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COUNTRY	<input type="text"/>	USSR	REPORT	<input type="text"/>
SUBJECT	Soviet Propaganda	<input type="text"/>	DATE DISTR.	10 November 1959
			NO. PAGES	2
			REFERENCES	RD

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DATE OF INFO.
PLACE & DATE ACQ

SOURCE EVALUATIONS ARE DEFINITIVE. APPRAISAL OF CONTENT IS TENTATIVE.

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- a. Higher Education in the USSR, Soviet Booklet No. 51, Professor V. Yelyutin, 60 pages, London, June 1959.
- b. Co-Operatives in the Soviet Union, Soviet News Booklet No. 36, Israel E. Friedman, 30 pages, London, November 1958.
- c. Social Security in the USSR, Soviet Booklet No. 50, A. Kochkurov, 39 pages, London, May 1959.
- d. On Overcoming the Cult of the Individual and Its Consequences, Soviet News Booklet No. 20, Resolution of the Central Committee of the Communist Party of the Soviet Union, 32 pages, 30 June 1956.
- e. If the Arms Race Were Stopped, Soviet News Booklet No. 32, Professor M. Rubinstein, D.Sc.(Econ.), 31 pages, London, July 1958.
- f. The USSR - 100 Questions Answered, Soviet Booklet No. 40, 5th edition, 198 pages, London, November 1958.
- g. Soviet Planet Into Space, Soviet Booklet No. 48, 42 pages, London, 1959.
- h. The Land of Soviets - A Soviet Family Budget, N. Tatarakaya, A. Guryanov, Foreign Languages Publishing House, 36 pages, Moscow 1957.
- i. New Steps for Peace by Socialist Countries - Meeting of the Political Consultative Committee of the Warsaw Treaty Organization 24 May 1958, Soviet News Booklet No. 31, 36 pages, London, May 1958.
- j. Bringing Soviet Schools Still Closer to Life, Soviet Booklet No. 44, 24 pages, London, December 1958.

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(Note: Washington distribution indicated by "X"; Field distribution by "#")

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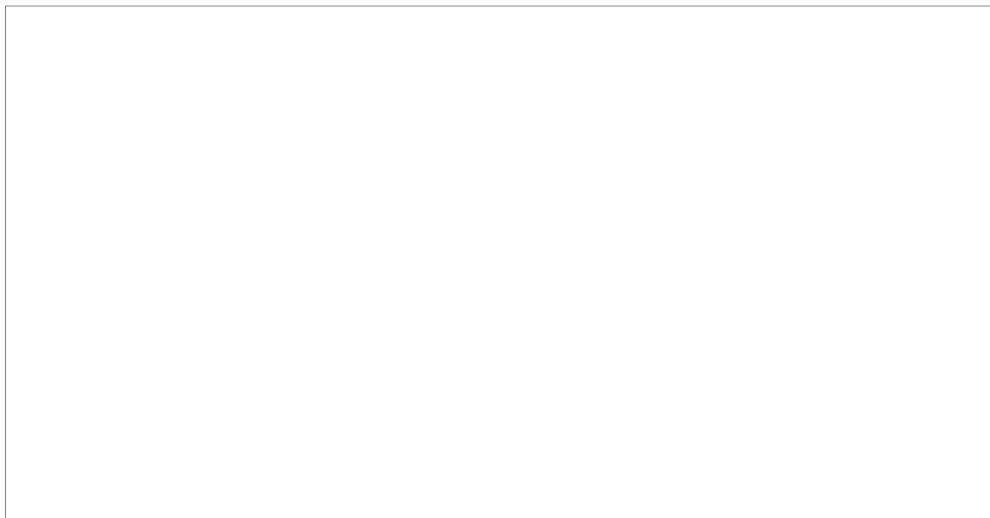
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- k. Great Plan of the Soviet Union - Target Figures for the Economic Development of the USSR from 1959 to 1965, Soviet Booklet No. 49, 62 pages, London, May 1959.

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The attached documents are UNCLASSIFIED when detached from this cover sheet.

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On Overcoming the Cult of the Individual and Its Consequences

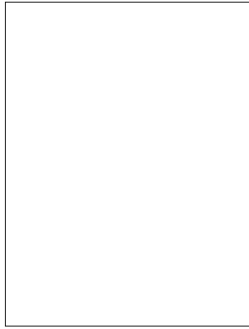
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*Resolution of the
Central Committee of the
Communist Party of the
Soviet Union*

30th June 1956

STAT

SOVIET NEWS BOOKLET No. 20



ON OVERCOMING THE CULT
OF THE INDIVIDUAL AND ITS
CONSEQUENCES

*Resolution of the Central Committee of
the Communist Party of the Soviet Union*

June 30, 1956

1. THE central committee of the Communist Party of the Soviet Union notes with satisfaction that the decisions of the historic 20th Congress of the C.P.S.U. have been welcomed entirely and supported wholeheartedly by our party as a whole, by the entire Soviet people, by the fraternal communist and workers' parties, by working people of the great community of socialist nations, and by millions of people in the capitalist and colonial countries. And this is quite understandable, for the 20th Party Congress, marking as it did a new stage in the creative development of Marxism-Leninism, gave a thorough-going analysis of the present international situation both at home and in the world, equipped the Communist Party and the Soviet people as a whole with a magnificent plan for the continued effort for building communism, and opened up new prospects for united action of all working-class parties in averting the danger of war, and on behalf of the interests of labour.

The Soviet people, carrying out the decisions of the 20th Congress, are gaining more and more outstanding achievements in every aspect of the country's political, economic and cultural life under the leadership of the Communist Party. The Soviet people have rallied still more closely behind the Communist Party and are showing a wealth of constructive initiative in their efforts to accomplish the tasks set before them by the 20th Congress.

The period which has passed since the congress was held has shown also the great and vital importance of its decisions for the international communist and labour movement, for the struggle of all progressive forces to strengthen world peace. The important theoretical theses the congress laid down on the peaceful co-existence of states with different social systems, on the possibility of preventing wars in modern times, on the multiplicity of forms of the transition of nations to socialism are having a favourable effect on the international situation, promoting the relaxation of tension, greater unity of action of all the forces working for peace and democracy, and the strengthening of the positions of the world socialist system.

While the Soviet people and the working people of the people's democracies and of the world as a whole have met the historic decisions of the 20th Congress of the C.P.S.U. with great enthusiasm and with a new upsurge of constructive initiative and revolutionary energy, they have caused alarm and irritation in the camp of the enemies of the working class. Reactionary circles in the United States and in some other capitalist powers obviously feel uneasy about the great programme to strengthen peace which the 20th Congress of the C.P.S.U. has charted. Their uneasiness increases as this programme is being put into operation, vigorously and consistently.

Why are the enemies of communism and socialism making most of their attacks on the shortcomings about which the

central committee of our party told the 20th Congress of the C.P.S.U. ? The reason they are doing so is to divert the attention of the working class and its parties from the main issues which were raised at the 20th Party Congress and which were meant to clear the way to further progress being made in the cause of peace, socialism and working-class unity.

The decisions of the 20th Party Congress and the foreign and home policy of the Soviet government have created confusion in imperialist quarters in the United States and some other countries.

The bold and consistent foreign policy of the U.S.S.R., directed towards ensuring peace and co-operation between nations regardless of their social systems, is winning support from the great masses of the people in all countries of the world, extending the front of peaceloving nations and causing a profound crisis in the cold war policy, a policy of building up military blocs and stockpiling arms. It is no accident that it is the imperialist elements in the United States that have been making the greatest fuss over the efforts made in the U.S.S.R. to combat the cult of the individual. The existence of negative factors arising from the cult of the individual was profitable for them in order to fight socialism with these facts at their disposal. Now that our party is boldly overcoming the consequences of the cult of the individual, the imperialists see in it a factor making for our country's faster progress towards communism, and weakening the positions of capitalism.

The ideologists of capitalism, in an effort to undermine the great power of attraction of the decisions of the 20th Congress of the C.P.S.U. and their influence on the broadest masses of the people, are resorting to all manner of tricks and ruses to distract the attention of the working people from the progressive and inspiring ideas the socialist world puts forward before humanity.

The bourgeois press has lately launched a largescale campaign of anti-Soviet slander, which the reactionary circles are trying to justify by some of the facts connected with the cult of the individual of J. V. Stalin denounced by the Communist Party of the Soviet Union. The sponsors of this campaign are exerting every effort to "trouble the waters," to conceal the fact that what is meant is a stage the Soviet Union has passed through in its development; they are out to suppress and misrepresent the fact that in the years that have passed since Stalin's death the Communist Party of the Soviet Union and the Soviet government have been acting with exceptional perseverance and resolution to remove the after-effects of the cult of the individual, and have been making steady progress in solving new problems for the sake of strengthening peace, and building communism, in the interest of the people at large.

Bourgeois ideologists, in launching their campaign of slander, are trying to cast a slur once more, and again to no avail, on the great ideas of Marxism-Leninism, to shake the trust the working people have in the world's first socialist country—the U.S.S.R.—and to sow confusion in the ranks of the international communist and labour movement.

Historical experience indicates that the opponents of international proletarian unity have in the past attempted more than once to take advantage of what they believed to be opportune moments for undermining the international unity of the communist and workers' parties, for dividing the international labour movement, for weakening the forces of socialism. But each time the communist and workers' parties have discerned the intrigues of the enemies of socialism, have rallied their ranks still more closely, demonstrating their unshakable political unity, and their unbreakable loyalty to the ideas of Marxism-Leninism.

The fraternal communist and workers' parties have detected

this move of the enemies of socialism in good time, too, and are giving it a fitting rebuff. It would be incorrect, on the other hand, to shut one's eyes to the fact that some of our friends abroad are still not quite clear on the cult of the individual and its consequences and are sometimes giving incorrect interpretations to some of the points connected with the cult of the individual.

The party bases its criticism of the cult of the individual on the principles of Marxism-Leninism. For over three years our party has been waging a constant fight against the cult of the person of J. V. Stalin, and persistently overcoming its harmful consequences. It is only natural that this question should have entered as an important item into the deliberations of the 20th Congress of the C.P.S.U. and its decisions. The Congress recognised that the central committee had taken perfectly correct and timely action against the cult of the individual which, as long as it was widespread, belittled the role of the party and the masses, whittled down the role of collective leadership in the party and often led to serious omissions in its work, and to gross violations of socialist law. The congress instructed the central committee to carry out consistently the measures for removing wholly and entirely the cult of the individual, foreign to Marxism-Leninism, for removing its consequences in every aspect of party, governmental and ideological activity, and for strict enforcement of the standards of party life and of the principles of collective party leadership elaborated by the great Lenin.

In combating the cult of the individual the party guides itself by the well-known theses of Marxism-Leninism on the role of the masses, of parties and individuals in history, and on the impermissibility of a cult of the person of a political leader, however great his merits may be. Karl Marx, the founder of scientific communism, emphasising his revulsion for "any cult of the individual," declared that he and Friedrich

Engels joined the association of communists "on condition that everything making for unprincipled usurping of authority would be thrown out of it" (Karl Marx and Friedrich Engels, Works, Vol. 25, First Russian Edition, Pages 427-428).

In building up our Communist Party V. I. Lenin was irreconcilable in fighting the anti-Marxist conception of the "hero" and the "mob," emphatically denouncing the counterposing of individual heroes to the masses of the people. "The intellect of scores of millions," said V. I. Lenin, "creates something immeasurably higher than a forecast of the greatest genius" (*Works, Vol. 25, Page 431*).

In raising the question of combating the cult of the person of J. V. Stalin, the central committee of the C.P.S.U. acted on the assumption that the cult of the individual contradicted the essence of the socialist system and was becoming a brake on the way of progress of Soviet democracy and of the advance of Soviet society towards communism.

The 20th Congress of the party, on the central committee's initiative, found it necessary to speak openly and boldly about the grave consequences of the cult of the individual, of the serious mistakes made in the latter period of Stalin's life, and to appeal to the party as a whole to put an end, through combined efforts, to everything that the cult of the individual had brought in its train. In doing so the central committee realised that the frank admission of the errors made would give rise to certain negative features and excesses which the enemies could use. The bold and ruthless self-criticism in matters arising from the cult of the individual has been fresh, ample evidence of the strength and vitality of our party and of the Soviet socialist system. It can be said with confidence that none of the ruling parties in capitalist countries would ever have ventured to do anything like this. Quite the reverse, they

would have tried to pass over in silence and to hide from the people facts as unpleasant as these. But the Communist Party of the Soviet Union, reared as it is on the revolutionary principles of Marxism-Leninism, has spoken the whole truth, however bitter it might have been. The party took this step on its own initiative, guiding itself by considerations of principle. It believed that even if its action against the Stalin cult caused some momentary difficulties, it would be of enormous value in the long run from the point of view of the basic interests and ultimate goals of the working class. Sure guarantees are thereby created against things like the cult of the individual reappearing in our party or in our country ever again, and also for the leadership of the party and the country being effected collectively, through enforcing the Marxist-Leninist policy, in conditions of full-scale party democracy, with the active and constructive participation of millions of working people and with the utmost development of Soviet democracy.

By taking a determined stand against the cult of the individual and its consequences, and by openly criticising the errors it caused, the party has once more demonstrated its loyalty to the immortal principles of Marxism-Leninism, its loyalty to the interests of the people, its concern for providing the best possible conditions for the development of party and Soviet democracy in the interest of the successful building of communism in this country. The central committee of the C.P.S.U. places on record the fact that the discussions on the cult of the individual and its consequences by party organisations and at general meetings of working people have been marked by a great measure of activity, shown both by the party membership and by non-party people, and that the C.P.S.U. central committee's line has been welcomed and supported wholly and entirely both by the party and by the people.

The facts of the violations of socialist law and other errors connected with the cult of the individual of J. V. Stalin,

which the party has made public, naturally create a feeling of bitterness and deep regret. But the Soviet people realise that the condemnation of the cult of the individual was indispensable for the building of communism in which they are all playing their full part. The Soviet people have seen the party taking persistent practical steps for the past few years to remove the after-effects of the cult of the individual in every field of party, governmental, economic and cultural development. Thanks to this effort, the party, which no longer has its internal forces bound by anything, has drawn still closer to the people and has today developed its creative activity more than ever before.

2. HOW, indeed, could it happen that the cult of the person of Stalin, with all the attendant adverse consequences, could have appeared and gained currency in conditions of the Soviet system?

This question should be examined against the background of the objective, concrete historical conditions under which socialism was built in the U.S.S.R., and also some subjective factors arising from Stalin's personal qualities.

The October Socialist Revolution has gone down in history as a classic example of a revolutionary transformation of capitalist society under the leadership of the working class. The example of the heroic struggle of the Bolshevik Party, of the world's first socialist state, the U.S.S.R., is something from which the communist parties of other lands, indeed all progressive and democratic forces, are learning how to solve the fundamental social problems generated by modern social development. Throughout the nearly forty years that have gone into building socialist society, the working people of this country have accumulated a wealth of experience, which is being studied and assimilated by the working people of other socialist nations, creatively and in keeping with their specific conditions.

This was the first experience history has ever known of building a socialist society which was taking shape through the quest for and practical proving of many truths which until then were known to socialists only in general outline, theoretically. For over a quarter of a century the Soviet Union was the only country blazing the path to socialism for mankind. It was like a besieged fortress in capitalist encirclement. The enemies of the Soviet Union both in the

West and in the East, continued to plot new "crusades" against the U.S.S.R. after the failure of the fourteen-power intervention of 1918-20. The enemies sent large numbers of spies and wreckers into the U.S.S.R., trying by every means at their disposal to destroy the world's first socialist state. The threat of renewed imperialist aggression against the U.S.S.R. increased particularly after fascism's advent to power in Germany in 1933, which proclaimed its purpose to be that of destroying communism, that of destroying the Soviet Union, the world's first state of working people. Everyone remembers the establishment of what was called the "anti-Comintern pact" and the "Berlin-Rome-Tokyo axis," which were actively supported by the forces of international reaction as a whole. With a threat of a new war growing more and more evident, and with the western powers cold-shouldering the measures the Soviet Union more than once proposed to put fascism in a straitjacket and organise collective security, the Soviet Union had to exert every effort for strengthening its defences and countering the intrigues of the hostile capitalist encirclement. The party had to teach the people as a whole to be always vigilant and prepared to face enemies from without.

The intrigues of international reaction were all the more dangerous since there was a bitter class struggle going on within the country for a long time to see "who beats whom?" After Lenin's death, hostile trends began gaining currency in the party: Trotskyites, right-wing opportunists and bourgeois nationalists whose stand was one of opposition to Lenin's theory about the possibility of the victory of socialism in one country, a stand which would in fact have led to the restoration of capitalism in the U.S.S.R. The party launched a ruthless struggle against those enemies of Leninism.

In carrying out Lenin's behests, the Communist Party steered a course towards the country's socialist industrialisation, collectivising agriculture and making a cultural revolution. The

Soviet people and the Communist Party have had to overcome unimaginable difficulties and obstacles in solving these supreme problems of building a socialist society in a single country. Our country had to overcome its age-old backwardness and reshape the national economy as a whole along new, socialist lines, within the historically shortest period of time, and without any economic assistance whatsoever from outside.

This complicated international and internal situation called for iron discipline, tireless enhancement of vigilance, stringent centralisation of leadership, which could not but have had an adverse effect on the development of some democratic forms. In the bitter struggle against the whole world of imperialism our country had to accept some limitations to democracy, which were justified logically by our people's struggle for socialism in conditions of capitalist encirclement.

But even at that time the party and the people regarded these limitations as temporary and due to be removed as the strength of the Soviet state grew and the forces of democracy and peace developed throughout the world. The people made these temporary sacrifices conscientiously, seeing the Soviet social system make progress day by day.

All these difficulties on the way to socialism have been overcome by the Soviet people under the leadership of the Communist Party and its central committee, which consistently pursued Lenin's general line.

The victory of socialism in this country, faced as it was with hostile encirclement and the ever present threat of attack from without, was a historic exploit of the Soviet people. Through carrying out its first five-year plans, the economically backward country made a giant leap ahead in its economic and cultural development, thanks to the strenuous and heroic efforts of the people and the party. With the progress achieved in

socialist construction the living standards of the working people were raised and unemployment abolished once and for all. A thorough cultural revolution took place. Within a short space of time the Soviet people produced great numbers of technicians who rose to the level of world technological progress and brought Soviet science and technology to one of the leading places in the world. It was the great party of communists that was the inspiring and organising force behind these victories. By the example of the U.S.S.R. the working people of the whole world have seen for themselves that the workers and peasants, once they have taken power into their own hands, can build and develop successfully, without any capitalists and landowners, their own socialist state, representing and defending the interests of the people at large. All this has played a great and inspiring role in increasing the influence of the communist and workers' parties in all the countries of the world.

J. V. Stalin, who held the post of general secretary of the party's central committee for a long period, worked actively in common with other leaders of the party to put into effect Lenin's behests. He was faithful to Marxism-Leninism, and as a theorist and an organiser of high calibre he led the party's fight against the Trotskyites, right-wing opportunists, and bourgeois nationalists, against the intrigues of capitalists from without. It was in this political and ideological fight that Stalin earned great authority and popularity. But there was a mistaken practice of associating all our great victories with his name. The achievements gained by the Communist Party and by the Soviet Union, the eulogies of Stalin made him dizzy. That being the situation, the cult of the person of Stalin was being gradually built up.

Some of J. V. Stalin's individual qualities, which were regarded as negative yet by V. I. Lenin, contributed in great measure to building up the cult of the individual. Towards

the end of 1922 Lenin said in a letter to the coming party congress:

"Comrade Stalin, after taking over the post of general secretary, accumulated in his hands immeasurable power, and I am not certain whether he will be always able to use this power with the required care." In addition to this letter, writing early in January 1923, V. I. Lenin reverted to some of Stalin's individual qualities, intolerable in a leader. "Stalin is excessively rude," Lenin wrote, "and this defect, which can be freely tolerated in our midst and in contacts among us, communists, becomes a defect which cannot be tolerated in one holding the post of general secretary. I therefore propose to the comrades to consider the method by which to remove Stalin from his post, and to select another man for it who, above all, would differ from Stalin in only one quality, namely, greater tolerance, greater loyalty, greater politeness and a more considerate attitude towards the comrades, a less capricious temper, etc."

These letters of Lenin's were brought to the knowledge of the delegations to the 13th Party Congress which met soon after Lenin died. After discussing these documents it was recognised as desirable to leave Stalin in the position of general secretary on the understanding, however, that he would heed the critical remarks of V. I. Lenin and draw all the proper conclusions from them.

Having retained the post of general secretary of the central committee, Stalin did take into account the critical remarks of Vladimir Ilyich during the period immediately following his death. Later on, however, Stalin, having overestimated his own merits beyond all measure, came to believe in his own infallibility. He began transferring some of the limitations on party and Soviet democracy, unavoidable in conditions of a bitter struggle against the class enemy and its agents, and subsequently during the war against the Nazi invaders, into

the standards of party and governmental life, grossly flouting the Leninist principles of leadership. Plenary meetings of the central committee and congresses of the party were held irregularly and later were not held at all for many years. Stalin, in fact, was above criticism.

Great harm to the cause of socialist construction, and the development of democracy inside the party and the state was caused by Stalin's erroneous formula alleging that, with the advance of the Soviet Union to socialism, the class struggle would grow increasingly sharp. This formula, which is true only for certain stages of the transition period, when the question of "who will win?" was being decided, when a persistent class struggle for the construction of the foundations of socialism was proceeding, was advanced to the foreground in 1937, at a time when socialism had already triumphed in our country, when the exploiting classes and their economic base had been eliminated. In practice, this erroneous theoretical formula was used to justify gross violations of socialist law and mass repressions.

It is precisely in these conditions that, among other things, a special status was created for the state security organs, which enjoyed tremendous trust because they had rendered undoubted services to the people and the country in defending the gains of the revolution. For a long time the state security organs justified this trust and their special status evoked no danger. The situation changed after Stalin's personal control over them had been gradually superseded for control by the party and the government, and the usual exercise of the standards of justice was not infrequently replaced by his individual decisions. The situation became still more aggravated when the criminal gang of the agent of international imperialism, Beria, got to the head of the state security organs. Serious violations of Soviet law and mass repressions then occurred. As a result of the machinations of our enemies, many honest

communists and non-party people had been slandered and suffered, although completely innocent.

The 20th Party Congress and the entire policy of the central committee after Stalin's death are vivid evidence of the fact that inside the central committee of the party there was a Leninist core of leaders who correctly understood the pressing needs in the spheres both of home and foreign policy. One cannot say that no counter-measures were taken against the negative phenomena that were associated with the cult of the individual and impeded the advance of socialism. Moreover, there were definite periods during the war, for example, when Stalin's individual actions were sharply restricted, when the negative consequences of lawlessness, arbitrariness, etc., were substantially reduced.

It is known that precisely during the war members of the central committee as well as outstanding Soviet military leaders took control of definite sections of activity in the rear and at the front, independently took decisions, and by their organisational, political, economic and military work, together with local party and government organisations, secured the victory of the Soviet people in the war. After the victory, the negative consequences of the cult of the individual again became strongly manifest.

Immediately after Stalin's death the Leninist core of the central committee took the path of vigorous struggle against the cult of the individual and its grave consequences.

The question may arise: Why then had these people not come out openly against Stalin and removed him from leadership? In the prevailing conditions this could not be done. The facts unquestionably show that Stalin was guilty of many unlawful acts that were committed particularly in the last period of his life. However, one must not forget at the same time that the Soviet people knew Stalin as a man always

acting in the defence of the U.S.S.R. against the machinations of the enemies, and working for the cause of socialism. In this work he at times applied unseemly methods, and violated the Leninist principles and standards of party life. Herein was the tragedy of Stalin. And all this together made difficult the struggle against the lawless actions that were then being committed, because the successes in building socialism and strengthening the U.S.S.R. were, in the atmosphere of the cult of the individual, ascribed to Stalin.

Any opposition to him under these circumstances would not have been understood by the people, and it was not at all a matter of lack of personal courage. It is clear that anyone who in these circumstances would have come out against Stalin would have got no support from the people. What is more, such opposition would have been evaluated, in those circumstances, as being against the cause of building socialism, as an extremely dangerous threat to the unity of the party and the whole state in conditions of capitalist encirclement. Moreover, the achievements of the working people of the Soviet Union under the leadership of the Communist Party instilled legitimate pride in the heart of every Soviet man and created an atmosphere in which individual errors and shortcomings seemed less important against the background of the tremendous achievements, and the negative consequences of these errors were rapidly compensated by the immensely growing vital forces of the party and Soviet society.

It should also be borne in mind that many facts about wrong actions of Stalin, particularly in the sphere of violating Soviet law, became known only lately, already after Stalin's death, chiefly in connection with the exposure of Beria's gang and the establishment of party control over the security organs.

Such are the chief conditions and reasons that resulted in the cult of J. V. Stalin's personality coming into being

and spreading. All this, of course, explains, but by no means justifies, the cult of J. V. Stalin's personality and its consequences, which have been so sharply and justly condemned by our party.

3. THE cult of the individual, unquestionably, did grave harm to the cause of the Communist Party, to Soviet society. But it would be a great mistake to draw conclusions about some changes having taken place in the social system of the U.S.S.R. from the fact that in the past there was the cult of the individual, or to see a source of this cult in the nature of the Soviet social system. Both conclusions are utterly wrong, as this is not in accordance with reality and is contrary to the facts.

Notwithstanding all the evil done to the party and the people by the cult of Stalin's personality, he could not, and did not change the nature of our social system. No cult of the individual could change the nature of the socialist state, which is based on social ownership of the means of production, the alliance of the working class and the peasantry, and friendship between the peoples, although this cult did cause serious harm to the development of socialist democracy and the promotion of the creative initiative of millions of people.

To think that one personality, even such a great one as Stalin, could change our social and political system is to lapse into profound contradiction with the facts, with Marxism, with truth, is to lapse into idealism. This would mean ascribing to an individual such excessive, supernatural powers as the ability to change a system of society and, moreover, such a social system in which the many-million strong masses of the working people are the decisive force.

As is known, the nature of a social and political system is determined by its mode of production, by who owns the means

of production in society, by which class wields political power. The whole world knows that in our country, as a result of the October Revolution and the triumph of socialism, a socialist mode of production has been established, that it is now already almost 40 years that power has belonged to the working class and the peasantry. Thanks to this the social system is growing stronger from year to year, and its productive forces are growing. Even our ill-wishers cannot fail to recognise this fact.

The cult of the individual, as is known, resulted in some serious errors being made in the direction of various branches of activity of the party and the Soviet state, both in the domestic life of the Soviet Union and in its foreign policy. Among other things, one can point out serious errors committed by Stalin in the direction of agriculture, in organising the country's preparedness to rebuff the fascist invaders, and gross arbitrariness that led to the conflict in the relations with Yugoslavia in the postwar period. These errors harmed the development of individual aspects of the life of the Soviet state, and especially, in the last years of J. V. Stalin's life, impaired the development of Soviet society, but, naturally, did not divert it from the correct road of advancement to communism.

Our enemies allege that the cult of Stalin's personality was engendered not by definite historical conditions that have now lapsed into the past, but by the Soviet system itself, by, in their opinion, its undemocratic nature, etc. Such slanderous assertions are refuted by the entire history of the development of the Soviet state. The Soviets as a new democratic form of state power came into being as a result of the revolutionary creative activity of the broadest masses of the people who rose in struggle for freedom. They have been and remain organs of genuine people's power. It is precisely the Soviet system that has made it possible to tap the tremendous

creative energy of the people. It brought into motion inexhaustible forces inherent in the masses of the people, drew millions of people into conscientious administration of the state, into active, creative participation in the construction of socialism. In a brief historical period, the Soviet state emerged victorious from the severest trials, stood the test in the fire of the Second World War.

When the last exploiting classes were eliminated in our country, when socialism became the dominant system in the entire national economy, and the international position of our country altered fundamentally, the bounds of Soviet democracy expanded immeasurably and are continuing to expand. In contrast to any bourgeois democracy, Soviet democracy not only proclaims but materially ensures all members of society without exception the right to work, education, rest and recreation, to participation in state affairs, freedom of speech, press and conscience, a real possibility for the free development of personal abilities, and all other democratic rights and freedoms. The essence of democracy lies not in formal signs but in whether the political power serves and reflects the will and fundamental interests of the majority of the people, the interests of the working folk. The entire domestic and foreign policy of the Soviet state shows that our system is a genuinely democratic, genuinely people's system. The supreme aim and daily concern of the Soviet state is the utmost advancement of the living standards of the population, the ensuring of a peaceful existence for its people.

Evidence of the further development of Soviet democracy is the measures that are being carried out by the party and the government for broadening the rights and competence of the Union republics, the strict observance of the law, reconstruction of the planning system with a view to unleashing local initiative, activating the work of the local Soviets, developing criticism and self-criticism.

Notwithstanding the cult of the individual and in spite of it, the mighty initiative of the masses of the people, led by the Communist Party, initiative brought into being by our system, pursued its great historical task, overcoming all obstacles on the road to the construction of socialism. And herein lies the highest expression of the democracy of the Soviet socialist system. The outstanding victories of socialism in our country did not come by themselves. They were achieved by the tremendous organisational and educational work of the party and its local organisations, by the fact that the party always educated its cadres and all communists in the spirit of loyalty to Marxism-Leninism, in the spirit of devotion to the cause of communism. Soviet society is strong by the consciousness of the masses of the people. Its historical destinies have been and are determined by the constructive labour of our heroic working class, glorious collective farm peasantry, and people's intelligentsia.

Eliminating the consequences of the cult of the individual, re-establishing the Bolshevik standards of party life, developing socialist democracy, our party has further strengthened its ties with the broad masses of the people and has rallied them still closer under the great banner of Lenin.

The fact that the party itself has boldly and openly raised the question of eliminating the cult of the individual, of the impermissible errors committed by Stalin, is convincing proof that the party firmly guards Leninism, the cause of socialism and communism, the observance of socialist law, the interests of the peoples and the rights of all Soviet citizens. This is the best proof of the strength and viability of the Soviet socialist system. At the same time it shows a determination finally to overcome the consequences of the cult of the individual and to prevent the recurrence of such errors in the future.

The condemnation of the cult of J. V. Stalin and its conse-

quences has evoked endorsement and a broad response in all fraternal communist and workers' parties. Noting the tremendous significance of the 20th Congress of the C.P.S.U. for the entire international communist and labour movement, the communists in the foreign countries regard the struggle against the cult of the individual and its consequences as a struggle for the purity of the principles of Marxism-Leninism, for a creative approach to the current problems of the international labour movement, for the consolidation and further development of the principles of proletarian internationalism.

Statements by a number of fraternal communist parties express endorsement and support for the measures taken by our party against the cult of the individual and its consequences. Summarising the conclusions to be drawn from the discussion of the decisions of the 20th Congress of the C.P.S.U. by the political bureau of the central committee of the Communist Party of China, the party's newspaper *Jenminjihpao*, in an editorial "On the historical experience of the dictatorship of the proletariat," wrote:

"The Communist Party of the Soviet Union, following Lenin's behests, seriously regards some grave errors committed by Stalin in the direction of socialist construction, and their consequences. The graveness of these consequences raised before the Communist Party of the Soviet Union the necessity, simultaneously with recognising Stalin's great services, of laying bare most sharply the essence of the errors committed by Stalin, and calling upon the entire party to take care to prevent a repetition of this, and to root out vigorously the unhealthy consequences of these errors. We, Chinese communists, profoundly believe that after the sharp criticism that was displayed at the 20th Congress of the C.P.S.U., all the active factors that were strongly restrained in the past because of certain political errors, will surely come into motion everywhere, that the Communist Party of the Soviet Union and the

Soviet people will be still more united and rallied than before. in the struggle for the construction of a great communist society, unprecedented in the history of mankind, for lasting world peace."

"The merit of the leaders of the Communist Party of the Soviet Union," a statement of the political bureau of the French Communist Party says, "is the fact that they have undertaken to correct the errors and shortcomings associated with the cult of the individual, which testifies to the strength and unity of the great party of Lenin and the trust it enjoys among the Soviet people and to its prestige in the international movement." The general secretary of the national committee of the United States Communist Party, Comrade Eugene Dennis, noting the great significance of the 20th Congress of the C.P.S.U., says in his well-known article: "The 20th Congress strengthened world peace and social progress. It marked a new stage in the advancement of socialism and in the struggle for peaceful co-existence that began in Lenin's day, continued in the following years, and is becoming ever more effective and successful."

At the same time it should be noted that in discussing the question of the cult of the individual, the causes of the cult of the individual and its consequences for our social system are not always correctly interpreted. Thus, for example, Comrade Togliatti's comprehensive and interesting interview given to the magazine *Nuovi Argomenti*, along with many quite important and correct conclusions, contains also wrong propositions. Particularly, one cannot agree with Comrade Togliatti's putting the question of whether Soviet society has not arrived at "certain forms of degeneration." There is no grounds for putting such a question. It is all the more incomprehensible in that in another part of his interview Comrade Togliatti quite correctly says: "It is necessary to draw the conclusion that the essence of the socialist system was not

lost, just as not a single one of the previous gains was lost, and above all the support of the system by the masses of the workers, peasants and intelligentsia who make up Soviet society was not lost. This very support shows that notwithstanding everything, this society has preserved its basic democratic nature."

Indeed, without the support of the broadest masses of the people for the Soviet government and the policy of the Communist Party, our country could not have built up in an unprecedentedly brief period a mighty socialist industry and effected the collectivisation of agriculture, it could not have won the Second World War, on the outcome of which the destinies of all mankind depended. As a result of the utter rout of Hitlerism, Italian fascism and Japanese militarism, the forces of the communist movement have broadly developed, the communist parties of Italy, France and other capitalist countries have grown and become mass parties, the people's democratic system has been established in a number of European and Asian countries, the world system of socialism has arisen and become consolidated, the national-liberation movement which has brought about the disintegration of the colonial system of imperialism has scored unprecedented successes.

4. UNANIMOUSLY approving the decisions of the 20th Congress of the C.P.S.U., which condemn the cult of the individual, the communists and all Soviet people see in them evidence of the growing power of our party, of the strength of its Leninist principles, unity and solidarity. "The party of the revolutionary proletariat," V. I. Lenin pointed out, "is sufficiently strong to openly criticise itself, to call a mistake a mistake, and a weakness a weakness" (*Works, Vol. 21, Page 150*). Guided by this Leninist principle, our party will continue, in future too, boldly to disclose, openly to criticise, and resolutely to eliminate mistakes and blunders in its work.

The central committee of the C.P.S.U. considers that the work accomplished by the party so far in overcoming the cult of the individual and its consequences has already yielded positive results.

On the basis of the decisions of the 20th Congress of the party, the central committee of the C.P.S.U. calls upon all party organisations:

Consistently to adhere in all their work to the most important principles of the teaching of Marxism-Leninism about the people being the makers of history, the creators of all the material and spiritual riches of mankind, on the decisive role of the Marxist party in the revolutionary struggle for the transformation of society, for the victory of communism;

Persistently to continue the work, conducted in recent years by the central committee of the party, for the strictest observation by all party organisations, from top to bottom, of the Leninist principles of party leadership, and primarily of the

supreme principle of collective leadership, the observation of the norms of party life, as fixed by the rules of the party, of developing criticism and self-criticism ;

Fully to restore the principles of Soviet socialist democracy as laid down in the Constitution of the Soviet Union finally to correct the violations of revolutionary socialist laws ;

To mobilise our cadres, all communists and the broadest masses of the working people, in the struggle for the practical realisation of the targets of the Sixth Five-Year Plan, giving the utmost stimulation to the creative initiative and energy of the masses, the true makers of history, in achieving this end.

The 20th Congress of the C.P.S.U. pointed out that the most important feature of our epoch is the conversion of socialism into a world system. The most difficult period in the development and consolidation of socialism now lies behind us. Our socialist country has ceased to be a lonely island in an ocean of capitalist states. Today more than one-third of humanity is building a new life under the banner of socialism. The ideas of socialism are winning the support of many, many millions of people in the capitalist countries. The influence of the ideas of socialism is tremendous among the peoples of Asia, Africa and Latin America, who are fighting against all forms of colonialism.

The decisions of the 20th Congress of the C.P.S.U. are regarded by all supporters of peace and socialism, by all democratic and progressive circles, as an inspiring programme of struggle for the consolidation of peace throughout the world, for the interests of the working class, for the triumph of the cause of socialism.

Under present conditions, the communist parties and the whole international labour movement are faced with broad, inspiring prospects—to secure, hand in hand with all the peace-

ful forces, the prevention of a new world war, to curb the monopolies and ensure lasting peace and the security of the peoples, to put an end to the armaments race and remove from the working peoples the heavy burden of taxes bred by it, to fight for the preservation of the democratic rights and liberties which facilitate the working peoples' struggle for a better life and a bright future. This is what the millions of ordinary people in every country of the world are vitally interested in. The successful solution of these problems is to a tremendous degree facilitated by the peaceful policy and the ever new successes of the Soviet Union, the Chinese People's Republic and all the other countries advancing on the road of socialism.

In the new historical conditions, such international organisations of the working class as the Comintern and the Cominform have ceased their activities. But this in no way means international solidarity has lost its significance and that there is no longer any need for contacts among the fraternal revolutionary parties adhering to the positions of Marxism-Leninism. At the present time, when the forces of socialism and the influence of socialist ideas have immeasurably grown throughout the world, when different means of achieving socialism in the various countries are being revealed, the Marxist working-class parties must naturally preserve and consolidate their ideological unity and fraternal international solidarity in the fight against the threat of a new war, in the fight against the anti-national forces of monopoly capital striving to suppress all the revolutionary and progressive movements. The communist parties are welded together by the great objective of freeing the working class from the yoke of capital, they are united by their fidelity to the scientific ideology of Marxism-Leninism, to the spirit of proletarian internationalism, by the utmost devotion to the interests of the people.

In their activity under modern conditions, all the communist

parties base themselves on the national peculiarities and conditions of every country, giving the fullest expression to the national interests of their peoples. At the same time, recognizing that the struggle for the interests of the working class, for peace and the national independence of their countries is the cause of the entire international proletariat, they are consolidating their ranks and strengthening their contacts and co-operation among themselves. The ideological consolidation and fraternal solidarity of the Marxist parties of the working class in different countries are the more necessary since the capitalist monopolies are creating their own aggressive international coalitions and blocs, such as N.A.T.O., S.E.A.T.O., and the Baghdad pact, which are directed against the peace-loving peoples, against the national-liberation movement, against the working class and the vital interests of the working peoples.

While the Soviet Union is continuing to do very much to bring about a relaxation in international tension—and this is now recognised everywhere—American monopoly capital continues to assign large sums of money for increasing the subversive activities in the socialist countries. When the cold war was at its height, the United States Congress, as is well known, officially appropriated (apart from the funds used unofficially) 100 million dollars for the purposes of conducting subversive activities in the people's democracies and the Soviet Union. Now that the Soviet Union and the other socialist countries are doing everything possible to ease international tension, the cold war adherents are seeking once more to galvanise the cold war which has been condemned by the peoples of the entire world. This is shown by the decision of the United States Senate to appropriate an additional 25 million dollars for subversive activity, under the cynical pretext of "stimulating freedom" behind the "iron curtain."

We must soberly appraise this fact and draw the necessary

conclusions from it. It is clear, for instance, that the anti-popular riots in Poznan have been paid for from this source. But the *agents-provocateur* and subversive elements who were paid out of the overseas funds had enough "go" in them only for a few hours. The working people of Poznan resisted the hostile actions and provocations. The plans of the dark knights of the "cloak and dagger" have fallen through, their dastardly provocation against the people's power in Poland has failed. All future attempts at subversive actions in the people's democracies are similarly doomed to failure, even though such actions are generously paid for out of funds assigned by the American monopolies. This money may be said to be spent in vain.

All this shows that we must not allow ourselves to be indifferent about the new designs of the imperialist agencies, seeking to penetrate into the socialist countries in order to do harm and disrupt the achievements of the working people.

The forces of imperialist reaction are seeking to divert the working people from the true road of struggle for their interests, to poison their minds with disbelief in the success of the cause of peace and socialism. In spite of all the designs of the ideologists of the capitalist monopolies, the working class, headed by its tried communist vanguard, will follow its own road, which has already led to the historic conquests of socialism, and will lead to new victories in the cause of peace, democracy and socialism. There can be no doubt that the communist and workers' parties of all countries will raise still higher the glorious Marxist banner of proletarian internationalism.

The Soviet people are naturally proud of the fact that our homeland was the first to pave the road to socialism. Now that socialism has become a world system, now that fraternal co-operation and mutual aid have been established among the

socialist countries, new favourable conditions have been created for the flourishing of socialist democracy, for the further consolidation of the material and industrial basis of communism, for a steady rise in the living standards of the working people, for an all-sided development of the personality of the new man, the builder of communist society. Let the bourgeois ideologists invent fables about a "crisis" of communism, about "dismay" in the ranks of the communist parties. It is not the first time that we have heard incantations from enemies. All their predictions have always burst like bubbles. These sorry soothsayers have appeared and disappeared, while the communist movement, the immortal and inspiring ideas of Marxism-Leninism, have advanced from victory to victory. So it will be in the future, too. No malicious, slanderous outburst of our enemies can stop the invincible, historic march of mankind towards communism.

Published by Soviet News, 3 Rosary Gardens, London, S.W.7,
and printed by Farleigh Press Ltd. (T.U. all depts.),
Beechwood Rise, Watford, Herts.

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SOCIAL SECURITY in the U.S.S.R.

by **A. Kochkurov**
Soviet Booklet No. 50

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SOVIET BOOKLET No. 50

LONDON, MAY, 1959

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18 MILLION PENSIONERS

IF YOU GO into any house in the Soviet Union, whether that of a factory worker or an office employee, you're almost bound to find a pensioner there.

Of the U.S.S.R.'s total population of 200 million, over 18 million, or about 10 per cent, receive pensions. In other words, one out of every ten or eleven Soviet citizens is a pensioner.

Never before in the history of Russia has such a large part of the population been provided for by state pensions.

Let's look at Proletarskaya Street in the city of Kalinin, for instance. Here, at No. 118 live the Nikonorovs. Both husband and wife used to work as weavers. Now they have both retired on pensions, receiving a total of 998 roubles a month.

If you were to list the pensioners who live on Proletarskaya Street according to the size of their pension, the Nikonorovs would be somewhere in the middle. In other words, their pension is an average one.

State pensions are only a part of the existing far-reaching system of social insurance and social maintenance which exists in the Soviet Union.

Article 120 of the Constitution of the Union of Soviet Socialist Republics says: "Citizens of the U.S.S.R. have the right to maintenance in old age and also in case of sickness or disability.

"This right is ensured by the extensive development of social insurance of industrial, office and professional workers at state expense, free medical service for the working people, and the provision of a wide network of health resorts for the use of the working people."

Social insurance is one of the main ways of ensuring the right of citizens to material security in old age, during illness or in case of disablement.

In the Soviet Union there are also other forms of providing social security for the working people. These include: social maintenance, the insurance of members of small producers' co-operatives and co-operatives of invalids, and social mutual aid for collective farmers.

Let us consider each of these forms separately.

Social Insurance

This is a system of material security provided at state expense for workers when they become old or temporarily disabled or ill, and also for families that have lost their breadwinners. Under this system workers also obtain various services and treatment to prevent disease or restore health. Various cultural and welfare facilities are also provided.

The social insurance system of the U.S.S.R. embraces all industrial and office workers of state, co-operative and social enterprises, institutions and organisations.

The administration of this system is in the hands of the trade unions, the general management being conducted by the All-Union Central Council of Trade Unions and, in the provinces, by the respective republican, territorial, or regional committees of the trade unions and the republican, territorial and regional trades councils.

At enterprises and in institutions it is the local committees and the social insurance commissions they organise, as well as their insurance delegates, who manage social insurance questions.

The social insurance commissions supervise the distribution of accommodation for sanatoriums and rest homes, the payment of temporary disability and maternity leave benefits, the fulfilment of plans for housing construction and the work of medical, prophylactic and children's institutions.

The membership of these commissions, which are elected at trade union meetings, consists of industrial workers, engineers, technicians, and doctors.

Thus social insurance in the U.S.S.R. is directly governed by the social organisations of the working people.

With the tremendous development of the Soviet national economy, social insurance has become a very important method for improving people's well-being.

Every worker who has fallen ill or been maimed has the right to receive aid during his temporary disability. He receives such aid from the very first day of his illness until his recovery or until the day when a special medical commission declares him an invalid. In this case he will receive the right to a corresponding pension.

Temporary disability grants are given to workers, no matter where they were employed, if they are ill or receiving treatment at a sanatorium or resort, if they have to take care of some sick member of the family or have been released from work as a result of quarantine. In all such cases workers are released from work on decision of a doctor.

The amount of the temporary disability grant is based on the individual earnings of the sick person. Account is also taken of the length of time he has worked at one and the same enterprise or institution prior to his having fallen ill:

up to 3 years ..	50	per	cent	of	his	earnings
from 3 to 5 years ..	60	"	"	"	"	"
from 5 to 8 years ..	70	"	"	"	"	"
from 8 to 12 years ..	80	"	"	"	"	"
over 12 years ..	90	"	"	"	"	"

Those workers who are not members of a trade union receive half the amount indicated above during temporary disability (except if their condition is due to some injury incurred during work or as a result of some occupational disease).

If temporary disability is due to injury incurred at work or the result of some occupational disease the sick benefit is 100 per cent of wages, regardless of length of employment and trade union membership.

In any case, sick benefit cannot be less than 300 roubles a month in towns and workers' settlements or less than 270 roubles in rural districts.

The Soviet State assumes all the expenses involved in medical treatment. Millions of people receive treatment and

spend their vacation at sanatoriums and rest homes every year at the expense of the social insurance fund.

All working people enjoy the services of a wide network of free medical institutions. Many enterprises and institutions have their own polyclinics and dispensaries, staffed with experienced specialists.

Some enterprises even provide medical services for their workers right in the shops. For instance, at the "Azovstahl" (Azov Steel) Metallurgical Works in the city of Zhdanov there is a doctor for every shop, who attends to working and living conditions, and draws up an all-round plan of preventive measures to meet the particular needs of the shop.

All the factory's shops are supplied with shower-rooms, laundries, drying rooms for working clothes, and hygienic rooms, while in the hot shops there are special water-screens for cooling the air, powerful ventilation systems and soda-water supply.

The medical posts in the shops are supplied with first-aid outfits, stretchers, and dressings. These shop medical posts function day and night.

The U.S.S.R. annual State Budget makes generous provision for social insurance.

In 1959 the budget provides for a total expenditure of 707,200 million roubles. The biggest allocation—308,700 million roubles, or 43 per cent—is to develop the national economy; 232,000 million roubles, or 33 per cent, are allocated for social and cultural measures (215,000 million roubles were spent in 1958). This includes allocations for education, the training of workers and cultural measures, the development of science, public health and physical culture and, finally, social insurance and social maintenance.

Expenditure on social insurance and social maintenance amounts to 93,700 million roubles. Most of this comes from the social insurance fund provided by the obligatory payments made by industrial establishments, institutions and other enterprises.

No deductions whatsoever are made from workers' earnings. Thus what workers receive in the form of social

insurance constitutes a substantial addition to their wages.

Simple arithmetic tells us that 93,700 million roubles is equal to about 13 per cent of total budget expenditure, and that it is only slightly less than the expenditure on defence (96,100 million roubles).

But there is something else to be pointed out in this connection. Whereas the funds directed towards social insurance and maintenance in 1959 are 5,500 million roubles more than in 1958, the allocations for defence are less than in 1958.

By contrast, certain Western countries are spending a major portion of their budgets on armaments. President Eisenhower, for instance, has recently stated that the "national security programme" accounts for about 60 per cent of the entire federal budget for the coming fiscal year.

Co-operative Insurance

This form of insurance covers members of industrial co-operatives and co-operatives of invalids. Its funds are derived from obligatory insurance payments made by the co-operatives, no deductions whatever being made from the earnings of the members.

Co-operative insurance is similar to State social insurance, although it has some specific features. The members of producer co-operatives receive sick benefit during temporary disability and all forms of pension security, such as are provided for by the Law on State Pensions. But it is the co-operative organs which provide this co-operative insurance, and which decide the amount of benefits and pensions to be paid.

Social Maintenance

This is a system of state and social measures for the material security of citizens in old age, during convalescence, illness, in case of the loss of the breadwinner, and in other cases provided for by the law.

Social maintenance organs determine and pay pensions to workers and servicemen, and to their families. These organs

are also responsible for providing security to scientific workers, single mothers and mothers of large families, to secure work for invalids, organise their training and the teaching of new trades, supply them with artificial limbs and render other services to pensioners. The social maintenance organs manage homes for the aged and invalids, homes for crippled children, and so on.

Social maintenance, like social insurance, is financed by the State budget. Part of the expenses are covered by funds from the social insurance funds and part by direct allocations from the local, republican and All-Union budgets.

In distinction to social insurance, which is handled by the trade unions and co-operatives, the social maintenance system is run by state organs.

Every Union and autonomous republic has its Ministry of Social Maintenance. In the territories and regions all the work is managed by the departments of social maintenance of the respective territorial or regional executive committees of the Soviets (Councils) of working People's Deputies.

There are similar social maintenance departments under the executive committees of the local Soviets. These handle the granting of pensions, finding employment for disabled persons wishing to work, providing artificial limbs to those in need of them, and so on.

Social Mutual Aid

This form of security embraces members of collective farms. It is run by the social mutual aid societies, the money coming from the collective farm funds.

These societies are organised on a voluntary basis by decision of a general meeting of collective farm members. Their functions are restricted to their own particular farms.

In the Russian Federation alone there are over 24,000 mutual aid societies which have a membership of over 5 million collective farmers. Their budgets amount to tens of millions of roubles.

This money is used to repair homes for the disabled and the homes of families of men who died in the Services, to purchase cattle and fodder for those who need it, and to organise sanatorium and other treatment at resorts for collective farmers when ill.

In the countryside such mutual aid societies have assumed care of 23,000 orphaned children, and they also maintain sixty-nine homes for aged and disabled collective farmers.

As the collective farms improve their economy they are able to render ever greater material aid to needy members.

For instance, the *Proletarian Will* collective farm in Stavropol Territory passed a decision at a general meeting of its farmers to the effect that those of its farmers who have worked with the farm not less than twenty years will be paid a pension of 120 work-days* a year, the women when they reach the age of 55, and the men when they reach the age of 60.

At this farm the value of a work-day is very high. In 1956, for example, 120 work-days meant about 2,000 roubles in cash, 350 kilogrammes† of grain, 180 kilogrammes of potatoes, 180 kilogrammes of vegetables, 16 kilogrammes of vegetable oil, and other products.

This mutual aid society not only provides for its aged collective farmers, but also takes care of its disabled. At present it maintains forty-eight disabled collective farmers. Each of them receives 29 kilogrammes of wheat every month as well as 10 kilogrammes of potatoes, milk, and vegetable oil.

Furthermore, each person taken care of by this mutual aid society was provided with from 600 to 1,500 roubles a year for personal expenses.

Not every collective farm provides pensions and benefits on this scale, although many of them do. Each collective farm determines the conditions and system of granting pensions as well as the amount, depending on its financial condition. All payments for pensions to collective farmers are made from

* Work-day—the unit for figuring the amount and quality of work done at a collective farm.

† 1 kilogramme = 2.2 lb.

the *indivisible* funds of the farm, i.e. from the collective assets and revenue.

Thus social insurance, social maintenance, co-operative insurance and social mutual aid differ one from another as regards the people they provide for, the system of financing, and also the forms of maintenance provided.

However, they all form part of the general system of material maintenance for Soviet citizens in old age, in case of illness and in case of disability.

A FUNDAMENTAL QUESTION OF THE SOCIAL SYSTEM

M. I. KALININ, a former Soviet President,* said in his day that the question of social security, the real security of the working people, was a fundamental question of the social system.

As the Soviet State developed its economic might it persistently developed and perfected its social security system. Allocations for such purposes increased from year to year, the extent and forms of social security became greater, and the size of benefits, pensions and other money grants grew. In 1955 the State paid out 30,100 million roubles in pensions; in 1957, after the new pension law was passed, it paid out almost 58,000 million roubles; and in 1958, 64,000 million roubles.

How are these funds, which have been allocated from the U.S.S.R. budget for this purpose, used?

Let us take the Russian Federative Republic as an example. In 1956 22,900 million roubles were spent for social security in the Russian Federation; in 1957—over 36,500 million roubles; and in 1958—40,800 million roubles.

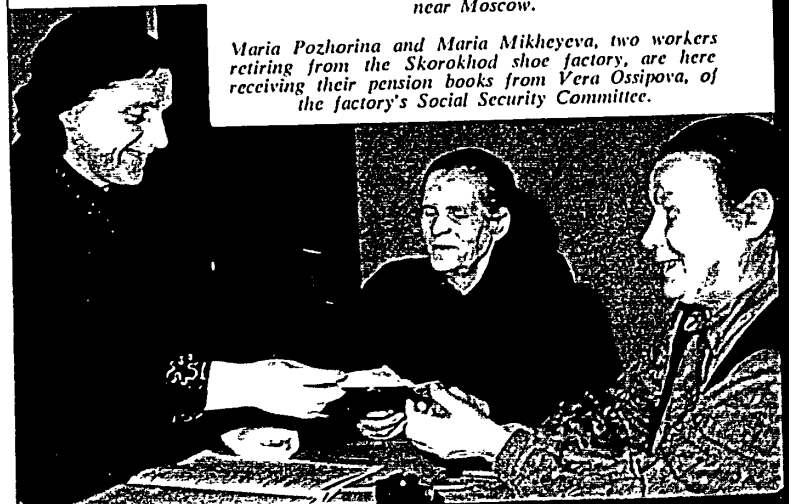
What was this money spent on?

Pensions constitute the main form of social security. Over 36,700 million roubles were spent on pensions and cash grants.

* He died in June, 1945—Ed.



The skiers in the above picture are all blind, and live, with other blind people, in the house behind them, near Moscow.



Maria Pozhorina and Maria Mikheyeva, two workers retiring from the Skorokhod shoe factory, are here receiving their pension books from Vera Ossipova, of the factory's Social Security Committee.



A foreman, a fitter, and two blacksmiths of the Gorky car works, all of them with twenty-five years service, work out what their pension will be on retirement.

Z. S. Dusaev, a retired teacher, receives his pension from A. V. Sorokina, a postgirl of Kazan.



An equally important form of State aid to the disabled is the restoration of their ability to work. The making of artificial limbs, treatment to restore the health of individuals, specialised industrial enterprises, professional schools, technical schools and courses—all of these are widely developed in the republic.

The Russian Federation has seventy-four enterprises making artificial limbs and appliances of various kinds. These are given to the people free of charge. 133 million roubles were spent for this purpose in 1958.

The Russian Federation has forty-one boarding industrial schools and nine technical schools to train disabled workers and teach them new skills and trades. All the students in these schools are supported completely by the State. In 1958, 61 million roubles were spent on such study courses.

Doctors play an important part in the work of social maintenance organs. They have a responsible task—to organise medical examinations by experts in order to decide just what labour an incapacitated worker can perform.

Not only does the size of the pension paid depend upon the proper determination of the degree of a worker's disability, but also on finding work which he is capable of doing without impairing his health.

These medical check-ups are made by Medical Labour Expert Commissions consisting of doctors who are experts in this work. There are 2,405 such commissions in the Russian Federation, their maintenance amounting to over 48 million roubles. These Commissions are controlled by the social maintenance organs.

Old people and invalids who are all alone or who, for one reason or another, are unable to live with their families, are taken complete care of by the State. The Russian Federation, for example, has 609 Homes for the Aged and Disabled, for the maintenance of which 60 million roubles were allocated in 1958.

Of the remaining funds, 3,200 million roubles were used as grants to single mothers and mothers of large families and 44.6 million roubles for health centres.

Special Features of Pension Security

In the U.S.S.R. those who have the right to a state pension are: factory and office workers, workers on State farms, regular servicemen, students in higher, specialised secondary schools, and other schools, in schools and courses for the training of workers, citizens who have become disabled during the fulfilment of state and social duties, and, finally, members of families that have lost their breadwinners.

Pensions are granted for old-age, disability, and in case of the loss of the breadwinner.

All workers, without any exception whatsoever, have the right to pension security. It does not depend on the nature of their work, whether permanent, temporary, or seasonal. Nor does the place of work, that is, whether it is a state or co-operative institution, a social organisation, or the personal household of individual citizens* play any role.

The method of payment for the work done, that is whether the work is paid for according to time, whether it is piece-work, and the like, is also not taken into consideration. And, finally, a person has the right to a pension regardless of his race, nationality, or sex.

Pension security is based on the principle: "To each according to his work." When the size of pension is determined, the amount and quality of the work done by the pensioner when he was working are taken into consideration. This is reflected, in particular, in the fact that when pensions are granted, special benefits are sometimes awarded; higher pensions are given to those engaged in work underground, in hot shops, or under conditions that are harmful or difficult.

Provision is also made for corresponding additions to pensions for long, uninterrupted service and also for the payment of pensions even when the length of service is less than normally required.

The amount of pension is dependent on wages and constitutes from 50 per cent to 100 per cent of the average monthly

* Where people are employed by a personal household, the householder pays the contributions.

earnings. The lower the earnings, the higher the percentage on which the pension is figured. The average earnings may be calculated not only on the basis of the last year's work, but also on the basis of five successive years of the ten years prior to one's application for a pension. This is of special benefit to the worker who, just before retiring on a pension, may have earned less than when he was younger.

Pensions are supervised on a wide democratic basis. They are supervised by the trade unions which take part in the work of the commissions awarding pensions and in the Medical-Labour Expert commissions, and see to it that the funds are spent correctly.

Workers as a whole are encouraged to take an interest in social security questions, as shown, for example, by the country-wide discussion of the draft Law on State Pensions.

WHEN OLD AGE ARRIVES . . .

MOST SOVIET PENSIONERS are labour veterans. That can readily be seen by glancing at the figures for the Russian Federation. In 1946, 2,200 million roubles were paid out in pensions to retired workers. In 1957 they received 19,200 million roubles, which is more than half of the total social security expenditure in this republic.

Men who have reached the age of 60 and who have worked at least twenty-five years, and women who are 55 years of age and have worked at least twenty years have the right to an old-age pension.

It is interesting to note, in this connection, that in Britain the corresponding ages are 65 years for men and 60 for women; in the U.S.A. it is 65 and 62; in the German Federal Republic 65 for both men and women; in Sweden—67; and in Canada, Ireland and Norway—70 years.

Old-age pensions in the U.S.S.R. are granted for the rest of a pensioner's life, regardless of his ability to work. The maximum pension is 1,200 roubles a month and the minimum 300 roubles (225 in rural areas).

Ivan Dybin, who lives at No. 3 Bogoslovsky Lane, Flat 3, Moscow, worked for many years as an electrician for a public trust in the Sovietsky district of the capital. In 1956 when he was 63 years old, he decided to retire on a pension. His earnings during the past few years were not very high: 600-700 roubles a month. Yet he was assigned a pension of 1,200 roubles a month.

It probably seems strange that, as a pensioner, he should receive *more* than he earned in the last few years of his working life. But, as already mentioned above, a pension may be figured on the basis of any five successive years of the last ten years of a worker's employment, prior to his applying for a pension.

And so Dybin's pension was calculated on the basis of his average monthly earnings during the years when his wages were especially high.

Ivan Dybin is no exception. Take Vladimir Privezentsev, another pensioner who lives in Sovietsky District, Moscow. Now 61 years old, he spent thirty years working on various construction projects. For the last ten years before his retirement Privezentsev worked as a fitter. His average monthly earnings, 2,013 roubles, served as the basis for calculating his pension, which amounts to 1,006 roubles.

But Privezentsev was also entitled to an additional 10 per cent for his continuous long service record, which meant another 100 roubles a month. Furthermore, his wife, Antonina Privezentseva, did not work but was dependent on him, for which another 10 per cent was added to the pension. Thus Vladimir Privezentsev was given the maximum pension of 1,200 roubles a month.

Needless to say, not every pensioner in the Soviet Union receives such a high pension. But what should be particularly stressed is that the Soviet State provides enough to retiring workers to enable them to maintain the material and cultural standard which they had enjoyed before retiring, and to enjoy a secure old age without any worries.

For those who work under difficult conditions the length of service required to receive a pension has been reduced by

five years. Even greater benefits are granted to those engaged in work underground or in hot shops, as well as to those who work under harmful conditions. In such cases a man is entitled to a pension if he has reached the age of 50 and has worked twenty years, and a woman if she is 45 years old and has a service record of fifteen years.

The pensions of such workers are 5 per cent higher than usual. In order to be eligible for such privileges it is sufficient to have spent half of the necessary period in these special categories of work, regardless of where the last place of work may have been.

Konstantin Ivanov worked as a founder at a Moscow enterprise ever since 1936. As this was considered harmful work Ivanov, upon reaching the age of 50 in 1958, was granted an old-age pension of 1,200 roubles (his average monthly earnings had been 2,500 roubles).

Apart from the above categories of pensions for workers from the age of 45-50, there are pensions for prolonged, meritorious service which are granted at an even earlier age. Such pensions are awarded regardless of age, working ability, and earnings and irrespective of whether or not the pensioner is still working.

They are granted to doctors, pharmacists, teachers, agronomists, zootechnicians, pilots of the civil air fleet, and several other categories of specialised work, including circus and stage stunt performers, ballet dancers, animal trainers, wind instrumentalists and solo singers.

The following is the present scale of old age pensions in roubles per month:

Average earnings	Pension percentage	Pension not less than
up to 350	100	300
350-500	85	350
500-600	75	425
600-800	65	450
800-1,000	55	520
over 1,000	50	550

Average earnings	Pension percentage	Pension not less than
For those employed underground, in hot shops or under harmful conditions, for earnings as above	100	300
	90	350
	80	450
	70	480
	60	560
	55	600

The minimum old age pension is 300 roubles per month.
The maximum old age pension is 1,200 roubles per month.

Working pensioners receive an old age pension of 150 roubles per month provided their earnings (not counting the pension) do not exceed 1,000 roubles.

Working pensioners eligible for old age pensions on favourable terms, such as persons employed on underground work, on work with harmful conditions of labour, or in hot shops, receive 50 per cent of the full pension irrespective of their income.

People with insufficient service are ineligible for an old age pension if they continue working.

The law also provides other pension benefits.

Women who have given birth to five or more children and have raised them to the age of eight have the right to a pension when they are 50 years old if they have a service record of at least fifteen years.

Working people may receive old-age pensions even if their service record is not complete. Such people who have reached pensionable age and have worked at least five years, three of which were immediately prior to their application for a pension, are eligible for a pension. In such cases the amount of the pension is proportional to the length of their service, but not less than a fourth of the full pension.

IF ONE BECOMES DISABLED

IN OLD RUSSIA thousands of beggars and homeless cripples flooded the towns, villages and roads in search of their daily bread. Many perished.

The State showed practically no concern whatever for the disabled, leaving all that to social, philanthropic societies

which depended on the rare and incidental contributions of eminent rich people.

True, crippled service men of the lower ranks were given state pensions if they had no one to support them, but the amount of these pensions was a paltry dole—3 roubles a month—which meant semi-starvation.

The fate of those who were injured by an accident at work was especially bitter. Such cripples were callously discharged from their jobs. There was always someone to take their place from amongst the crowds of people waiting outside the factory gates, ready to accept any work for any wages.

Here is an item taken from the newspaper *Pravda* on November 17, 1912.

"Locomotive driver Loginov, who worked on locomotives for about twenty years, was sacked in the summer after a medical examination, because of deafness. Loginov appealed to be given other work. His request was refused and he was told there was no other work for him. . . .

". . . Loginov has many children. Some of them attend the railway school, but in view of Loginov's discharge from work they are now deprived of the means to continue their studies.

"Loginov was discharged without being given a pension. Work, work, and then end it all near some fence, to die of starvation. . . ."

On November 27, 1912, *Pravda* reported another case, under the heading "*No longer needed.*"

"On November 15, Iv. Avilov, a turner at the main locomotive shops of the Nikolai railway terminus, fell behind his lathe during a fit. That very same day he was summoned to the office and told that he was completely discharged from his work, and even had to sign a paper that he had been advised to that effect.

"Avilov had worked in the shops for thirteen years. He was discharged without being given any pension, aid, etc., for he was no longer needed. They had squeezed all his strength and health out of him and when his exhausting labour and terrible working conditions had worn him out

completely he was thrown out. He was no longer needed."

This discharge of incapacitated and aged workers without pensions or other form of aid was common practice in tsarist times.

It would be interesting to pay a visit today to that very same building mentioned in *Pravda* of 1912. Today it is the premises of Locomotive Depot No. 8 of the October Railway. About a thousand people are employed there. Of this number 114 are pensioners, seventy-two receiving old-age pensions, forty disability pensions, and two are war disabled from the Patriotic War.

Who are these pensioners?

One of them, Mikhail Klochkov, was formerly a locomotive engineer on a passenger train. The Medical Labour Expert Commission declared him as a disabled worker in group III and he was transferred to lighter work, taking care of cold locomotives. His earnings remained the same as before, for his pension and new wages amounted to what he had received as a locomotive driver on a passenger train.

Or take the case of Yevgeni Filimonov, a mechanic at depot No. 8. In 1947, as a result of an accident, he was injured and declared a group I disabled worker. As such he received a pension amounting to 100 per cent of his wages. In the meantime he was given medical treatment and when he had recovered sufficiently to return to work he was given an easier job. His wages are less but he received a pension of 500 roubles a month because of the injury he had received, so that his income is the same as before.

The Soviet State is very attentive to the needs of the disabled, who are provided with pensions, helped to recover their ability to work, and, it goes without saying, receive medical care.

Workers are entitled to a disability pension in case of permanent or prolonged loss of the capacity to work. In such cases they are granted pensions irrespective of when they became disabled—before starting work, during their working life, or after retirement.

A person may become disabled as a result of some injury



"A long and happy retirement" friends wish to P. T. Alexandrov, a weaving instructor of Trekhgornaya textile mills.



Nikolai Prokhorov operates a drill in the factory run by the Moscow Society of the Blind.



A weekend call by former workmates of Dniepropetrovsk steel works finds Yakov Kovtun enjoying his garden after forty-five years at work.



One of the homes at Voronezh for old age pensioners and war invalids. Three hundred receive constant care and attention and full maintenance here. Below is shown a corner of the Reading Room in this building.



Below, retired theatre people in the lounge of their Leningrad home





Keeping age and illness at bay! Shipyard workers of "Krasnoye Sormovo", Gorky, have an overnight sanatorium for those requiring medical care without being hospitalised. Above, I. A. Chicherov, a moulder, tackles sanatorium manager M. A. Temilov at chess.

N. A. Kamensky, being congratulated, below, on his fiftieth anniversary at the Krasni Proletari engineering works. But he doesn't want to retire yet—he says his father worked sixty years at the same works.



received at work, or because of some occupational disease or following some general ailment.

In the first two cases a pension is granted irrespective of the service record. The pension awarded to those in Group I or II who have become disabled following some general ailment is proportionate to the service record, but cannot be less than one-fourth of the full pension. In the last case the worker is entitled to a pension if he had a qualifying service record, according to the following table.

Age	Length of Service (in years)	
	Men	Women
from 20 to 23	2	1
" 23 to 26	3	2
" 26 to 31	5	3
" 31 to 36	7	5
" 36 to 41	10	7
" 41 to 46	12	9
" 46 to 51	14	11
" 51 to 56	16	13
" 56 to 61	18	14
" 61 and older	20	15

Factory, office or other workers disabled by a general disease before reaching the age of 20 are eligible for a pension:

- (a) if disability ensued in the period of work or after stopping work—irrespective of the length of service;
- (b) if disability ensued before starting work, providing not less than a year has been spent in work.

For workers employed underground, working under harmful conditions or in hot shops, the qualifying service period for disability pension as a result of general ailment is less.

Since the degree of disability varies for different people disabled workers are classified in three groups. The Medical Labour Expert Commission determines the group to which a disabled worker belongs.

The size of a disability pension depends on the earnings, the group and the cause of the disability, as well as on the trade working conditions.

Pensions for people injured at work or suffering an occupational disease are as follows: for group I: minimum—360 roubles a month; maximum—1,200 roubles; for group II: minimum—285 roubles; maximum—900 roubles; and for group III: 210 and 450 roubles respectively.

For workers who have become disabled as a result of some ailment the following pensions have been established: group I—from 300 to 900 roubles a month; group II—from 230 to 600 roubles a month; and group III—from 160 to 400 roubles a month.

On what basis are disability pensions calculated?

On the basis of the worker's earnings.

Disability pensions resulting from an injury incurred during work or from an occupational disease are granted as follows: for group I—100 per cent of earnings up to 500 roubles a month plus 10 per cent of the rest of the earnings; for group II—90 per cent of earnings up to 450 roubles a month and 10 per cent of the rest of monthly earnings; for group III—65 per cent of earnings up to 400 roubles a month and 10 per cent of the rest of monthly earnings.

For workers engaged in underground work, hot shops and in work under harmful and difficult conditions the size of the pension is greater.

The following increases in disability pensions may be granted (within limits of the maximum pensions):

- (a) to invalids of the first and second categories (in consequence of a general disease) for continuous service: from 10 to 15 years, 10 per cent of the pension; over 15 years, 15 per cent of the pension;
- (b) to non-working invalids of the first and second categories (irrespective of the cause of the disability) who have dependents incapable of work: for one dependent incapable of work, 10 per cent of the pension; for two or more dependents incapable of work, 15 per cent of the pension;
- (c) to invalids of the first category (irrespective of the cause of the disability), 15 per cent of the pension as a nursing allowance.

The increases to invalids of the first category in consequence of a general disease may not total above 30 per cent of the pension.

If a disabled worker has reached the age of 60 (for men) or 55 (for women) the pension is awarded for life. Other disabled workers are granted pensions for the whole period of their disability, which is laid down by the Medical Labour Expert Commissions.

Many disabled workers wish to continue their work and do so. In such cases those in groups I and II receive their pensions in full just the same, irrespective of their earnings or other form of income.

Those in group III are in a somewhat less privileged position. They receive a pension which, together with their earnings, does not exceed the total pay received before the pension was granted. But in all cases they receive at least 50 per cent of the full pension of their category.

Soviet laws pay special attention to those injured at work through the fault of the management. A worker has the right to demand compensation for his injury from the management. On decision of the court the injured person receives supplementary pension from his enterprise making the total pension equal to what he earned before the injury.

Here is an example. Montashin, a worker at a plant in the city of Ulyanovsk, was injured in an accident at work. He was completely disabled. The doctors proclaimed him a group I invalid. Before the accident he had earned 1,064 roubles a month. He still receives that amount now: 695 roubles in the form of a pension paid by his district social maintenance department, and 369 roubles a month from his plant.

Privates and non-commissioned officers, whether they worked or not before being called to the army, are also entitled to a pension in case of disability. Neither the duration of their service in the army, their preceding work, nor their age are of any significance here.

Servicemen who receive disability pensions are classified according to two categories. The first of these categories

... of those who were ... military ...

The second category ... military ...

In the first case ... military ...

In the second case ... military ...

Those who, before ... military ...

Non-working invalids in groups ... military ...

What about privates and non-commissioned officers ... military ...

Disabled servicemen in groups ... military ...

Pensioners in all of these groups ... military ...

Additional amounts for dependents ... military ...

Another 10 per cent ... military ...

paid to non-commissioned officers ... military ...

The Soviet State renders every kind of assistance to pensioned invalids who wish to continue working. The Medical Labour Expert Commissions advise disabled people as to what kind of work they can do and under what conditions, so that they will not impair their health.

Guided by the recommendations of the Medical Labour Expert Commission the social maintenance departments allocate these disabled pensioners to some enterprise or industrial co-operative.

The managements of these enterprises are obliged by law not only to accept such invalids for work but to provide them with all the necessary conditions (special equipment, tools, working schedule, and so on), recommended by the medical commission.

The social maintenance departments as well as the medical experts regularly check up on the working conditions of disabled workers, follow up their state of health, and see to it that they receive the necessary treatment. The factory trade union committees, through special social insurance committees and pension groups, also check up on their working conditions.

The Krasnoye Sormovo plant in Gorky, which is one of the largest plants in the country, employs a number of disabled men who work successfully on an equal footing with the rest of the workers. The plant's management does everything it can to provide these invalids with good working conditions.

Most of them are qualified workers whose experience and skills are constantly increasing. In the first six months of 1958 fifteen of them were granted higher wages.

In the same six-month period, thirty disabled workers were taught new specialities. By improving their skills they also began to earn more.

Another form of help to disabled workers is free instruction and the teaching of new trades in special technical schools and technical boarding schools.

Professional and technical schools train agronomists and zootechnicians, dressmakers and tailors, shoemakers, bookkeepers, cinema operators, draughtsmen, designers, mechanics

consists of those who were disabled by a wound, shock or injury sustained while defending the U.S.S.R. or performing other military duties, or in consequence of some disease contracted at the front.

The second category consists of those whose disability is due to the same causes but is not connected with the fulfilment of military duties or life at the front.

In the first case the size of the pension depends upon the earnings of the disabled servicemen before engaging in military service: for those in group I—from 385 to 1,200 roubles a month; for group II—from 285 to 900 roubles a month; and for group III—from 210 to 450 roubles a month.

In the second case the respective pensions are: group I—from 330 to 900 roubles; group II—from 230 to 600 roubles; group III—from 160 to 400 roubles.

Those who, before serving in the army, had worked underground, in hot shops, or under harmful or difficult conditions are entitled to more favourable pensions.

Non-working invalids in groups I and II who are serving in the army, as well as those who have become invalids following an injury incurred during work or as a result of an occupational or general disease, are given additions to their pension for dependents incapable of working.

What about privates and non-commissioned officers who did not work before they were called up? What pensions have been established for them?

Disabled servicemen in group I (of the first category) receive 385 roubles a month and those in the second category 330 roubles; for group II the corresponding amounts are 285 and 230 roubles; and for group III, 210 and 160 roubles.

Pensioners in all of these groups are also entitled to additional amounts for dependents incapable of working (10 per cent of the pension for one dependent incapable of working, 15 per cent for two or more dependents incapable of working). Another 10 per cent increase to the pension is paid to non-commissioned officers in the army and navy.

* * *

The Soviet State renders every kind of assistance to pensioned invalids who wish to continue working. The Medical Labour Expert Commissions advise disabled people as to what kind of work they can do and under what conditions, so that they will not impair their health.

Guided by the recommendations of the Medical Labour Expert Commission the social maintenance departments allocate these disabled pensioners to some enterprise or industrial co-operative.

The managements of these enterprises are obliged by law not only to accept such invalids for work but to provide them with all the necessary conditions (special equipment, tools, working schedule, and so on), recommended by the medical commission.

The social maintenance departments as well as the medical experts regularly check up on the working conditions of disabled workers, follow up their state of health, and see to it that they receive the necessary treatment. The factory trade union committees, through special social insurance committees and pension groups, also check up on their working conditions.

The *Krasnoye Sormovo* plant in Gorky, which is one of the largest plants in the country, employs a number of disabled men who work successfully on an equal footing with the rest of the workers. The plant's management does everything it can to provide these invalids with good working conditions.

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Another form of help to disabled workers is free instruction and the teaching of new trades in special technical schools and technical boarding schools.

Professional and technical schools train agronomists and zootechnicians, dressmakers and tailors, shoemakers, bookkeepers, cinema operators, draughtsmen, designers, mechanics

for the repair of sewing and knitting machines, technologists, rate-setters, landscape gardeners and other trades.

There is an agricultural school in Kungur which trains agronomists and zootechnicians. It has its own 130-acre farm, a herd of cattle, a large poultry farm, and also its own orchards, vegetable gardens, and a large number of modern agricultural machines.

The State has assumed all the expenses connected with teaching, feeding and maintaining its 200 disabled pupils. Furthermore, these disabled pupils receive part of their pensions. Those with families receive their pensions in full.

This technical school helps to supplement the ranks of agricultural specialists every year.

FOR FAMILIES WHO HAVE LOST THEIR BREADWINNERS

IN ADDITION TO OLD AGE and disability pensions, the U.S.S.R. provides special pensions for families that have lost their breadwinner.

All members of the family of the deceased worker, office employee or pensioner, who were his dependents and who are unable to work, have the right to such a pension. These include his children, brothers, sisters and grandchildren under sixteen years of age and students up to the age of eighteen.

Should they become invalids at this age the pensions are payable to the children of the deceased for life, and to his brothers, sisters and grandchildren in the event that they do not have parents who are able to work.

The parents of the deceased breadwinner are paid a pension if they themselves are invalids or aged (that is, if the father is 60 years old and the mother 55 years). In this case it is of no significance when the parents of the deceased became invalids or reached the indicated age, before or after the death of their breadwinner.

The wife or husband of the deceased is eligible for a pension if he (or she) reached advanced age and became an

invalid before, or not later than five years after, the death of the breadwinner. If there are no adult children capable of working the bereaved spouse is awarded a pension regardless of when advanced age is reached or invalidity ensues.

The husband or wife continues to receive his or her pension even if they marry again.

A parent or spouse of the deceased who is not working, but is engaged in caring for the under-eight-years-old children, brothers, sisters or grandchildren of the deceased, receives a pension regardless of his ability to work and his age. In case of the death of one parent, children who have been dependent on both parents are still entitled to a pension even if the other parent works.

The grandparents of a deceased person are given a pension if they have no one else who is bound by law to support them. If the deceased was an adopted child, his foster parents have the same rights to a pension as his parents would have had, and adopted children are equal to the deceased person's own children in the eyes of the law.

In the case of the death of the breadwinner the following pensions are granted:

To the families of factory and office workers regardless of when the breadwinner died, that is, whether during the period when he was working or after he had stopped working:

To the families of servicemen if the breadwinner died when in the army or not later than three months after his demobilisation, or if he died after this period as a result of a wound, shock, injury or illness incurred during his military service;

To the families of pensioners if the breadwinner died during the period when he was receiving a pension or not later than five years after he had ceased to receive a pension.

Pensions awarded because of the absence of the breadwinner, the reason for such absence not being known, are granted regardless of when the absence of the breadwinner was established.

If a factory or office worker dies as a result of an injury incurred during work or some occupational disease, his family is granted a pension irrespective of the length of service of

the breadwinner. If the death results from a general disease, the pension is granted the family provided that at the time of his death the breadwinner had a service record which would have entitled him to an invalid pension. Families of servicemen are given pensions in all cases, regardless of the length of military service or the previous work of the serviceman.

What are the amounts of pensions granted in case of the loss of the breadwinner?

This is determined by the number of members in the family who are unable to work, by the cause of the death (an industrial accident, an occupational disease, or general disease), and by the conditions under which the deceased worked (whether underground, in a hot shop, or under harmful or difficult conditions).

The following pensions, which are the highest, are granted to families of workers and office employees who died as a result of an industrial accident, after some occupational disease, irrespective of the service record of the breadwinner, and also to families of those who worked underground, in hot shops or under harmful or difficult conditions: for three or more members of the family who are unable to work—from 300 to 1,200 roubles a month; for two members of the family—from 230 to 900 roubles; for one member—160 to 450 roubles.

Similar pensions are granted to families of privates in the army who, before their service, had been employed as factory or office workers. But this refers only to those who died after having been wounded, sustained shock or been crippled in defending the U.S.S.R. or performing other military duties, or as a result of some disease contracted at the front. In the case of the death of the serviceman not being attributed to the exercise of his military duties or service at the front, his family is granted a pension equivalent to that given to families of factory and office workers whose breadwinners died as a result of general illness.

The families of deceased privates who had not worked before their military service are granted pensions on the



Above, the house at Kashtak for retired metalworkers of the Chelyabinsk Region

Olde Tyme Dancing! Retired veterans of the Likachev motor works in Moscow show their paces. Across the hall hung a banner—"Honour and Renown to the Veterans of Labour".





Of course one doesn't need four to qualify for Children's Allowances! Shop-assistant Vera Bosova and her chauffeur husband have the active interest of the local Social Security Committee in caring for Faith, Hope, Love, and Rose.

Below, a meeting of the Pensions Committee of the Sverdlov district, Moscow. Left to right: Medical Workers' Union representative, Chairman of the Committee, a pensions inspector, and the assistant head of the district's finance department.



following scale: for three and more members of the family who are unable to work, 255 or 300 roubles a month; for two members—195 or 230 roubles; for one dependent member—136 or 160 roubles. The lower figure is granted to families living permanently in rural localities and connected with agriculture.

In all cases the families of non-commissioned officers who had been serving a limited term in the army are given an additional 10 per cent.

When the size of the pension to families that have lost their breadwinners as a result of general disease is being determined, the service record of the deceased person, necessary for the granting of a disability pension, and also the working conditions (underground, in hot shops, or under harmful or difficult conditions) are taken into consideration.

These factors determine the size of the pension granted: for three and more members of the family, who are unable to work—from 300 to 900 roubles a month; for two such members—from 230 to 600 roubles a month; and for one dependent member of the family—from 160 to 400 roubles a month.

Certain additions and supplements are granted within these limits. For instance, higher pensions are granted to complete orphans and to children of a deceased unmarried mother. If the deceased had the necessary uninterrupted service record, his family receives an additional 10-15 per cent. However, if the deceased breadwinner did not have a service record sufficient for the granting of a complete pension, the members of the family can receive part of the pension if the breadwinner died during the period when he was still working.

The care shown by the state for families that have lost their breadwinner is not restricted to the payment of pensions. The social security organs and the trade unions, working in close co-operation, organise other forms of aid.

They include, for instance, finding work for the members of the families of the deceased and giving them an industrial training; providing them with accommodation in a sana-

torium, rest home, or Young Pioneers' camp; giving them financial aid and loans to enable them to build their own homes and purchase clothing and cattle; helping them organise vegetable gardens and orchards; providing them with fuel and with fodder for their livestock, etc.

At enterprises this work is done either by the guardian councils or the social insurance committee organised by the trade unions, and, in the countryside, by the social mutual aid societies of the collective farmers.

RECOVERING ONE'S ABILITY TO WORK

IT IS A GRIEVOUS BLOW for a person to lose his hands or feet. Is it possible for such a person to return to work? Yes, it is! It's not only possible but even necessary, for a return to normal working activity not only helps to restore morale but is equivalent to the rebirth of the person.

Work is not such a serious problem for someone who has become disabled as a result of some occupational or general disease. He worked and will continue to work, although under new, and easier conditions, such as are recommended by the Medical Labour Expert Commission.

However, for the person who has lost his hands or feet, the situation is different. His return to work depends upon the use of artificial limbs.

The Soviet State has assumed this burden. Working people in need of artificial limbs and orthopaedic appliances are given them free of charge. Invalids without legs are also given motorised wheel-chairs without having to pay for them.

An order for the necessary appliance can be given to the nearest plant or shop. For those invalids who find it difficult to move about themselves, there are travelling orthopaedic workshops. Such mobile workshops also serve outlying districts.

Science is of great help in designing artificial limbs and helping the disabled to recover their ability to work, as well

as ascertaining what they can do. In the Russian Federation alone there are four scientific research institutions which devise methods for determining the extent of disability, design new, more functional artificial orthopaedic appliances, improve existing designs, and study and assess the experience of organising work for disabled persons.

These institutes have combined staffs of over 1,900 scientific and technical workers, ninety of whom have doctor's and master's degrees.

Soviet scientists and inventors have created the most diverse improved appliances for invalids, in particular artificial limbs for people who have lost both hands, and appliances which they call active artificial hands.

Artificial limbs to replace a hand or foot can greatly facilitate one's return to work. But what a person wants more than anything else is to return to his former trade or profession. He who was once a turner or fitter would like to work at that trade again. What is to be done in this case?

Here, too, the scientific institutes have come to the aid of man. They have designed various functional appliances which enable disabled people to engage in skilled work.

MOTHERHOOD—A STATE OF HONOUR

THE CONSTITUTION of the U.S.S.R. gives women the right to equal pay for equal work, and equal rights with men as regards participation in all spheres of economic, government, cultural, and political life.

This equality of women exists not only in law but also in reality. The State manifests special concern for the health of women, the upbringing of the children, and mothers of large families.

Of great significance for working women is the law on increasing the length of paid maternity leaves from 77 to 112 days, and payment during maternity leaves, ranging from 60 to 100 per cent of their wages.

According to the law a woman cannot be refused work because of the fact that she is an expectant mother. Expectant mothers cannot be employed on night work, nor can they be asked to do overtime work after the third month of pregnancy.

Women also have at their service whatever special medical and prophylactic aid may be required during their pregnancy. Upon the recommendation of the doctor the plant management must transfer expectant mothers to lighter work, while continuing to pay them their former wages.

The Law on State Pensions also reflects the concern of the State for women. As has already been said, working women have the right to receive a pension five years before men.

Even during the difficult years of the Great Patriotic War, when all the means and efforts of the Soviet people were directed towards the defence of the country, the State found it possible to render aid to unmarried mothers and mothers of large families. In July 1944, the Presidium of the Supreme Soviet of the U.S.S.R. passed a decree "On Increasing State Aid to Expectant Mothers, Mothers of Large families and to Unmarried Mothers, on Improving the Care of Mother and Child, on the Establishment of the Title of Honour 'Mother Heroine' and the institution of the order 'Glory of Motherhood' and the 'Medal of Motherhood'."

According to this decree women who have two children receive a one-time State grant upon the birth of a third child. Should they bear other children, they are given both one-time grants and also monthly financial aid the size of which increases according to the number of children. Unmarried mothers are ensured a monthly grant when their first child is born.

The State spends huge sums of money on aid to unmarried mothers and mothers of large families. In 1956 alone it paid out 5,100 million roubles for such aid.

Allocations to improve women's working and living conditions constantly increase. The network of canteens, and laundries, dress-makers, tailors, and shoe-repairers, personal

service shops, the production of semi-finished products and all kinds of machines to lighten housework—all of these are constantly being extended both in town and countryside.

These measures help to free women from many household duties and cares, and enable them to take a more active part in the public life of the country and to devote more attention to the upbringing of their children.

HOMES FOR OLD PEOPLE

IN THE PAST the fate of many lonely old people and invalids, in tsarist Russia, who had no means of subsistence, was indeed bitter. They were forced to lead a pauper's life, constantly wandering from place to place in search of a piece of bread. It was only some especially "fortunate" homeless old people and invalids who found shelter or a nook in some wretched poorhouse.

How different has become the situation in Soviet times! By the beginning of 1958 the U.S.S.R. had 1,055 Homes for the Aged and Disabled, which provided real homes for 135,000 people.

Who has the right to live in a Home for the Aged and Disabled? All citizens not less than 16 years old who are group I and II invalids and who have no relatives bound by law to support them and give them the necessary care.

In addition to Homes of a general type, there are special boarding homes for tubercular people, chronic psychopaths, and invalid children.

Those who live in Homes for the Aged and Disabled are supported completely by the state, which provides clothing, footwear, three or four meals a day, necessary treatment, care, and recreation facilities.

These Homes have their own auxiliary plots of land, which produce a regular supply of fresh vegetables, fruit, meat and dairy products.

Many Homes of the general type, besides having their own plots, also have workshops for tailoring and dress-making, manufacturing cardboard articles, footwear, lace and such

like. People work in these shops and on the plots only with the permission of the doctor and under his supervision.

For performing this work inmates receive half of the value of the articles produced; the other half goes to improve the cultural and other needs of the inmates as a whole.

Although the people who live in these Homes are supported entirely by the State, they still retain, in some measure, their right to pensions. For instance, disabled servicemen receive 25 per cent of their pension; others receive 10 per cent but not less than 50 roubles a month. If a pensioner who lives in the Home has dependents who are unable to work, the latter are also paid from 25 to 70 per cent of the pension.

As a rule these Homes exist in every region and even in the most remote and northerly parts of the country.

The Yakutsk Autonomous Republic has nine such Homes, among them the Aldan Home, which was built in 1956. There are 150 people living here, Yakuts, Russians, Chinese, Koreans, Tatars, and others.

The people live here as one harmonious family. Their rooms are light and well-kept. Each Home has a large dining-room, reception room, library, hairdressers and other facilities and services.

To make time pass more interestingly the healthier people, if the doctor agrees, may work in the carpentry shop where they can make tables, chairs, bed-side tables and so on.

The Kharbet Home for Disabled in the Armenian Republic has won fame throughout the country. It occupies three white-stone buildings surrounded by greenery and flowers. The 200 inmates are mainly disabled workers and ex-servicemen who have no family or relatives.

The Home is exceedingly cosy: there are flowers on the tables, snow-white embroidered curtains on the windows, a bedside table next to every bed, beautiful bedspreads, soft comfortable beds, and convenient wardrobes. There is a special medical room for those in need of treatment.

The people living here also work on the auxiliary plot of land, make shoes and clothes, or grow flowers, depending upon their physical ability and health.

THE EQUAL OF ALL OTHERS

THE SOVIET STATE devotes special attention and renders great help to the deaf, dumb or blind. They are given the opportunity of receiving an education the same as anyone else, and learn a specific trade or occupation. All work with them is conducted through the Society of the Blind and the Society of Deaf-Mutes.

In the Russian Federation the Society of the Blind has 260 educational and industrial training enterprises, seventy club-houses, 1,008 recreation rooms, thirty-five regional libraries, and over 700 travelling libraries and branches at public libraries. The publication of literature in Braille is expanding continuously.

The blind are taught to read and write according to the Braille system at schools for young workers and in elementary schools for adults. Thousands of blind people attend secondary, technical and higher educational institutions and have become teachers and scientists.

The state has established a six-hour working day for the blind. They are also given special benefits when retiring on an old-age pension. Those blind people who receive a disability pension may receive an old-age pension instead if they have reached the age of 50 and have worked at least fifteen years. For women it is on reaching the age of 40 and having worked at least ten years.

Enterprises employing the blind are exempt from taxes on their turnover. This enables them to accumulate more funds which are used for the building of hostels, houses, clubs, new enterprises, for cultural and educational work and also to render more material and medical aid to their workers.

In 1956 alone as many as 14,000 blind people were sent to sanatoriums and rest homes, and 7 million roubles were given to them in the form of one-time grants.

The All-Russian Society of Deaf-Mutes conducts its work on a large scale. This society has fifty-eight educational and industrial training enterprises where 4,000 deaf-mutes work

and study. It also has three factory and workshop schools and a trade school.

The members of the society take part in various cultural activities. The society has about 500 clubs and recreation rooms, and 300 libraries. About 15,000 people take part in its numerous sports clubs.

In August 1957 international contests of deaf-mutes were held in Milan. At that time Soviet athletes won 31 medals—13 gold, 11 silver, and 7 bronze—and took first place among the representatives of twenty-six countries.

Such are the talented, gifted people among the blind and the deaf-mutes.

Many people have heard of the sports pistol designed by Margolin, a blind Soviet designer. Soviet marksmen were victorious when shooting with it at international championships held in China, Rumania, Venezuela, and elsewhere. The 1956 world champion, Kalinichenko, used a Margolin pistol.

The name of the blind architect, Alexander Zotov, is widely known in Central Asia.

During the war the Begovat metallurgical works announced a competition for the best housing design.

There was one entry which specially attracted the jury's attention. The building was very simple and comfortable, its construction requiring less funds than the usual type and being easy to build.

The project was unanimously awarded the first prize. Imagine the amazement of the members of the jury when they learned that the design had been submitted by Zotov the blind architect!

Today Alexander Zotov is a member of the staff of one of the designing organisations of Uzbekistan. His designs form the basis for the construction of the district centre of Kara-Uzyak in Kara Kalpakia, for the reconstruction of the city of Ferghana, and for the nearby town of Margelan.

FOR THE WELL-BEING OF THE PEOPLE

THE WELL-BEING of the workers has always occupied the attention of the Soviet Government and the Communist Party of the Soviet Union.

The U.S.S.R., the first state of workers and peasants on this planet of ours, has been in existence for forty-one years. Throughout this period, under the most difficult conditions, in the midst of dealing with intricate problems of state and economic construction, the Soviet Government has always shown concern for the welfare of the people.

From a wooden plough to artificial Earth satellites and atomic power stations—such are the visible landmarks in the sweeping development of the Soviet State. And the constant improvement in the well-being of the people has kept pace with the rapid growth of the socialist economy.

Unemployment disappeared in the Soviet Union long ago. The number of workers employed in the Soviet national economy has increased more than four-fold as compared with 1913. Real earnings, if we bear in mind pensions, money grants, free tuition and free medical service, are almost double what they were in 1940, the year before the war.

During the past three years the Soviet Government and the Communist Party have introduced such important measures as raising the wages of the lower-paid workers, reducing the length of the working day on the eve of holidays and free days (usually Sundays), the transition to a shorter working day for factory and office workers in the coal industry, ferrous and non-ferrous metallurgy, oil, gas, chemical, and cement; the lengthening of maternity leave, and the new Law on State Pensions.

Much has already been done, but the immediate future holds forth promise of even greater things. The 1959-1965 Seven-Year Plan for the development of the Soviet national economy provides for a further powerful growth in all branches of the economy and a corresponding considerable rise in the people's living standards.

The national income, which, in the U.S.S.R., is distributed in the interests of all members of society, will increase by 62-65 per cent by 1965. This will permit an average increase of 40 per cent per worker in real income.

Wages of lower and medium-paid workers will be raised. In particular, the minimum wage will be increased from 270-350 roubles a month to 500-600 roubles a month.

The Soviet State annually spends tremendous amounts of money on free education and courses to improve the workers' skills, on free medical service, sanatoriums and resorts, pensions and other forms of aid to factory and office workers in the form of social insurance.

The Seven-Year Plan provides for a further increase in expenditure for these purposes. In 1965 it will amount to 360,000 million roubles, as compared with 215,000 million roubles in 1958.

Pensions will also be increased. The minimum old-age pensions, for instance, will be raised from 300 to 400 roubles a month in 1963 (for those in rural areas it will be raised to 340 roubles), and to 450-500 roubles a month in 1966 (again with a corresponding increase in rural areas). Disability pensions and pensions granted in case of the loss of the breadwinner will also be increased.

One of the first decrees passed by the Soviet State was the decree establishing an eight-hour working day. Today a seven-hour and even a six-hour working day has been established in a number of branches of industry.

By 1960 all factory and office workers will have been transferred to a seven-hour working day, while workers in the leading trades in the coal and mining industry, those engaged in work underground, will enjoy a six-hour working day.

This is to be followed by a transition to a 40-hour working week, which, according to plan, is to be completed in 1962. A gradual switch-over to a 30-35-hour working week will be effected in the U.S.S.R. by 1964. The Soviet Union will then have the shortest working day and the shortest working week in the world.

The planned tremendous increase in industrial output,

about 80 per cent, will be achieved, to a great extent, by introducing new machinery, and by mechanising and automating production. This in turn, will contribute to a further improvement in the working conditions of the people.

Measures are also being considered to improve industrial health and safety at enterprises and building projects, and to introduce, on a wide scale, the most up-to-date scientific and technical methods to make working conditions healthier.

The coming seven-year period will see a further improvement in public health measures: 25,400 million roubles is being allocated to construct public health institutions, social security, physical culture and sport, and to develop medical services. That is 80 per cent more than was spent during the previous seven years, 1952-1958.

The new construction projects will make it possible to double the number of beds in hospitals and to increase the number of places in hospitals more than 2½ times as compared with the increase during the previous seven-year period.

The necessary funds will also be provided by the State, trade unions, and collective farms for the wide-scale construction of boarding homes for the aged both in town and countryside.

The Seven-Year Plan, as drawn up by the Communist Party of the Soviet Union, takes into consideration all the most important aspects of the working, cultural and social life of the Soviet working people. It is a programme for a new, powerful advance in the Soviet economy, and a further improvement in the people's standard of living.

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HEAD OF THE CLASS

"When the first earth satellite was shot into outer space in October, 1957, ushering in a new age of man's relation to the universe, the world rubbed its eyes, and then painfully opened them. This step into space had not been taken by Germans or Americans or French or British, but by Russians. The dark, unlettered-people of tsarist times, liberated and enlightened, had stepped to the head of the class. Behind their spectacular advance was a generation of assiduous study and research in mathematics, astronomy, physics, chemistry, biology, geology, history, economics, political science, sociology, language, mechanics, electronics, atomics—taught in the universities and colleges, in the institutes and special schools, in the pioneer houses and in the elementary classes, by competent well-trained teachers to tens of millions of healthy, bright-eyed, eager pupils."

(Scott Nearing: *Soviet Education*: California, 1959.)

EDUCATION—A TOP PRIORITY

"It is doubtful that any society has ever poured such a high proportion of its energies and resources into educational activities, in the broadest sense of the term, as the Soviet Union is doing today. Soviet leaders, from the beginning, have treated organized education with greater seriousness than political leaders in any other country. And this seriousness is widely shared by Soviet students and teachers, at every level of the school system."

(George L. Kline, Assistant Professor of Philosophy, Columbia University, in an article, June 16, 1958, following his visits to Soviet schools in 1956 and 1957.)



STAT

Higher Education in the U.S.S.R.

by

Professor V. Yelyutin, D.Sc.

Minister of Higher Education of the U.S.S.R.

Soviet Booklet No. 51

London, June, 1959



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FOREWORD

Today there is world-wide recognition of the great strides made by Soviet industry and science. No one doubts any longer that Soviet engineers and technicians, in fact her specialists in every field, occupy a leading place in the world.

The three sputniks, the space-rocket, the atomic-powered ice-breaker, and other outstanding Soviet achievements have contributed, in a somewhat dramatic form, to throw into relief the great progress made by the Soviet Union.

It has not been lost on commentators in other countries that much of this advance is due to the Soviet educational system and to the great care lavished by the Soviet Government and people on the training of specialists of all kinds.

This is not fortuitous, for a basic aim of the Soviet socialist system has been scientific, technical and cultural progress and the utmost development of all the creative genius and talents of man.

For this reason the Soviet State, the Communist Party, and the Soviet people as a whole have devoted special attention to the training of highly skilled specialists for all branches of industry, agriculture, science, education, medicine and the arts.

In line with the tasks involved in its economic and cultural development, the Soviet Union plans to expand and improve still more the training of specialists.

From 1959 to 1965, some 2,300,000 will graduate from the colleges and universities as against 1,700,000 between 1952 and 1958—40 per cent more. The number of engineers to be trained for industry, building, transport and communications

will be 90 per cent greater, and that of agricultural specialists 50 per cent greater, than in the previous seven-year period. The increase will be greater in the case of engineers specialising in chemical technology, automation, computing techniques, electronics and other new fields.

It is also planned to improve the existing higher education system by linking it more closely with production and by enrolling in higher educational establishments more young people having some experience of life and a record of practical work.

The role and importance of evening and correspondence schools in the college educational system will grow immensely.

In this booklet Professor V. Yelyutin, Minister of Higher Education of the U.S.S.R., describes the great progress in the field of higher education made in the Soviet Union since the Revolution in 1917, and outlines the further important perspectives for the coming period.

HIGHER EDUCATION BEFORE THE REVOLUTION

HIGHER EDUCATION commenced in Russia when the Slav-Greco-Latin Academy was founded in Moscow at the end of the 17th century. Although the academy was a religious school, it exerted a favourable influence on the subsequent development of science and education in Russia.

It provided the possibility of accumulating a definite store of experience for advancing higher education, since, along with theological subjects, the students were instructed in grammar, arithmetic, geometry, astronomy, geography and other subjects.

Later, in the early 18th century, a number of secular schools were opened by order of Tsar Peter I for training navigators and engineers; to a certain degree they became the embryo of higher engineering education in the U.S.S.R.

The development of agricultural production, the birth and growth of industry created a pressing need to develop higher education, to open higher schools and research institutions.

An Academy of Sciences was founded in St. Petersburg, in 1725, and a university was opened under its auspices in 1726; the latter, however, was short-lived and ceased to exist after 1765.

This university is nevertheless worth mentioning because it was the first to adopt the new system of education which combined the reading of lectures with extensive laboratory practice, the purpose being education as well as scientific research.

In 1755, a firm foundation was at last laid for university education, when Moscow University was opened on the initiative and with the direct co-operation of the most outstanding Russian thinker and scholar of the time, Mikhail Lomonosov.

FIRST RUSSIAN UNIVERSITY

THE UNIVERSITY began its work in the premises of a former drugstore in Red Square (where the Historical Museum now stands), with a faculty of no more than a few professors and lecturers, and less than a hundred students.

Still, it was a real university with the latest equipment, a curriculum covering all the necessary subjects, and lecturers who were capable of ensuring standards of education on a level with the achievements of science at that time. And most important, it was the first Russian university.

Industrial progress in Russia created the need for a national higher school for training engineers, especially mining and metal engineers. And the St. Petersburg (now Leningrad) Mining Institute, founded in 1773, furnished the basis for the progress of technical education in Russia.

Other institutes and universities were added later. Thus, the Konstantinovskoye School for Land Surveyors was opened in 1779; it provided the basis for the Moscow Land Surveying Institute which was opened in 1835.

An academy for training army surgeons was founded in St. Petersburg (it was formerly called academy of medicine and surgery) in 1798.

The Derpt (now Tartu) University, and the Forestry Institute of St. Petersburg were opened in 1802, the University of Kazan (where Lenin studied) in 1804, and Kharkov University in 1805.

Among the many establishments for education opened in the first half of the 19th century were the Railway Engineering Institute and Technological Institute (1828) in St. Petersburg, and the Moscow Higher Technical School (1830).

Kiev University, which was opened in 1834, was destined to play an important cultural and educational role in the Ukraine.

EDUCATION FOR PRIVILEGED FEW

THE FOUNDING of higher educational establishments and the further development of existing ones continued during the second half of the 19th century.

However, the economic conditions and political atmosphere in tsarist Russia were extremely unfavourable for the development of higher education.

Pre-revolutionary Russia lagged far behind the economic and cultural development of the advanced countries of the West. The reactionary autocratic regime acted as a brake on Russia's economic and cultural progress, stifling scientific thought and the initiative of her progressive representatives.

A college education was one of the privileges of the propertied classes before the Revolution. For sons and daughters of the working people the way to college was well-nigh blocked.

In 1914, for example, of the total number of students of the eight Russian universities 38.3 per cent were children of aristocrats and officials, 43.2 per cent, children of clergymen and rich families, 14 per cent, children of kulaks (capitalist farmers), and only 4.5 per cent, children of workers, peasants and working intellectuals.

Before the Revolution college education was denied also to the national minorities. There was no provision for higher education in the territories of the present Byelorussian, Lithuanian, Moldavian, Azerbaijan, Armenian, Kazakh, Uzbek, Turkmen, Tajik and Kirghiz republics of the Soviet Union, whereas today these Union Republics have 151 higher educational establishments with about 380,000 students.

For a long time colleges were completely closed to women. Only at the end of the 19th and beginning of the 20th centuries did the tsarist government grant permission for the introduction of higher courses for a limited number of women, on a restricted curriculum.

VALUABLE TRADITIONS

AND NOW, let us sum up.

In 280 years pre-revolutionary Russia acquired 105 universities, colleges and technical institutes, attended by 127,000 students. These establishments were located in 21 cities, concentrated mainly in Central Russia; there was not a single college in the border regions, especially in the east and in places with a non-Russian population.

And yet, despite all that, higher education in pre-revolutionary Russia built up its own system of training specialists, founded and developed a national school of science, educated many specialists, and produced a number of world-famous scholars.

It is enough to mention the work of Lomonosov, Lobachevsky's discovery and elaboration of non-Euclidean geometry, Mendeleev's discovery of the periodic law of chemical elements, Stoletov's definition of the photo-electric effect, Zhukovsky's works in aeromechanics, and Timiryazev's works in botany.

The crowning achievement was Mendeleev's periodic system of elements which blazed a reliable road into the future of science and engineering. This discovery furnished the theoretical basis for the use of atomic energy, the basis for modern technical progress, for the development of new and highly promising trends in science and engineering.

In the process of this work Russian higher education accumulated a rich store of experience in tuition. It evolved systems of education which received international recognition and were widely adopted. An instance of this was the Moscow Higher Technical College.

This college utilised the summarised experience of different Russian colleges of technology, as a basis to develop a new trend in college education. Its underlying idea was the establishment of close organic ties between theoretical education and practical training in production.

This system was widely adopted in the technical colleges of Europe and America after the world industrial exhibitions of 1872 (in Vienna) and 1876 (in Philadelphia).

The Soviet people are proud of the past achievements of Russian higher education and strive to develop and extend the valuable traditions of their predecessors.

PROGRESS OF SOVIET HIGHER EDUCATION

A POWERFUL impetus to the progress of higher education, science and public enlightenment, was supplied by the October Socialist Revolution.

"Knowledge for the people" became the motto in Soviet Russia.

Speaking at the Third All-Russian Congress of Soviets, in 1918, Lenin said:

"In the past, the whole of human intellect, all its genius, laboured in order to give all the benefits of engineering and culture to some, and to deprive others of the most essential, of education and development. Now, however, all the wonders of engineering, all the achievements of culture will become available to the people as a whole, and henceforth human intellect and genius will never be used as a means of violence, a means of exploitation. This we know—and is it not worth while to work for this great historic task? Is it not worth devoting all our strength to it? And the working people will accomplish this colossal historic work, for latent within them are great forces of revolution, regeneration and renewal."

The achievements of culture, of human thought should become the general possession of the whole people—that is the fundamental principle underlying the activities of the state to advance public education, college education, science and culture.

Science serves progress only when combined with democracy. To make education and science in the Soviet Union democratic the state created favourable conditions for providing the vast majority of people with knowledge.

In practice this meant the opening a of huge number of special secondary schools and higher educational establishments (institutes and universities) and the founding of many research institutes.

UNIVERSAL EDUCATION

A RADICAL change has taken place in the geographical distribution of colleges and scientific institutions throughout the country.

The regular secondary school equips its pupils with polytechnical knowledge. Along with a grounding in the sciences the pupils acquire skill in one field or another.

After finishing secondary school the young boy or girl may enter a college, or go to work in industry, or agriculture.

With two years' experience in production applicants who pass the college entrance examinations are given priority when applications for admission are considered.

Before going to work, the secondary school graduate may learn a trade by attending special short-term courses maintained in the factories, or a technical school. This training is given at the expense of the enterprise concerned, and the students are paid a small wage throughout the duration of this training.

Opportunities for a secondary schooling in native language are available to all citizens, since numerous national schools exist in all the republics of the Soviet Union.

The development of education in the U.S.S.R. may be illustrated by the following statistical data:

YEARS	Total school attendance	Including	
		Secondary school attendance (5-10 grades) in millions of people	Schools for adults
1914-15 ..	9.7	0.6	—
1957-58 ..	30.6	13.5	1.9

Steps have now been taken for educational reform. In particular arrangements have been made for combining education in the higher school grades directly with work in production. This brings secondary education increasingly closer to life, to practice.

The younger generation is receiving knowledge which will be necessary for its future work. This knowledge is at the same time adequate to qualify school graduates for entering a college or university.

Consequently, the college or university has a huge field from which it can draw its new enrolments.

DEMOCRATIC EDUCATIONAL SYSTEM

IMMEDIATELY AFTER the establishment of Soviet government, steps were taken to develop college education and ensure the most consistent implementation of the principle of democracy in the universities and institutes.

This afforded the opportunity for an education to the most capable citizens, without any discrimination based on property, social standing, nationality, sex, religion, or world outlook.

The reorganisation of higher education on these lines was decreed by the Council of People's Commissars on August 2, 1918. This decree opened the doors of the higher institutes of learning to the working people and their children, abolishing all restrictions which kept them out of college, and announced that all citizens could qualify for admission.

Not only were tuition fees abolished in the colleges, but state stipends were instituted for the students. Faculty mem-

bers and students were called upon to co-operate in the management of the colleges and universities.

On September 2, 1921 the Council of People's Commissars of the Russian Soviet Federative Socialist Republic, headed by Lenin, endorsed the new charter of higher education, the first statutes of Soviet colleges.

Despite the heavy burdens resulting from civil war and foreign intervention, the first benefits of the Soviet policy in the realm of higher education were soon apparent. Already by the autumn of 1919 college enrolment had grown to 221,000, as compared with 136,900 at the beginning of 1918.

Free admission of students from the ranks of the workers and peasants and the institution of state stipends for them were not enough, important though they were, to enable workers and peasants to take advantage of their new opportunities. Special arrangements had to be made to enable them to acquire secondary education.

This problem was solved through the setting up of workers' faculties, which were college preparatory schools for adult workers and peasants. These schools made a most valuable contribution to the training of intellectuals from the midst of the people, to the rearing of a Soviet intelligentsia.

With the progress of Soviet secondary education, the need for the workers' faculties gradually diminished, and they were finally closed.

College education advanced in the Soviet Union very rapidly. By 1921-22, Soviet Russia already had 279 higher educational establishments, which means that their number had grown in the first few post-revolutionary years by 150 per cent, as compared with pre-revolutionary Russia.

TRAINING SPECIALISTS

ONE OF the main tasks confronting higher education under the early five-year plans was the training of Soviet technical specialists.

It was in that period that new institutes were opened in Moscow, Leningrad, Kiev, Kharkov, Tbilisi, Yerevan, Baku, Minsk and many other cities of the constituent republics of the U.S.S.R. The existing higher educational establishments were expanded, new college buildings and dormitories put up, new laboratories equipped and the college faculties received additional personnel.

As a result, college attendance was brought up to 504,400 at the end of the first five-year plan period. As many as 198,700 college-trained specialists, including 76,600 engineers, were educated during the first five-year period, and in the second five-year plan period the Soviet Union advanced to one of the leading places in the world in turning out college-trained specialists.

And so, immediately before the war of 1941-45 Soviet higher education was in a position to train specialists for all fields of economic and cultural endeavour.

The progress of college education was retarded slightly by the war, but even in the most difficult period of the war the colleges were continuing without interruption the education of specialists as well as scientific research. Three hundred and two thousand specialists were educated by the colleges during the war.

Tremendous damage was caused to higher education in the Soviet Union by those enemies of civilisation, science and enlightenment—the fascist invaders. For example, they were responsible for destroying 334 college buildings. Steps to restore these colleges were taken by the Communist Party and the Soviet Government when the war was still in progress.

In the post-war years Soviet higher education has not only recovered from the ravages caused by the fascist vandals; it has made greater progress, training greater numbers of specialists equipped with a more thorough grounding in the specific fields of knowledge.

College attendance grew from 811,000 in 1940 to 1,247,000

in 1950, an increase of more than 50 per cent, and to 2,001,000 in 1958, an increase of 150 per cent over the 1940 figure.

As compared with 1914 (when pre-revolutionary Russia had the highest college attendance in her history), the college attendance in 1957-58 had grown 16.6 times over.

Along with the general increase in college attendance, there has been an especially great increase in the number of students majoring in the most essential professions and fields.

Attendance in the technical colleges which educate engineers for industry, construction, transport and communications has grown from 25 per cent of the total college attendance in 1940 to 38.1 per cent of the total in 1958.

The corresponding share of students of the agricultural and forestry colleges had grown in relation to the total attendance from 6.4 per cent in 1940 to 10.8 per cent in 1958. Attendance in the economics and law colleges in 1958 was four times that of 1940; attendance in the teachers' training colleges and in the respective university faculties in 1958 was double that of 1940, and in the medical and physical culture colleges, 50 per cent more.

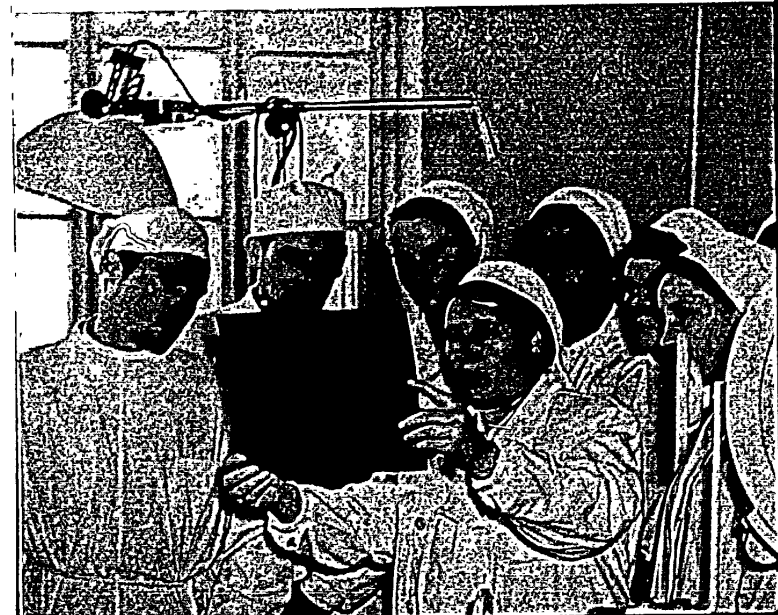
Especially high was the rate of progress in the fifth five-year plan period, when the number of graduating specialists in the engineering colleges had grown by 93 per cent, and in the agricultural and forestry colleges by 102 per cent, as compared with the fourth five-year period, the general increase in the college attendance in the fifth five-year period amounting to 72 per cent.

Considerable changes in the distribution of the higher educational establishments, improvements in their organization and in the educational system in order to bring it up to the level of the new requirements and urgent state tasks have been made since the war.



One of the reading rooms of the Moscow Power Institute

Professor Tatyana Birich and fifth-year students of Minsk Medical Institute examine an X-ray photograph



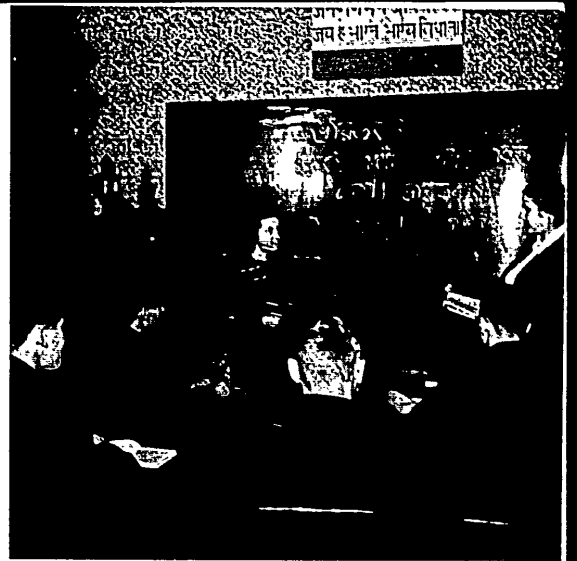


A group of young Kirghiz scientists and research workers of the Kirghiz Academy of Sciences

Third-year student Irina Artemeva and other students of English at the Moscow Motor and Highway Institute, are enjoying Jerome K. Jerome's "Three Men in a Boat"

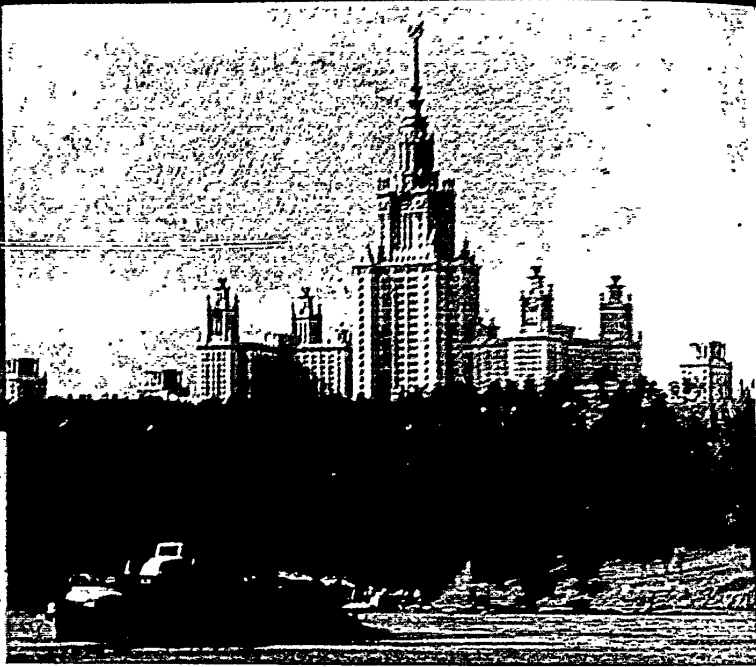


A lesson in Bengalese for first-year students in the Oriental Languages Department of Leningrad University



Irina Ushaeva, in the Zoology Room of Leningrad University, is a Khants and studies in the Department of the Peoples of the North





Moscow State University, seen from the river. Below we see some of its students at their microscopes in the Petrography Laboratory studying geology.



NATIONAL REPUBLICS

STEPS TAKEN to promote the development of the productive forces in the east of the U.S.S.R., greater industrial and agricultural progress, and the development of culture in these regions, created a demand for the faster expansion of the existing colleges there and the opening of new ones.

The number of higher educational establishments has been growing steadily in the Urals, in West and East Siberia, in the Far East and in the Central Asia republics. They now have 200 such establishments as compared with four before the Revolution.

The college attendance in the eastern part of the U.S.S.R. in 1958 was 60 per cent more than in 1950, and 270 per cent more than in 1940. The higher educational establishments in the Soviet East have 25 per cent of the total college attendance of the U.S.S.R.

Universities have been opened in the Tajik, Turkmen and Kirghiz Union republics, in the Yakut, Kabardino-Balkar, Bashkir, and Mordovian autonomous republics, and in Vladivostok; 25 higher schools of technology, seven agricultural colleges, six medical and many other higher schools have been founded in the Soviet East.

One of the most remarkable results of the cultural revolution in the U.S.S.R. is the development of college education in the national republics.

Higher educational establishments existed in pre-revolutionary Russia only in 21 cities situated mainly in the central part of the country. They now exist in 220 cities of the Soviet Union, among them many cities in the national republics.

Furthermore, there are extension colleges, branches of colleges and consultation centres for college correspondence students in more than 500 inhabited places.

There is not a single republic in the U.S.S.R. without its own university and other institutions for higher education. There are at present 140 colleges in the Ukraine (there were only

27 before the Revolution, 22 in ~~Ukraine~~, 27 in Kazakhstan, 15 in Azerbaidjan, and 27 in the Soviet Baltic republics (Lithuania, Latvia and Estonia). Many peoples who had no written language of their own before the Revolution, now have their own engineers, ~~agronomists~~, ~~writers~~, ~~doctors~~, ~~scientists~~, writers and other intellectuals.

The progress of college education is especially striking in the Ukrainian Soviet Socialist Republic, which had suffered terribly from the German fascist invasion. In 1957-58 the Ukraine's college attendance was 296,000.

In order to appreciate properly the successes of the Ukrainian S.S.R. in the sphere of higher education, it is enough to know that the total attendance in the whole of pre-revolutionary Russia was 127,000.

NEW INTELLIGENTSIA

THIS PROGRESS of college education has made it possible to train in a comparatively brief period of time numerous intellectuals who are deeply devoted to their people.

The decisive role played by higher education in the creation of the Soviet intelligentsia may be judged by the fact that before the Patriotic War Soviet colleges were educating specialists at the rate of 100,000-110,000 a year, as compared with the annual average of 8,000-10,000 before the Revolution.

College Attendance and Graduates

YEAR	1914	1950	1950	1958	Growth in 1958, as compared with 1914
Number of students, correspondence students included (in thousands) ..	127.4	287.9	811.7	2001.0	16.6 times over
Number graduating ..	10.7	43.9	126.0	290	27 times over

The progress of higher education in the republics may be illustrated by the following figures.

YEAR	RSFSR	Ukraine	Byelo-russia	Kazakh-stan	Uzbeki-stan	Tajiki-stan
1914	72	27	—	—	—	—
1958	441	138	24	27	31	7

The number of college students for every 1,000 inhabitants was more than 10 in 1958.

The progress made by higher education in the U.S.S.R. in the past 40 years is truly immeasurable, and is now in a position to meet the country's full demand for specialists.

The U.S.S.R. now has skilled specialists and executives who are capable of solving the most complex problems in industry, science, engineering and management, of achieving the highest results in industry, transport, construction and agriculture with the least expenditure of labour, funds and materials.

As many as 3,800,000 college-trained specialists, including one million engineers, have been educated in the Soviet period.

SOME GENERAL INFORMATION

MOST INSTITUTES of higher learning in the Soviet Union are maintained at state expense and financed from the state budget.*

A college education may be acquired by attending a college in daytime, or an evening college (for students who work during the day), or by taking a college correspondence course. In the latter case the necessary lessons are mailed to the students and they attend the institute twice a year for examinations.

All these facilities may be available at one and the same

*With the exception of a few colleges which belong to the co-operative societies and mass organisations.

institute. Diplomas issued to the graduates in all these cases are equally valid.

Colleges are subordinated to different ministries and departments. All the universities and most of the technical schools are subordinated to the Ministry of Higher Education; the agricultural institutes are subordinated to the Ministry of Agriculture; the medical institutes to the Ministries of Public Health of the Union Republics; the teachers' training institutes to the Ministries of Public Education of the Union republics, and so on.

But in order to ensure a uniform system of instruction, scientific research and methods of education in all the colleges (irrespective of jurisdiction) they receive their guidance from the Ministry of Education of the U.S.S.R.

The colleges may be divided for the sake of convenience into three main groups: universities, polytechnical institutes and specialised institutes.

UNIVERSITIES

IN ACCORDANCE with their historic traditions, the universities have been developed as major scientific and educational centres. They conduct extensive scientific research and train highly skilled specialists for the scientific institutions, for the national economy, cultural and educational institutions, for secondary and higher education and for the state apparatus.

University education has made great progress under the Soviets. Tsarist Russia had 13 universities with an attendance of no more than 43,000; the U.S.S.R. today has 39 universities with an attendance exceeding 200,000.

The universities turn out versatile specialists with a thorough grounding in physics, chemistry, mathematics, mechanics, biology, geology, geography, philology, history, philosophy, economics and law.

The number and nature of the faculties vary in different

universities. Here is some detailed information about two universities.

Moscow University, the oldest in the country, was founded in 1755. In 1957-58, Moscow University was attended by 21,200 students: 14,600 attended the university in day-time, about 3,000 in the evening, and 3,600 were taking correspondence courses. There are faculties of history, philology, journalism, philosophy, economics, law, physics, mechanics and mathematics, chemistry, biology and soil science, geology and geography.

The faculty is composed of 1,800 lecturers who include more than 100 members and corresponding members of the Academy of Sciences, 390 professors with D.Sc. degrees and more than 1,000 lecturers with M.Sc. degrees.

The university has fine lecture halls and well-equipped laboratories. The new buildings on the Lenin Hills occupy a territory of over 400 acres. They have a floor space of about 5 million square feet and 25,000 rooms, including 5,714 in the student hostels.

Sixty nationalities of the Soviet Union and 40 nationalities of other countries are represented by students at this university. One thousand two hundred students from 40 foreign countries attend the university.

Important scientific investigations are conducted here by the university's scientists.

Moscow State University maintains extensive scientific contacts with universities in other countries. The works of its scientists may be found in the libraries of many universities and scientific institutions of the world. It has a regular exchange of scientific works with 277 institutions, and periodically also with 138 institutions of 54 countries.

The university has numerous laboratories with first-class equipment, a students' club and a library with more than 5 million books, magazines, and newspaper files in both Russian and foreign languages.

The Central Asian University has its seat in Tashkent, the capital of the Uzbek Republic. Founded only 38 years ago it has educated about 25,000 specialists. With faculties of history, philology, oriental studies, law, physics and mathematics, chemistry, biology and soil science, geology and geography, it has an attendance of 5,000 and a staff of 429 lecturers, including 33 professors. This university has trained many eminent statesmen, scientists, writers and other distinguished people.

At the Central Asian University, Uzbeks are instructed in their native language.

The universities play an important part in training and retraining teachers and scientific workers. There are extensive facilities for post-graduate studies and research. Some of the universities (Moscow, Leningrad, Kiev, Ural, Central Asian and Kazan Universities) have in the last few years rendered a valuable service in training highly qualified lecturers for the advanced training institutes of social science teachers, and of instructors in philology, mathematics and physics.

Scientific research conducted at the universities is of great theoretical and practical value. Progress made in natural and exact sciences (physics, mathematics, chemistry, biology and geology) serves as the foundation and pivot of technical progress in all branches of production.

The scientists and lecturers of the universities number in their midst recognised authorities in all these fields of knowledge.

ENGINEERING INSTITUTES

ENGINEERS ARE trained in the Soviet Union in almost 200 special fields. They are educated by various technological institutes which may be divided for convenience into two groups: polytechnical and specialised.

Polytechnical institutes occupy an important place among

the engineering colleges. As a rule they have many faculties educating engineers in a great many specialities.

The Leningrad Polytechnical Institute, for example, has nine faculties including metallurgy, mechanics and machinery, electromechanics, electrical engineering, physics and mechanics, hydrotechnical and radio engineering.

Each faculty covers allied fields. For example, the radio engineering faculty trains specialists in radiophysics, industrial electronics, dielectrics and semi-conductors; the metallurgical faculty educates specialists in the production of iron and steel, and non-ferrous metals, metallography, foundry production, treatment of metals under pressure, and so on.

Altogether the institute trains its students in 42 specialities; it has 10,000 day students and more than 800 evening students. There is a staff of 360 professors and lecturers.

The institute has more than 200 laboratories equipped with the latest instruments, making possible not only normal laboratory practice, but also extensive research which is conducted by the faculty members and students.

Other polytechnical institutes are organised along the same lines. There is the Ural Polytechnical Institute with 13 faculties educating students in 36 special fields, the Kharkov Polytechnical Institute with 15 faculties educating students in 38 special fields, and the Kaunas Polytechnical Institute with seven faculties, educating students in 18 special fields.

The specialised institutes educate specialists for a definite industry. This category includes the metallurgical, mining, civil engineering, chemical technology, transport engineering and other institutes.

They offer courses in a more limited number of fields and have a smaller number of faculties than the polytechnical institutes.

For example, the Dniepropetrovsk Mining Institute educates engineers for the coal industry. With geological prospecting, mining, mining machinery and mine construction facul-

ties, this institute educates students in 10 special fields, and has an enrolment of 3,900.

The Novosibirsk Civil Engineering Institute has five faculties and trains civil engineers in seven special fields.

I have already mentioned that the technical and polytechnical institutes are divided into two groups for the sake of convenience. There are certain technical institutes which occupy a place between these two groups. The Moscow Power Engineering Institute, for example, although nominally a college for training specialists for a specific industry, has 10 faculties offering courses in 26 specific lines. The Moscow Higher Technical School is also organised approximately along the lines of the polytechnical institutes.

The number of technical colleges, the nature of their specialisation and organisation reflect the present standards, requirements and prospects of economic development in the U.S.S.R.

Old Russia had 16 technical colleges (in 1914), whereas the Soviet Union now has 200. Eighty-four thousand specialists received their diplomas in these colleges in 1957, and 94,000 in 1958.

The industrial development of a constantly greater number of formerly underdeveloped or completely undeveloped districts has brought about a re-distribution of the technical colleges. There were technical colleges in only nine cities of pre-revolutionary Russia; today they exist in more than 60 cities; they are located not only in big centres, but also in the new industrial districts, much closer to production.

EDUCATION OF AGRICULTURAL SPECIALISTS

AGRICULTURAL SPECIALISTS are educated at agricultural colleges.

The reorganisation of agriculture along socialist lines has

resulted in the development of highly mechanised, large-scale co-operative (collective) farming and state farming.

This was naturally bound to and did create a high demand for agricultural specialists. Accordingly, the network of agricultural colleges was expanded. Pre-revolutionary Russia had no more than 15 agricultural colleges with an attendance of 5,000, whereas the Soviet Union has 99 agricultural institutes with 223,000 students.

The agricultural colleges educate specialists in agronomy, animal husbandry and veterinary medicine and in the mechanisation of agriculture.

Thus, at the Timiryazev Agricultural Academy of Moscow specialists are educated at the faculties of agronomy, pomology and gardening, agrochemistry, animal husbandry and economics.

Thanks to the more or less even territorial distribution of the agricultural institutes it has been possible to adapt their plans and programmes to the most urgent local requirements (in the district where the specific institute is located, and, practically in the place where the specialists educated in the district will be working).

The faculty members of the agricultural colleges are confronted at present with the important task of strengthening contact between education and production, of tying it up with the concrete features and urgent requirements of agriculture in the respective zone.

EDUCATION OF ECONOMISTS

THE NATURE and standards of education in the higher schools of economics are determined by the requirements of the socialist economic system. Management of socialist enterprises requires deep knowledge of economics and the ability to apply it in practice.

Specialists for economy, trade and finance are educated by the economics' institutes and also by special faculties in

the universities and the economic engineering faculties of the higher technical schools.

Economists are educated in the following fields: political economy, economics of industry, transport and agriculture, finances, planning and production accounting. These specialists are educated at present in 30 institutes of economics, 14 universities and 61 industrial and agricultural institutes.

LAW SCHOOLS

MEASURES TAKEN by the Soviet state for strengthening socialist law and improving the state apparatus dictate the need for special attention to the education of expert lawyers. These specialists are educated by the law institutes and law faculties of the universities.

While receiving instruction in jurisprudence, economics, political subjects and philosophy, the future lawyers become skilled in analysing social phenomena and are given the opportunity of undergoing practice in the legal services and government offices.

The law schools and law faculties of the universities have an enrolment of 36,000, including 24,000 working students who are taking college correspondence courses.

TEACHERS' TRAINING

ILLITERACY HAS been banished into the realm of history in the U.S.S.R. Universal seven-year schooling has been introduced in the countryside, and secondary education in major cities.

Polytechnical education is intended to bring students closer to life, to acquaint them with the production processes in industry and agriculture.

There were practically no teachers' training colleges in tsarist Russia apart from two small private colleges. In the U.S.S.R., however, these institutes comprise one of the largest groups of Soviet colleges.

The Soviet Union has 212 teachers' training institutes with an attendance of 515,000. Their responsible and honourable mission is to train teachers for the fifth to tenth grades of the secondary schools and for instruction in general subjects at the specialised secondary schools.

The teachers' training institutes are quite evenly distributed throughout the country, through all the republics. This, together with the specialists educated by the universities, makes it possible to meet the demand for teachers in all the secondary schools and the great demand for teachers in the schools where classes are conducted in the non-Russian languages of the peoples of the Soviet Union.

MEDICAL COLLEGES

TO GIVE a good idea of progress made in this field it is enough to say that tsarist Russia had no more than eight medical colleges in 1914; concentrated in Central Russia, they issued 1,000-1,500 diplomas a year.

One of the first acts of the Soviet Government was to provide a great number of medical specialists in order to ensure medical service to all the many millions of people of the Soviet republics. In 1922 the country already had 26 medical institutes.

Today, numbering 79, they have an attendance of more than 160,000.

A radical change has taken place, too, in the geographical distribution of the medical colleges: in the outlying border regions where not a single doctor, to say nothing of medical schools, was found in the past, medical institutes are now turning out highly skilled specialists.

These institutes (with a six-year course) train specialists in internal medicine, pediatry, sanitation, stomatology and pharmacy. The continuous progress of medicine has made it necessary to open refresher courses and advanced training institutes (mainly at the medical institutes).

Diplomas are issued by the medical institutes at the rate of 18,000-20,000 a year. (The population is provided with medical service free of charge.)

Specialists for physical culture and sports (who include medical specialists as well as instructors) are educated at 18 special institutes which have an attendance of 14,500.

TRAINING IN THE ARTS

IN PRE-REVOLUTIONARY Russia training in the arts was limited to seven colleges. Their number has grown seven-fold under the Soviets, and the U.S.S.R. now has 22 conservatoires of music, 12 dramatic and scenic-design institutes, a cinematography institute, an architectural institute, several academies of arts, art institutes, several institutes of applied and decorative arts, as well as industrial art schools and a literary institute.

Faculty members of the art schools include many outstanding Soviet art workers.

The wide and versatile network of Soviet higher educational institutions provides every possibility for meeting the great demand for specialists in every sphere of economic and cultural endeavour. Soviet colleges are constantly improving their educational methods and work as well as scientific research, which is conducted in numerous fields.

A good general theoretical background is especially important at present when science and engineering are advancing with seven-league strides. It provides the basis for special training, for the extensive use of specialists in different fields of economic endeavour and for the best solution of scientific and technical problems arising today.

Special attention is devoted to general improvements in the system of education in order to meet the general requirements of the state and to give young people the opportunity of acquiring an education according to their choice. Soviet education is so organised as to ensure the closest links between theory and practice in each field.

SOME QUESTIONS OF PLANNING

EDUCATION OF specialists is based in the Soviet Union on the estimates of future requirements in the respective branches of the national economy and cultural services. Estimates of these requirements for six to ten years ahead are prepared by all the enterprises, institutions and organisations, taking into account the long-range plans for the corresponding economic and cultural spheres.

When the time for the distribution of the graduating students arrives, the institutes have at their disposal complete lists of available vacancies and requirements in the given year.

Knowing the required number of specialists each year (for six to ten years ahead), it is possible to determine the enrolment for each speciality in order to meet the future requirements of the national economy. Knowledge of the geographical distribution of the population, industry and agriculture provides the basis for a correct decision as to the geographical distribution of the colleges.

Consequently, education of specialists on a planned basis makes it possible to change the number and ratio of specific groups of specialists.

The existing correlation in percentages between specific groups of specialists (college attendance) is as follows:

The humanities, including the teachers' training group	42.6
Engineering	38.1
Agricultural	10.8
Medical	8.5

Naturally, this correlation changes with the progress of all the spheres of the national economy and culture.

ADMINISTRATION AND ORGANISATION

ONE-MAN MANAGEMENT is combined with collective management of the colleges.

Every college is headed by a director (a rector at the university), who has several assistants responsible for educational, scientific and executive activities.

There is an academic council functioning under the director (or rector) who presides at this council.

It is composed of the director's assistants responsible for educational and scientific work, faculty deans, professors who head the respective departments and some of the lecturers. Mass organisations at the colleges (e.g. trade union, Communist Party, Young Communist League) each have a representative on the council.

ACADEMIC COUNCILS

THESE COUNCILS have extensive rights and prerogatives. Their activities are planned by themselves. Chief attention is devoted to questions relating to educational work and methods, to the work of the departments, faculties and the institute as a whole.

Questions relating to scientific research are also dealt with by the councils. They adjudge the scientific title of associate professor to instructors and discuss candidates recommended for docentships, or professorships.

The councils of the bigger colleges have the right to receive dissertations for M.Sc. and D.Sc. degrees, to adjudge M.Sc. degrees and to make recommendations for the conferment of D.Sc. degrees.

The academic councils deal not only with current affairs, but also with important fundamental questions relating to the future development of the specific educational establishment.

They discuss term and annual plans for the departments, faculties and other divisions, and for the institution as a whole, as well as reports on work already accomplished.

The director (rector) endorses the plan for scientific research which covers general theoretical problems and urgent problems relating to technical progress in industry and other

branches of the national economy, and to the introduction of the results of scientific research into production.

Plans for scientific research also include the compilation of textbooks, manuals, and courses of lectures. College scientists compile each year more than 300 new textbooks and aids in various subjects.

The colleges publish scientific papers prepared by faculty members, lecture series, guides and manuals for laboratory practice, collections of problems, guides on method, treatises, popularisations and so on.

The faculties and departments are the colleges' basic organisations.

The faculties are responsible for the education of students in one or more allied specialities. Each faculty is headed by a dean appointed from among the professors who represent the leading specialities of the faculty.

The dean is directly responsible for the educational and scientific work of the departments, for the fulfillment of the educational plans and programmes. He directly sees to the organising of education and arrangements for the students' practical training, he approves the schedules, and is also responsible for the maintenance of discipline.

The bigger colleges have faculty councils presided over by the deans. The functions of the faculty councils are approximately the same as those of college councils. The bigger faculty councils have the right to receive dissertations.

THE DEPARTMENTS

THE PRIMARY educational and scientific unit of the college is the department which is responsible for guiding the educational work, and questions concerning methods and scientific research in one or several allied subjects.

The department is headed by a professor who directs the work of the laboratories, reads lectures in the main subjects, directs the work of the professors, docents and lecturers, checks

up on the quality of their lectures, practical and other work. The head of the department directs all the work of the students, post-graduate studies and advanced training of the teaching staff of the department.

As a rule, the staff of a department includes professors if several courses of lectures are read, docents, lecturers and assistants. There is ordinarily a group of laboratory workers attached to a department.

The head of the department and professors are elected through a contest among professors or scientists with D.Sc. degrees. Docents are also selected through a contest of docents or persons with M.Sc. degrees.

Lecturers are selected by the Councils of the faculties or the institute.

Each department has its own plan for the academic year subject to approval by the director of the college. It covers the educational programme, scientific research and methods.

The plan contains provisions also for the compilation of new textbooks and manuals, to assist student scientific circles and societies, and direct post-graduate work. Special attention is given to advanced training and refresher courses for the teaching staff.

Meetings of the department held once or twice a month discuss the progress of the studies in specific groups, hear reports on scientific problems and methods, discuss the results of scientific research conducted by the staff members, manuscripts of textbooks and manuals, theses of future lectures on the most important and complex problems covered by a definite course of lectures, and questions relating to the future work of the laboratories.

Other questions discussed include plans for dissertations, reports on post-graduate research and scientific papers.

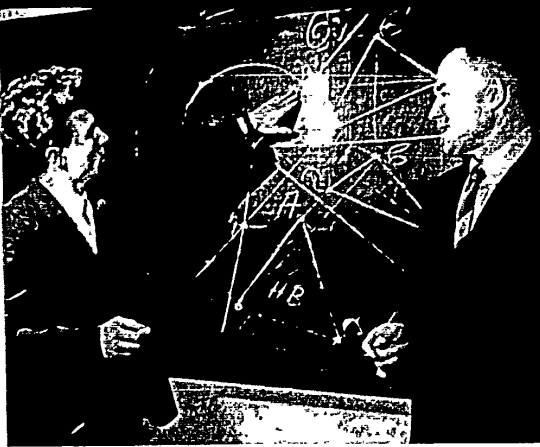
Reports on scientific problems are made at these meetings by outstanding people in industry: chief engineers and technologists employed in factories, or mines, directors of factory



Above—a welcome meal for Moscow University students in one of the dining halls



The students on the right are from the Moscow Textile Institute, and are being shown how the loops are formed on a knit-goods machine



Maths for motor-car makers: Fitter V. Grishin (left) from the Gorky Motor Works, studies at the Polytechnical Institute. His tutor is Vladimir Lipkin, M.Sc.

Future road-builders in their third year at the Motor and Highway Institute test the action of heat on bitumen



First-year students of therapeutics in the lecture theatre of the Moscow Medical Institute

Leningrad University students. The one on the right is studying journalism in the Philology Department. He already has a world-wide reputation—for he is Boris Spassky, International Grandmaster and junior world champion of chess





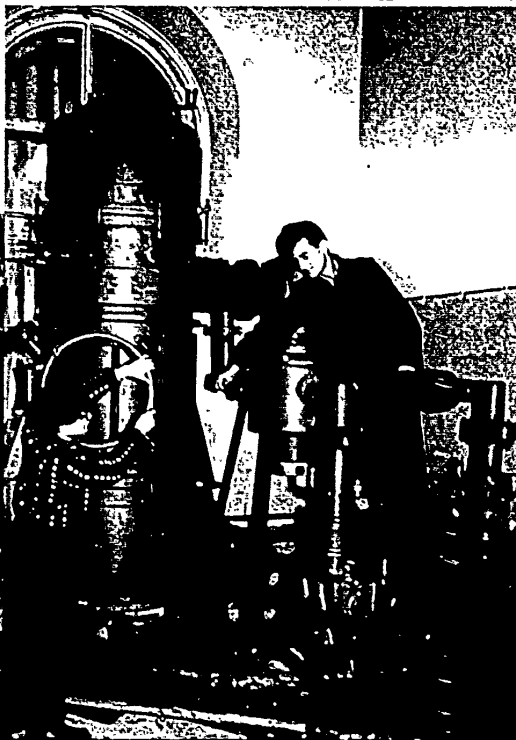
RELAXATION: Soviet students of the Bauman Technical College enjoy their sports day at which there are entrants for most sports and athletic events



One of the events at the Bauman Technical College sports in Moscow is wrestling. Here we see Anatoli Teplov and Leonid Maslov in a bout



Students of the Moscow Motor and Highway Institute keeping close to their main subject—the highway—in a training sprint



Students outside Riga University in the Latvian S.S.R.

Fourth-year students at the Moscow Steel Institute are here having a practical lesson in the assembly of a vacuum furnace





Three nurses who are determined to become surgeons: Dasya Abratanova, Valya Mikityuk, and Valya Volchikova

A three-student room in the students' hostel, Kapsukas State University, Vilnius, Lithuania. In the photograph is fifth-year medical student Ona Kavaliauskaite



laboratories, agronomists employed at state farms, collective farms, and experimental stations, and so on.

Reports are also delivered at these meetings (and lectures are delivered from time to time before student audiences) by rank-and-file innovators in industry and leading agriculturalists on their methods of work and achievements in production.

Professors and lecturers in their turn render direct assistance to the factories, co-operate in the scientific work done by their laboratories and assist (and sometimes assume full responsibility for it) the development of new technological processes, new designs for machines and instruments, and so on.

One of the basic trends in the work of the colleges is represented by the co-operation of their faculty members in solving the most important scientific problems relating to intensification of production on the basis of the latest achievements of science and engineering, to ways of cutting production and construction costs, and the overall development of definite economic regions where specific colleges are situated.

Because of this, direct scientific and technical co-operation is maintained constantly between the college departments and the enterprises in the respective industries. This co-operation has grown considerably since the war.

Organisations of students, professors, lecturers and all staff members exist in every college.

ENROLMENT AND PROVISIONS FOR STUDENTS

NEW REGULATIONS for admission to Soviet higher educational establishments, introduced in April 1959, continue the trend towards priority for those with a background of practical work.

Recent years have shown a marked change in this direction. In 1957, for instance, about two-thirds of the student body (in day, evening and correspondence higher schools) were

people who had worked in industry or other fields; last year the figure had grown to three-quarters.

And from now on even more emphasis will be placed on good references from trade union and Soviet Party, Young Communist League or other organisations to which they belong, when applications are being considered from would-be full-time students.

School leavers will also have to present recommendations from their schools.

For those wishing to study journalism, law, literature, philosophy and political economy, two years' practical work is a must.

Written entrance exams will be presented under a code name, and the papers will be marked by a commission of not less than two examiners.

Those who wish to enter the fields of teaching, medicine and international relations will receive priority if they have had working experience, and for the first time it will be possible to combine part-time medical studies in some fields with work in the health services.

Persons with a specialised secondary education employed in medical institutions can now be enrolled in evening departments of medical institutes or may study pharmacy and certain medical subjects in either correspondence or evening institutes.

Second World War ex-servicemen and women, who have completed their secondary education with excellent marks, will be admitted to day, evening and correspondence institutes without entrance exams, and will receive priority in enrolment.

Next in priority will be ex-servicemen and women who have headed their classes in technical schools, are working in their speciality and whose entrance exam marks are satisfactory; those without a war service record who receive the highest

marks in competitive exams; demobbed soldiers and persons who have passed the leaving exams in evening schools.

Secondary school leavers with the highest marks and those who have finished specialised educational establishments with honours and are working in production are required to pass entrance exams, but they will be given preference in enrolment in the event of marks and other conditions being equal.

The regulations insist that, while up to four college places in five may be allocated in accordance with these priorities, the remainder must be allocated by competitive exam.

To this exam school leavers would be admitted on equal terms with any other applicants.

The question may be asked: what becomes of the youths and girls who fail at the college entrance examinations?

They go to work in industry, agriculture, or offices. While working they have every opportunity of continuing their education by attending an evening college, or taking a college correspondence course.

They may also prepare for and enter the competitive examinations a year or two later; or, after attending an evening college, or taking a college correspondence course for two-three years, secure a transfer to a day college.

What provisions are there for students in the U.S.S.R.?

To begin with, there is a system of state stipends. More than 80 per cent of the college students are paid state stipends which cover the required minimum standard of living. The charge for accommodation in student hostels is very small (the subsidies necessary for covering the cost of all the services in the dormitories are provided by the state).

Special funds are allocated by the state for assistance to students, whenever the need for it arises; allowances to students in such cases are paid by order of the rector (of the university), or director (of the institute).

Thousands of college students are accommodated at sana-

torias, rest homes or tourist camps during the summer and winter holidays. Many of the colleges maintain their own holiday homes, sanatoria and summer camps.

Extensive assistance is rendered to the students by the trade unions and health departments. At least 10 per cent of the places in holiday homes and sanatoria maintained by the trade unions and Ministries of Public Health of the republics are reserved for students during the holidays.

METHODS OF EDUCATION AND TRAINING

THE METHOD of instruction employed in Soviet colleges varies, but its basic purpose is the fullest possible development of the individual inclinations and abilities of the students, and the combination of theoretical education with practical training.

Theoretical education is conducted through lectures, laboratory exercises and practical training, seminar discussions, and so on.

How much time is spent on each of these forms depends mainly on the nature of the subject. The time allocated in Moscow University for physics, for example, is 5,146 hours, which includes 2,110 hours for lectures, 1,688 hours for laboratory exercises and 1,348 hours for practical training and seminars.

Attendance at lectures and practical exercises is obligatory.

The academic year is divided into two terms: the autumnal term which lasts from September 1 until January 23, and the spring term which begins on February 7 and ends on June 30.

Each term concludes with examinations (in no more than five subjects) for which three to four weeks are allocated.

Under the guidance of their lecturers the students study no more than 36 hours a week in the first three years, and 28-30 hours a week in the fourth and fifth years.

There are holidays twice a year, winter holidays beginning

on January 24 and lasting to February 6, and summer holidays from July 1 to August 31.

The schedule is subject to approval by the director (or rector).

The order and inter-connection of the subjects are defined in the plan for the given speciality.

This plan covers 40-50 subjects and is composed of the following series: socio-economic, general science and special subjects. A general engineering series of subjects, which occupy a most important place in the educational programmes for engineers, may be designated in the technical colleges.

A greater number of hours are devoted to general science and general engineering subjects in colleges educating specialists for jobs requiring a wider range of knowledge.

The allocation of time in the technical colleges is as follows: up to 40 per cent for general science; general engineering subjects 25-40 per cent; special subjects 20-25 per cent; socio-economic subjects 8 per cent; and athletics up to 3 per cent.

Some technical colleges (such as construction engineering institutes, for example) spend about 40 per cent of the time on special subjects.

EXAMINATIONS

STUDENTS ARE required to take written examinations. In some subjects preliminary practical exams are taken. Students who fail at the preliminaries are not allowed to take the term examinations.

The marks are "Excellent", "Good", "Satisfactory" and "Unsatisfactory".

Only professors and docents have the right to act as examiners, while ordinary lecturers and assistants may supervise the preliminary examinations.

Every student receives a special examination card listing his subjects and marks.

As already noted above, the educational system is made up of lectures, practical (seminars in the humanities) and laboratory exercises, consultations, annual assignments and homework, preparation of graduation theses or projects, and state examinations.

There are regular lectures, many of them illustrated by experiments and visual aids, including educational films.

Books and life, theory and practice are organically bound up in Soviet higher education. As a rule, the lectures are combined with practical exercises, seminars, or laboratory practice.

PRACTICAL TRAINING

PRACTICAL TRAINING in production is part and parcel of the educational system. It covers practical work at the college as well as direct practice in production.

First- and second-year students are required to undergo practical training in the workshops and experimental stations maintained by the institutes, while practical training in production is obligatory at the end of the third and fourth years, and directly before work begins on the graduation theses.

Practical exercises are required in mathematics, theoretical mechanics, theory of mechanisms and machines, strength of materials, and other subjects.

In the presence of the lecturer the student carries out one or another demonstration based on the lecture. After that he continues to work independently on textbooks and other materials.

Seminars are arranged mainly in the humanities.

Special attention is devoted to laboratory practice which reinforces the theoretical knowledge acquired by the students, acquaints them with laboratory equipment and develops a taste for experimenting.

The student is given the opportunity not only to perform experiments the results of which are known to the lecturer in

advance, but also to do independent work, to draw up the plan for the experiment, conduct observations, sum up their results and draw the necessary conclusions.

Much is being done to improve laboratory work, to acquaint the students with the latest instruments and methods of research, to get them accustomed to observe the greatest accuracy when they are conducting experiments.

Practically every college gives students the opportunity of co-operating in scientific research conducted under the respective department.

The best works are awarded special medals and prizes; they are published in the collections of scientific papers issued by the institute and may be used as a basis for graduation works and dissertations.

Some of the programmes require the presentation of estimates and charts, or annual projects. These estimates represent the first experience in the independent application of the theoretical knowledge acquired by the students.

After completing their studies in one or another subject and presentation of the required estimates and charts, the students proceed to work on their annual projects. Their volume, subjects and nature are defined by the departments, depending upon the subject.

The student prepares his annual project independently, the lecturer's role being reduced only to that of consultant and examiner.

Moreover, consultations must not interfere with the student's independent work; he must not be given any ready solutions for his problems, he must not be allowed to copy existing projects and every encouragement must be given to the student's initiative.

The students defend their projects at a public hearing.

Annual theses are presented in the main subjects by students of the humanities. During the term, or during the

academic year, the student works on his theses, selecting one of the subjects announced by the department.

Lectures on optional subjects may be attended by students at their choice.

Practical work and laboratory exercises prepare the students for their future training in production, which they do under the guidance of a professor, or lecturer.

The students go together with the head of the department to the place where they are to do their practical training, the given enterprise appointing the most skilled specialists to assist them.

Arrangements for practical training are usually made at the best modern industrial enterprises, at collective farms, or state farms, offices, and other economic, cultural, educational and medical establishments.

Things are organized so that the student can perform independently, in consecutive order, various jobs ranging from less to more skilled, up to the duties of a technician and then of foreman and superintendent.

Students are acquainted not only with production processes and technology, but also with industrial organization and maintenance.

Final production practice is arranged directly before work begins on the graduation projects. Twenty to twenty-five weeks is allocated for the preparation of the graduation thesis.

There is a wide range and variety of subjects to choose from for the graduation projects at a technical college.

As a rule, the student is required to prepare the design of a locomotive, diesel engine, motor car, airplane, factory, shop, mine, electric power plant, and so on, depending upon the nature of his chosen profession.

The project embraces 10-15 standard sheets of drawings with a corresponding memorandum and calculations totalling about 100-120 pages.

Graduation theses required in some of the colleges are brief

works summing up the results of independent experiments and research.

Technical colleges, however, prefer graduation projects which give students the possibility of improving and completing their training for a chosen profession.

Graduation projects are primarily of educational value, but their subjects are connected with concrete tasks in industry, transport, construction, communications, and so on, and they therefore cover urgent problems confronting concrete enterprises, or even entire industries.

Numerous cases have been known in the last decade of projects prepared by students having been used for the construction of machines, automatic transfer lines, for building workshops and factories.

Both graduation projects and graduation theses are presented by students before the examination commissions.

Both at the institutes and at the universities students of the humanities are required to take state examinations. The president of the examination commission is, as a rule, an authority in the specific field, but not associated with work at the given institute.

After presenting his graduation project, or passing state examinations (in the humanities), the student receives a diploma qualifying him for work in his chosen field.

The role of Soviet education is to assist in the building of a communist society, in shaping the materialist world outlook of the students, equipping them with a good grounding in the different fields of knowledge and preparing them for socially useful work.

Graduates of Soviet higher educational establishments are expected to understand the fundamental laws governing the development of nature and society and to apply them creatively in practice.

They are largely helped to acquire this understanding

through the thorough grounding they are given in social and economic studies.

All students, irrespective of the subjects they are studying, are required to take courses in the History of the Communist Party of the Soviet Union, political economy and philosophy. Technical colleges allocate about 8 per cent of their time to these subjects, and still more time is allocated to these subjects in colleges specialising in the humanities.

EMPLOYMENT FACILITIES FOR COLLEGE GRADUATES

It has already been mentioned that colleges train specialists in the U.S.S.R. in accordance with the requirements of its national economic and cultural plans.

Young specialists therefore have no need to worry about finding employment. They know that the rapidly developing economy and culture of their country provide unlimited possibilities for them to make use of their energy and knowledge.

The question of appointments is usually considered a few months before the students receive their diplomas.

The director receives lists of vacancies in advance and he presides at the state commission where the students are invited to choose their place of work, in the presence of representatives of the respective enterprises or institutions where their services are wanted.

In most cases the question is settled without any difficulties. Sometimes a husband and wife may have graduated from different institutes. In such cases appointments are found for both of them in the same city, or rural district.

Sometimes the climate is found medically unsuitable in a district to which a graduate's appointment would take him.

Problems such as these are settled by the director offering alternative employment; and if that offers no way out, the graduate can make his own arrangements.

Such cases, of course, are exceptions.

Before starting work, all graduates are given a month's holiday and paid their final stipend. Specialists whose appointments entail taking up a different place of residence are paid by the management of the factory (or institution) travelling expenses (for himself and his family) and the cost of transporting baggage.

WORKERS AT COLLEGE

There are some people who for one reason or another are unable to attend college in the daytime. As a rule, these are family people who do not wish to give up their job. It would be unfair if such people had no chance to acquire a college education.

Forty-three per cent of the students in the U.S.S.R. attend college in the evening, or take college correspondence courses. There is a whole system of evening colleges and special institutes and faculties offering college correspondence courses.

The U.S.S.R. Law Correspondence Institute, for example, has 12,820 students; it offers a five-year course in law based on the same standards of education and according the same privileges as the law faculties of the universities.

This institute has branches in different parts of the country. Its students are government and local council employees, people's assessors and other people requiring a legal education.

Another college of this kind is the U.S.S.R. Polytechnical Institute (with 32,700 students) which offers correspondence courses in chemical engineering, mining, metallurgy, and so on. It has branches and consultation centres in 31 cities, some of them remotely situated, such as Magadan.

Then there is the U.S.S.R. Institute of Economics (with 9,434 students) which offers correspondence courses in industrial or agricultural management, statistics and so on. This school, too, has branches in many cities.

Correspondence courses are offered also by the faculties and departments of the regular institutes and universities.

Many colleges provide facilities for all forms of education; daytime attendance, evening courses (attended by working students who live in the city where the institute has its seat) and correspondence courses, which may be taken by people who reside in different parts of the country and report only for the examinations.

To enable worker-students to take advantage of these opportunities for a college education, the state gives them a number of privileges.

Just as in the day colleges, no charges are made for tuition or for any other service extended to those taking college correspondence courses. All expenses are borne by the state. Libraries supply all the necessary textbooks free of charge. And no charge is made for examinations.

Correspondence students who make good progress in their subjects are legally entitled to extra time off work with full pay (of no less than one month) for taking their examinations.

Graduating students receive a special leave of four months (receiving a state stipend for the duration of this leave) for preparing and presenting their graduation theses. Furthermore, travelling expenses required for reaching the place where examinations are held are paid by the enterprise or institution where these students are employed.

The effectiveness of this state aid may be judged by the fact that correspondence courses were completed and graduation projects or theses presented in 1957 by 3,400 lawyers, 5,700 economists, 5,800 engineers and thousands of other young specialists.

Facilities for a college education through attending evening school or through correspondence courses will be still greater in the coming period.

FACULTY MEMBERS

CONSIDERABLE ATTENTION has always been paid in the Soviet Union to the training of college professors and lecturers. This training is accomplished mainly through the post-graduate courses at universities, institutes and research institutions.

The best college graduates (or college-trained specialists with some experience in production) are given the opportunity for post-graduate studies (with a three-year course). After completing this course, post-graduates present their theses for an M.Sc. degree.

Faculty members have also been trained under the respective departments from amongst the most capable assistants who received their M.Sc. degrees after presenting dissertations.

A uniform system of post-graduate training was adopted in 1934. The two scientific degrees conferred are the M.Sc. and D.Sc. The first qualifies its holder for lecturing in a college as an assistant, or docent, and the second for a professorship.

A college-trained specialist desiring to qualify for an M.Sc. degree must take examinations in three or four subjects in accordance with the special programmes adopted in the respective college or scientific institute.

Next, he must, independently or under the guidance of a professor, conduct scientific research which would lead to new discoveries, and after these results are published defend his scientific paper at a public hearing before an academic council (of a college or scientific institution) which has the right to confer an M.Sc. degree.

An entirely independent scientific work with new results and treatment of a major scientific problem with scientific generalisations, is required for a D.Sc. degree. After the results of his work are published, the author defends it at

a public hearing before an academic council which has the right to confer D.Sc. degrees.

The decision of the council is based on a vote taken by secret ballot.

The decision to confer an M.Sc. or D.Sc. degree is subject to confirmation by the Supreme Qualification Commission of the Ministry of Higher Education of the U.S.S.R.

Statistical records of the Supreme Qualification Commission covering a period of 20 years (1937-57), show that 100,000 dissertations were submitted in the period in question for an M.Sc. degree and more than 12,000 for a D.Sc. degree.

The colleges train scientists and lecturers not only for their own faculties, but also for various research institutions, for the institutes of the Academies of Sciences, and so on.

More than 12,000 young people are taking post-graduate courses in colleges at present. Young scientists graduate at the rate of 3,500 annually.

How well the facilities for post-graduate studies and research have been extended may be judged by the fact that the number of scientific workers has grown to more than double the 1950 figure.

About 240,000 people are employed as scientific workers or faculty members today; they include more than 10,000 scientists with D.Sc. degrees and about 100,000 with M.Sc. degrees.

More than 120,000 lecturers are employed in the colleges and institutes. They include more than 5,500 scientists with D.Sc. degrees and more than 45,000 with M.Sc. degrees.

There are highly authoritative scientists in every field of knowledge capable of solving the most difficult problems advanced by science and technology today and of ensuring the training of specialists with standards of knowledge on a level with the latest achievements of science and engineering.

The Soviet Government does everything to encourage the training of scientific workers; it is enough to mention that high

stipends are paid to post-graduate students, and that lecturers or research workers who are doing post-graduate scientific work in preparation for M.Sc. or D.Sc. degrees are given a paid leave lasting up to three months.

Scientific degrees entitle specialists employed in research institutions, colleges, or industry, to higher salaries.

Plans for training scientific workers are drawn up in accordance with the requirements of the leading branches of industry and culture, and, especially, in such branches of knowledge as physics, mathematics, biochemistry, biophysics, aerodynamics, computing machines, radio engineering, electronics, semiconductors, and other new divisions of science and technology.

Those with at least two years' practical experience in their particular field and with abilities and a leaning for scientific research are admitted to post-graduate studies. In exceptional cases opportunities for post-graduate studies in some theoretical subjects are given to young people directly after graduation.

Facilities for post-graduate studies are available in the scientific institutions and colleges which have the necessary scientific personnel for giving guidance to post-graduate students and the necessary equipment for experimental work. The themes of the dissertations must be connected with the solution of the most urgent scientific and practical problems.

All this helps to provide additional personnel for university and college faculties. There is, however, still much to be done in this respect.

The point is that in the last few years college education has been developing much faster than the training of faculty members, with the result that 5,000-6,000 more professors are required in order to raise the standards of education and to widen the scale of scientific research in the colleges.

SCIENTIFIC RESEARCH

PERHAPS THE main feature distinguishing higher education from all other forms of education lies in its historic links with the development of science.

College instructors have always been and are bound to be direct contributors to scientific progress, scientists who can acquaint students not only with the results achieved by other scientists in a given field of knowledge, but also with the results of their own investigations.

Because of this one can expect college-trained specialists to be up to the level achieved by modern science and engineering.

Scientific research is conducted in Soviet colleges on a large scale. Faculty members have been responsible for some of the most important discoveries in science.

It is enough to mention Mendeleev's contributions to chemistry, or Zhukovsky's work in aerodynamics. It was as college faculty members that their most important scientific work was accomplished.

Faculty members in Soviet colleges are developing the finest traditions of the great Russian scientists.

New branches of knowledge developed of late are being energetically cultivated in college; this applies to nuclear physics, atomic crystallo-physics, chemistry of chain reactions, biogeochemistry, machine mathematics, electronics, the theory of semiconductors, automatic engineering, remote control, and so on.

That does not mean, of course, that colleges are trying to monopolise science. There is a vast number of scientific institutions in the U.S.S.R. It is enough to refer to the Academy of Sciences of the U.S.S.R. with its more than 3,000 research institutes, special institutes conducting research in specific branches of production, agricultural research institutes, and so on.

A student and instructor in Moscow University's laboratory of photogrammetry. This stereoplanigraph is used to make maps from aerial photographs



A meeting of the council of the students' scientific society, at Lvov State University

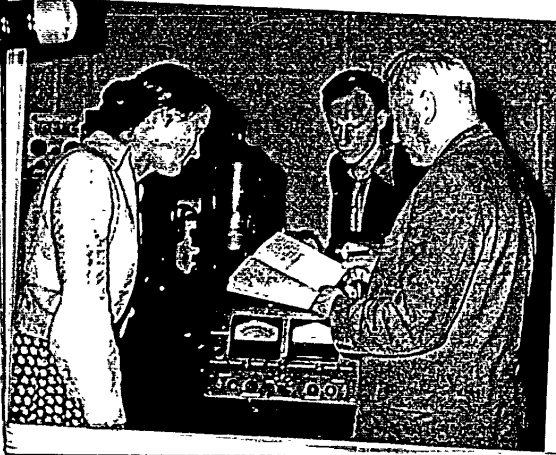




Tutor and research worker watch the tapping of molten metal at the Iron and Steel Institute, Stalinsk, Siberia



EXAMS: No time to lose when exams draw near! Volodya Mironov, of Moscow University, is catching up at meal-times. Below, two third-year students remember that holidays follow exams—and prepare for both together!



Professor Pavlas Brazdzyunas and students in the semi-conductors laboratory of Kapsukas State University, Vilnius, Lithuania



Education TRAINING of SPECIALISTS

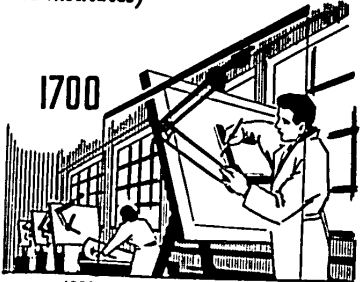
(In thousands, gradu-
ating from Universitites
and Institutes)

2300

HIGHER EDUCATION IN THE SOVIET SEVEN-YEAR PLAN

The diagram on the left shows the
achievements in higher education during
the previous planning period compared
with the training programme now
embarked upon.

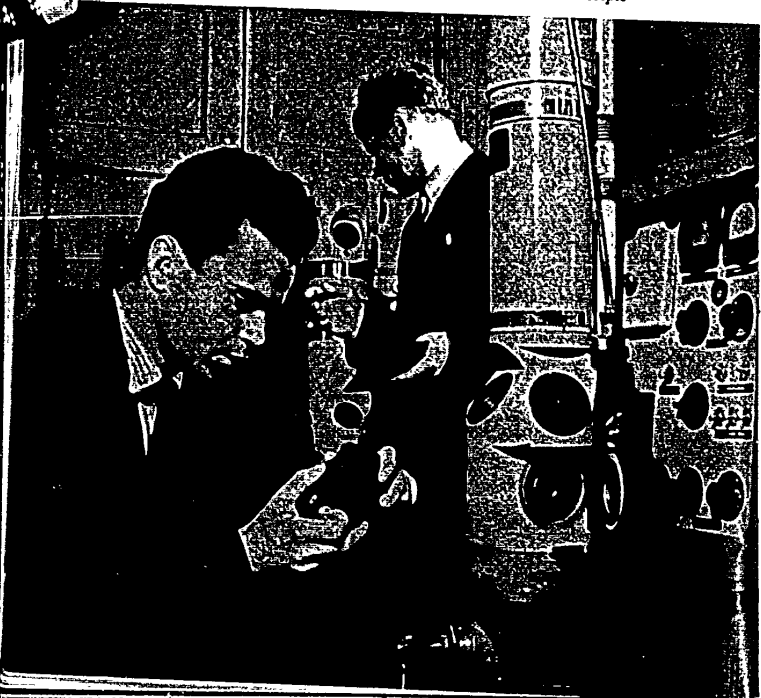
1700



1952-1958

1959-1965

Students at the Iron and Steel Institute,
Stalinsk, working with electronic micro-
scopes



Together with these institutions, colleges conduct extensive research in various fields of knowledge.

Numerous examples could be cited to show the great scope of scientific work accomplished by college professors. Soviet scientists have done much for the conquest of the most powerful forces of nature; they stand in the forefront of the development of world science and engineering in some of the leading and most important fields.

Great headway has been made in the U.S.S.R. in the peaceful uses of atomic energy. Its plan for the construction of atomic power plants is being successfully carried out.

Steps are being taken to acquire greater control of atomic and nuclear energy. The U.S.S.R. has built the world's most powerful accelerator of charged particles, the proton synchrotron; it is building the world's first solar electric power plant and is completing the world's first atom-powered icebreaker.

Extensive use has been made of tracer atoms as an important means of investigation and control of production processes in chemistry, mining, agriculture, in medical theory and practice for the purpose of combating diseases.

Soviet scientists, engineers and designers have remarkable achievements to their credit in rocketry. The TU-104, TU-114 and TU-114A are among the latest achievements in fast aircraft.

Last, but not least, the whole world knows about the Soviet sputniks and the Soviet cosmic rocket which has become the first man-made planet of the solar system. This is a most outstanding contribution to the scientific and engineering progress of all mankind which has long cherished the dream of conquering outer space.

The sputniks and the first artificial planet of the solar system represent one of the results of the Russian system of education —this is the general conclusion of world public opinion.

Direct participation of faculty members in scientific research enables them to bring standards of education up

to the requirements of modern science and engineering, to keep well abreast of the latest developments in science and ensure the constant training of new scientific personnel.

Everything is done to persuade the senior students (the best and most talented, of course) to co-operate in scientific research.

Just as an athletic coach selects the most promising athletes to train for competitions, so a professor selects future scientists from amongst the most talented and successful students, cultivating in them a taste for scientific research and helping them to scale, step by step, the difficult and thorny path of science.

INTERNATIONAL CONTACTS

CONTACTS WITH progressive scientific trends and scientists in other countries have always been maintained by Soviet higher educational establishments. They are expressed in the exchange of books, textbooks and other materials; exchanging scientific experience and methods of education by commissioning lectures to colleges in other countries for a long period of time, and through exchanges of visits and of students.

More than a hundred Soviet colleges, including universities, polytechnical, engineering, mining and agricultural institutes, are exchanging scientific works, textbooks, manuals and visual aids, collections of minerals, seeds and other materials. A voluminous correspondence is maintained on scientific and pedagogical questions.

The scientific library of Moscow State University exchanges books with more than 270 cultural institutions in 54 countries.

A regular correspondence is maintained between the botanical garden of the University and more than 100 institutions in 25 countries.

Professors and other faculty members of Soviet colleges have attended international congresses in philosophy, history, theoretical and applied chemistry, conferences on the peaceful

uses of atomic energy, and have visited many countries as members of Soviet cultural and scientific delegations.

Soviet scientists have read complete courses of lectures, as well as separate lectures in mathematics, physics, history, economics, jurisprudence and other subjects in China, Britain, France, Germany, Poland, Czechoslovakia, Hungary, Denmark, Finland, Switzerland, India, Turkey and other countries.

And Soviet students have heard in their colleges lectures by scientists from China, Britain, Germany, France, Finland, Czechoslovakia, Bulgaria, Hungary, Rumania, Sweden, Denmark and India.

Foreign scientists have paid visits to Moscow, Leningrad and other Soviet cities. The universities of Moscow, Leningrad, Kazan, Tomsk, Tartu and Kiev have now invited eminent foreign scientists to lecture to their students.

More than 13,000 students and post-graduates from 40 countries are attending colleges in the Soviet Union at present. As a rule, they study together with the Soviet students, in the Russian language, which they manage to learn quite quickly. The foreign students are also paid stipends. After graduating they return to their own countries.

Foreign students are admitted to Soviet colleges in accordance with special agreements between the Government of the Soviet Union and the governments of the respective countries.

In some cases they are sent to Soviet colleges under a reciprocal arrangement, in other cases this arrangement is extended as a privilege to students from the under-developed countries, the Soviet Government allocating special stipends for these students.

Soviet students and post-graduates are also given opportunities for studying in foreign colleges. Soviet colleges are now helping to provide equipment for a number of colleges in India, Burma and Afghanistan.

An important example of the kind of reciprocal arrangement the Soviet Union is developing is the programme of cultural, educational, scientific and technical exchanges recently agreed upon between the United Kingdom and the U.S.S.R.

Under this agreement 12 professors from each side will visit corresponding universities in the next 12 months to deliver lectures and meet students; there will be a similar exchange of four professors, instructors or lecturers from technical institutes of higher education in each country; an exchange of delegations between the universities of London and Leningrad to discuss university administration, teaching and research; an exchange of 20 post-graduate students from each side during the 1959-60 academic year; an exchange of 25 students at teachers' training colleges to improve their knowledge of the English and Russian languages and to become acquainted with the life and culture of their respective countries; a further exchange of Russian-language teachers from Britain and English-language teachers from the U.S.S.R.; and the continuation and expansion of exchanges of educational materials.

This agreement shows the possibilities which exist for still further co-operation and contact between the higher educational institutions of different countries.

By lending a hand to such developments Soviet colleges are making a valuable contribution to the building of improved relations between peoples, thus assisting to safeguard world peace.

CONCLUSION

TECHNICAL AND cultural progress creates a demand for increasingly skilled young specialists. In order to meet this demand, the standards of education and training have also been raised in Soviet colleges. Much has been done in the last few years to equip the young specialists with a wider store of

knowledge so that their education could be up to the requirements of scientific and technical progress.

A thorough grounding in the sciences can be acquired by the young specialists only by taking a direct part in scientific research at college. That is why every encouragement is given to scientific research in the U.S.S.R. It is our opinion that only a scientist who makes his own contribution to the progress of science has the moral right to lecture at a university or institute.

I should not like to create among my foreign readers the impression that all the problems of higher education have already been settled in the U.S.S.R.

The coming seven years will see still greater progress made in socialist culture and education and in the cultural development of the people. Exceptional importance is therefore attached to questions connected with the communist education of the people, especially of the growing generation.

Great as it is, the progress made in the U.S.S.R. in public education, in the education of specialists for all branches of the national economy and culture, is inadequate to keep pace with communist construction, and the system of education still has serious shortcomings to overcome.

The main shortcoming is expressed in a certain aloofness from life, in the inadequate practical training of the school graduates. The reorganisation of education taking place at present is intended to make our secondary and special schools and colleges a more effective factor in the constructive work of the Soviet people.

The main purpose is to bring about constant improvements in the educational process in the universities and institutes, to raise the professional standards of the young specialists. Our specialists must assimilate the experience of world science and engineering.

Practical training must be improved. What we want is to bring college education closer to practice, to life, and we are

persistently seeking better forms of organisation, ways of improving scientific research in the colleges.

All these questions are at present receiving special attention from our state and from the public as a whole. The countrywide discussion of these problems has shown that the programme for the development of education drawn up by the Central Committee of the C.P.S.U. and the Council of Ministers of the U.S.S.R. is of exceptional value for the successful solution of the problems connected with the building of communist society.

This programme has found its expression in the special law adopted for the purpose of strengthening the ties between education and life, for the purpose of furthering the progress of public education in the U.S.S.R. This law was passed by the Supreme Soviet of the U.S.S.R. by unanimous vote (in December 1958).

The main tasks of the colleges are:

Education of highly skilled specialists brought up in the spirit of Marxist-Leninist teachings and equipped with the knowledge of the latest achievements of science and engineering at home and abroad and with practical skill, and capable not only of making the most rational use of modern technique, but also of creating the technique of the future;

Promotion of scientific research which could assist in the building of communism;

Training of scientists and teachers;

Advanced training of specialists employed in various branches of the national economy, culture and education;

Dissemination of scientific and political knowledge among the working people.

In order to further the progress of college education, the existing system of day and evening colleges and college correspondence courses will be supplemented by a fourth type of school, the factory college.

Education in the new institutes will take the following two forms:

First, theoretical studies at the college, and practical training in the factory, which thus becomes as it were a branch of the institute.

Second, a factory, or big shop, is to be turned over entirely to the institute, for combining study with productive work.

The second type will be most suitable for the agricultural institutes which will, in fact, be converted into important state farm colleges.

Concrete forms of education will vary in all these four types of college, depending upon their nature. What they will all have in common is the closest possible combination of theoretical training with direct work in the factories, in agriculture, in scientific research institutions, cultural institutions, and so on.

Work in colleges will be reorganised so as to ensure the education of a new type of specialist who will be able to rise to the future requirements of science, engineering and production.

The modern specialist must possess a high level of practical skill combined with deep theoretical knowledge in his specific field; he must be thoroughly acquainted with practice in his field of production. And the system of college education is being reorganised at present to meet these requirements.

What are the concrete forms proposed for the development of higher education in the U.S.S.R.?

To begin with, attendance of evening colleges and studies by correspondence will be greatly encouraged, for these forms afford the greatest possibilities for combining theoretical and practical training.

Nine hundred and fifty thousand out of a total of 2,150,000 students are attending evening college or taking college corre-

spondence courses. The number of these students will be growing steadily in the years to come.

In view of the fact that these groups are composed of worker students with experience and skill in their specific fields, chief attention will be devoted to equipping them with the most thorough theoretical background.

Consequently, in reorganising education in evening colleges and correspondence courses chief stress will be laid on improvements in the methods of teaching in order to raise theoretical standards and make it easier for students to assimilate the required knowledge.

In their last years students will be released from work and given the opportunity to concentrate their attention entirely on their studies, research and designing.

Steps have been taken to promote the widest possible use of films, radio and television, to provide all worker students with the necessary textbooks, manuals and guides, and records of lectures. In addition to the existing publishing and printing facilities at the disposal of the colleges we are planning to set up a big publishing house in order to meet the full demand for textbooks and other literature required by the colleges in millions of copies.

The faculties of the evening colleges and correspondence courses will be reinforced with the most authoritative professors and lecturers and provided with greater facilities; evening colleges and faculties, as well as the correspondence extensions will be able to use the premises and facilities of the day colleges and of the leading industrial and agricultural enterprises.

Speaking of education through college correspondence courses, I should like to note a very important new function of the colleges which this very system will be called upon to perform: advanced training of working specialists. Colleges will thus be solving not only the problem of training new specialists for the national economy and culture, but also the problem of advanced training and refresher courses for the

older specialists and for the workers and other employees.

Colleges will provide an opportunity to study specific subjects, or all the subjects in a given field included in the college programmes, to all citizens who desire to do so, and who possess the necessary preliminary education.

Faculties for advanced training will be instituted in a number of colleges.

An important role will also be played by the college correspondence courses and evening schools of the universities in the education of specialists in the humanities.

Education there will be for practical workers whose occupation requires a knowledge of the humanities, and for those who wish to improve their general scientific and cultural background.

This form of education will afford the opportunity of studying specific subjects, or a course of inter-connected subjects (history, or jurisprudence, for example), and to take examinations in these subjects, or to take a complete course. Such students may terminate their studies at any stage.

With their greater facilities, the evening colleges and college correspondence courses will be able to provide all citizens with the opportunity of a college or university education, or of studying and graduating from another college.

This form of education has a great future. Greater progress and a higher productivity of labour will lead to the gradual reduction of the working day. The seven-year plan, as a matter of fact, contains concrete provisions for a reduction of the working day and working week, namely, for a 35-hour week with two free days. This will allow more leisure for studying.

I have already mentioned that the combination of work and study is the essence of the current reorganisation of the higher school. Naturally, the concrete forms of this combination will vary, depending upon different circumstances.

In some fields, where it is necessary to equip the students with knowledge of difficult theoretical subjects to begin with

and to give them time for extensive laboratory practice, first, second and even third-year students will devote themselves entirely to their studies. It is proposed to follow this up by a long period of practice; regular work for a year directly in factories, laboratories, designing offices, or research institutions.

Most of the day colleges (engineering, agricultural, and so on), will combine theoretical studies from the very beginning with work in production which, as a rule, will correspond to the nature of the college.

It is also proposed that young people who have had no practical experience before entering college should study during the first two years in an evening college, or through college correspondence courses. After these two years, the students may, if they wish to, remain in the evening college, or continue their studies through correspondence courses, or transfer to a day college.

In agricultural colleges, and in other colleges connected with branches of production which depend upon the seasons, the succession of theoretical and practical training will also depend upon these seasons. For example, students at agricultural colleges could study in the winter and do their practical training on farms in the summer.

Educational plans will be drawn up so as to enable the worker student to devote his attention in the period when he is occupied in production to subjects which could be studied independently, leaving the more difficult subjects for the third and subsequent years.

We are proposing to make arrangements so as to enable students of the humanities (law, economics, etc.) without previous practical experience to combine work with studies during the first year or first and second years.

In dealing with applicants, medical colleges will give priority to trained nurses and other people with experience in medical and prophylactic services. Theoretical studies will be com-

bined from the very outset with practice in medical and health services.

Those with a secondary medical schooling and with practical experience in this field will be able to attend a medical college without giving up their work.

It is impossible to raise a specialist's skill without raising his standards of theoretical knowledge. It is therefore natural that in the process of reorganising higher education special attention should be paid to the improvement of the theoretical background of the specialists.

A college-trained specialist must possess a deep knowledge of theory. National economic progress creates a constantly greater demand for advanced methods of work, and new technological processes. This cannot be achieved without advanced theoretical thought. Improved theoretical training of specialists remains one of our main tasks.

Our professors and other faculty members will be able to ensure the highest level of theoretical education by studying and summing up the achievements of science and engineering at home and abroad, by furthering scientific research and enlisting the students' co-operation in this work.

Special attention will be paid by Soviet colleges to equipping specialists with higher standards of knowledge in mathematics, physics, chemistry, mechanics, electrical engineering, instrument building and in other branches of knowledge which are connected directly with the development of science and engineering, so that our country can continue to occupy a leading place in all these fields.

College-trained specialists in these fields must be thoroughly versed in the latest achievements of science; they must be able to understand the future prospects of scientific thought and to acquire command of modern methods of experimenting. These specialists are indispensable to scientific institutions and to modern industrial and other enterprises.

Life itself dictates the need for the wider use of such

specialists in factory and shop laboratories, designing offices, experimental farms and other establishments.

Practice has shown that any research institution and designing office must have on its staff specialists with a good general grounding in theory as well as designing engineers and technologists. Only this combination can ensure the successful solution of fundamentally new problems.

All that I have said shows the steady progress of higher education and the growing opportunities for a college training.

In the coming seven years (1959-65), graduating college-trained specialists will increase by almost 50 per cent over the earlier seven years, from 1,700,000 to 2,300,000, and graduating engineers for industry, transport and construction will be almost doubled.

It is enough to mention that diplomas will be issued to engineers in the coming seven years at the rate of more than 100,000 a year.

It is evident that higher education in the U.S.S.R. has entered a new stage of development, meeting the fundamental interests of the people.

At the same time, the workers employed in the higher educational services of the Soviet Union are carefully studying the experience of college education in other countries, and we are always prepared to utilise the achievements of our foreign colleagues.

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IMPRESSIVE, WIDESPREAD, RAPID

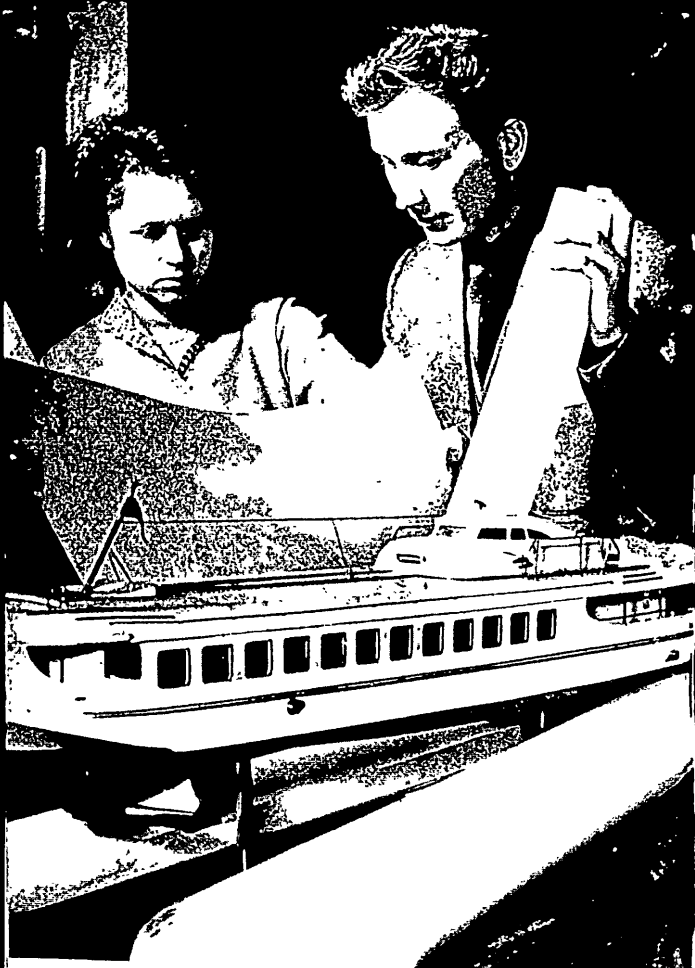
"An educational development so impressive, so widespread and so rapid must have required a tremendous effort. It could have come about only if the leaders of the new Russia had realised from the beginning the importance of education for the realisation of their national aims and if they had been supported in this regard by the people throughout the length and breadth of the Soviet Union. . . ."

(Education in the Soviet Union: A Report of a Study Tour. A Joint Report Submitted to the Educational Interchange Council and Representative Executive Committees. Published by the Educational Interchange Council (Inc.), London, 1956.)

ASTONISHED—AND SOBERED

"We were simply not prepared for the degree to which the U.S.S.R. as a nation is committed to education as a means of national advancement. . . . Our major reaction therefore is one of astonishment—and I choose the word carefully—at the extent to which this seems to have been accomplished. . . . Ten American educators came away sobered by what they saw. . . ."

(Dr. Lawrence G. Derthick, Commissioner of Education in the United States Department of Health, Education and Welfare, speaking at the National Press Club in Washington, June 13, 1958, following a visit of ten United States educationists to the Soviet Union in May, 1958.)



Above - Alla Kobayanna and Vyacheslav Mironov, working on their graduation project at the Leningrad Institute of Water Transport Engineering. Front Cover - Boris Kuznetsov, on a post-graduate correspondence course at Moscow University, is here making a study of chemical kinetics.

GREAT PLAN of the SOVIET UNION

STAT

<p>TARGET FIGURES for the Economic Development of the U.S.S.R. from 1959 to 1965</p> <p>⊙ Abridged Version</p>	<p>RESOLUTION of the 21st Congress of the Communist Party of the Soviet Union</p>
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1959

1965

With Map
and Thirty Diagrams

Soviet Booklet No. 49
NINEPENCE



STAT

TARGET FIGURES
for the
ECONOMIC DEVELOPMENT
OF THE U.S.S.R.
from 1959 to 1965

RESOLUTION
of the
21st CONGRESS of the
COMMUNIST PARTY
of the
SOVIET UNION
February 5th, 1959

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TARGET FIGURES FOR THE ECONOMIC DEVELOPMENT OF THE USSR FROM 1959 TO 1965

(The Seven-Year Plan was approved unanimously by the 21st Congress of the Communist Party of the Soviet Union on February 5, 1959. Published below is an abridged version of this document.)

RALLIED around their Communist Party, the Soviet people have reached summits that are so high, and have accomplished transformations that are so stupendous, that our country is now able to enter a new and most important period of its development—the period of the comprehensive building of communist society. The key tasks of this period will be the establishment of the material and technical basis for communism, the further consolidation of our country's economic and defensive might and, at the same time, the ever fuller satisfaction of the growing material and spiritual requirements of the Soviet people. This will be the decisive phase in the competition with the capitalist world, when the historic task of overtaking and surpassing the most highly developed capitalist countries in output per head of the population must be accomplished in practice. The Communist Party and all the Soviet people are fully convinced that this goal will be successfully achieved.

In order to accomplish in the shortest possible space of time the historic tasks confronting our country, the Central Committee of the C.P.S.U. and the U.S.S.R. Council of Ministers instructed the State Planning Committee of the U.S.S.R. to work out, on the basis of the decisions of the Twentieth Party Congress and subsequent decisions of the Party and government, a draft of the target figures for the country's economic development from 1959 to 1965 in line with the programme for the development

of the Soviet Union's productive force— which the Communist Party has mapped out for the next fifteen years and which was presented at the Anniversary Session of the U.S.S.R. Supreme Soviet on November 6th, 1957.

A wide discussion of the thesis of N. S. Khrushchov's report to the Twenty-First Congress of the C.P.S.U.: "Target Figures for the Economic Development of the U.S.S.R. from 1959 to 1965" took place prior to the Congress. In the course of the country-wide discussion before the Congress over 968,000 meetings were held at industrial establishments and construction sites, at collective farms and state farms, in scientific and educational institutions, units of the Army and Navy and in governmental offices. These meetings were attended by more than 70 million people, with 4,672,000 individuals making proposals, suggesting amendments and speaking at these meetings. Meetings of working people, Party conferences and Congresses unanimously approved the draft target figures.

The target figures for the economic development of the U.S.S.R. from 1959 to 1965, on instructions of the Central Committee of the C.P.S.U. and the U.S.S.R. Council of Ministers were elaborated by industrial establishments, economic councils, the State Planning Committees and the Council of Ministers of the Union Republics, ministries, departments, the Academy of Sciences, and other scientific institutions and the U.S.S.R. State Planning Committee, with the active participation of Party, trade

...and being Communist League representatives and made members of various executive bodies, districts, etc.

...the target figures are the first of a special, many-sided effort by the factory Government, planning and control bodies, the limit of production, creative initiative by the whole mass of the working people. This is in keeping with the concept of socialist planning which is a permanent principle of management of socialist economy and is the wish of all the people.

The development of the industry of socialist countries in the USSR, the creative initiative, the activity of workers and engineers, the plans of a social organization for the purpose of socialist industry, manufacturing the industry of socialist firms.

In the present conditions when the Soviet Union's economy has reached a new stage in its development, the Communist Party has worked at the Twentieth Congress the task of preparing for a long-term plan for a longer period. The main tasks and aims of this new five-year plan in the program of the USSR Supreme Soviet declared to the Twentieth Anniversary of the Great October Socialist Revolution.

In the USSR's economic development over the next fifteen years it is envisaged that the country's economic resources will more than double or triple their present volume. This period, therefore, is inseparable with the rapid growth of socialist industry. It is necessary to increase rapidly the production of all the main types of goods and services in the economy over the next five years. The main aim and task of socialist industry will be to increase the production of goods and services which will increase fourfold, and so on. It is necessary to increase the production of all the main types of goods and services in the economy over the next five years. The main aim and task of socialist industry will be to increase the production of goods and services which will increase fourfold, and so on.

...of this long-term plan. A special part of the program envisaged is that the highest goal is to be reached not in the period from 1940 to 1950.

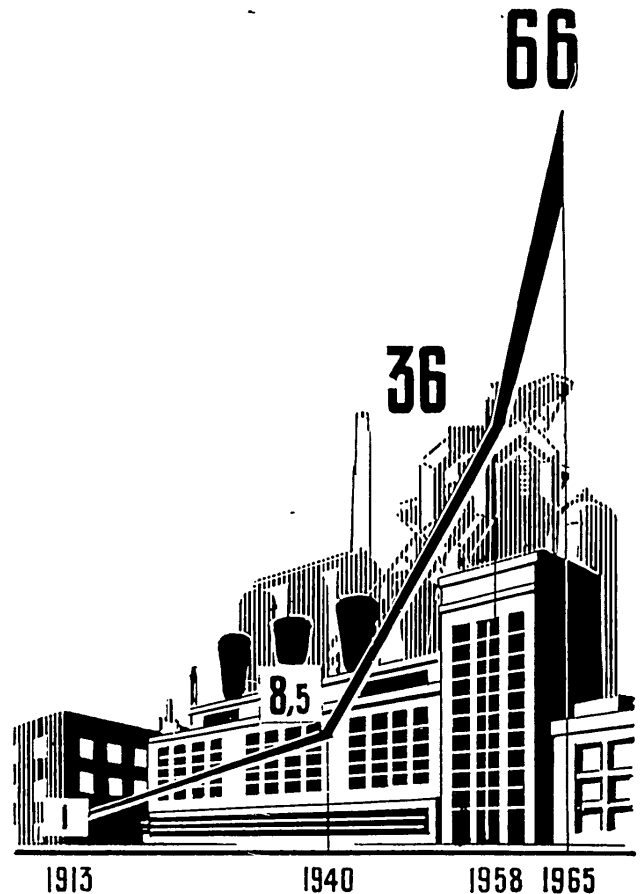
The fundamental problem of the economic development of the USSR is to increase the production of goods and services, to increase the production of goods and services, to increase the production of goods and services, to increase the production of goods and services.

Superiority in the field of government, the always present, and continues to be, the economic advantage of the socialist system. In the coming seven years, the USSR's economy, and above all its steel, heavy industry, will continue, as in the past, to develop at a pace many times faster than that of the capitalist countries, of the capitalist countries, including the United States of America.

The Seven-Year Plan is based on the following fundamental principles: 1. Increase of the production of goods and services, not only a higher rate of economic growth, but also a greater volume, in comparison with the past, higher production of goods and services, in the main volume of goods and services of heavy industry and agriculture. It is the main task of the production of goods and services in the next five years. There will be a further increase in the production of goods and services, not only a higher rate of economic growth, but also a greater volume, in comparison with the past, higher production of goods and services, in the main volume of goods and services of heavy industry and agriculture.

In the next fifteen years the USSR will rise to first place in the world, not only in the volume of production of goods and services, but also in the volume of production of goods and services, in the main volume of goods and services of heavy industry and agriculture. It is the main task of the production of goods and services in the next five years. There will be a further increase in the production of goods and services, not only a higher rate of economic growth, but also a greater volume, in comparison with the past, higher production of goods and services, in the main volume of goods and services of heavy industry and agriculture.

GROWTH OF INDUSTRIAL PRODUCTION IN THE USSR (1913 shown as 1)



1. Some Results of Economic and Cultural Developments in the USSR.

As a result of the industrialisation of the country, of the collectivisation of agriculture, of the liquidation of the exploiting classes, and of the cultural revolution, socialism has triumphed in the Soviet Union and the gradual transition to communism is being successfully carried out.

The world's first socialist state was built in exceptionally grim conditions. International imperialism tried more than once, by force of arms, to prevent the building of socialism in the U.S.S.R. Of the forty-one years of Soviet government, the Soviet people have been able to devote only slightly more than half to peaceful pursuits, because some twenty years have been lost owing to wars and the subsequent periods spent in restoring a ravaged economy. The great vitality of the Soviet system has been manifested in a striking way in the fact that the Soviet people have built up a powerful and prosperous socialist economy, surmounting all the difficulties and obstacles in their path.

The Soviet Union now possesses a powerful industry, transport and highly mechanised socialist agriculture—all of them developed in an all-round way. The country's social wealth and its national income are growing year by year. Since the birth of Soviet government, the national income, the growth of which expresses the general advance of the economy and of the people's standard of living, has increased fifteen-fold on a per capita basis. The material and cultural standards of the working people of town and countryside are steadily rising.

The most important result—the outcome of the Soviet people's heroic struggle and labour—is that they have built up a new society, a society of socialism, and a new political system corresponding to it—the Soviet socialist state. With the establishment and development of socialist society and the Soviet state system, there have arisen new and hitherto unknown laws of social development and new standards in the relationships between human beings.

The supreme goal of socialism, its mighty motive force, is the steady satisfaction of the rising requirements of the whole of society and the growth of the material well-being of the working people.

Socialist society has no place for such things as business competition, anarchy of production, unemployment and economic crisis. In socialist society other economic laws have come into being and are operating. They are: the balanced and proportionate development of the national economy, and the uninterrupted and rapid growth of production, knowing no slumps or crises. This makes it possible to plan the economy, to determine the trend of its development, the continual increase of volumes of output and the rational distribution of productive forces, and to carry out wide-scale specialisation and co-operation along socialist lines.

Socialism has engendered not only new economic laws, but also new social relationships. On the basis of socialist public ownership there have arisen mutual assistance and co-operation in the common labour of the free and equal members of society, who are deeply interested in economic and cultural development and who realise that this depends entirely on the results of their labour.

In the conditions of socialism, of the Soviet state system, there have appeared and developed new social relationships, characteristic of genuine democracy. The unbreakable alliance between the working class and the peasantry—that bedrock foundation of the Soviet state—has become still firmer, and the fraternal friendship of the free and independent peoples of the Soviet Union has grown stronger.

In the years of Soviet power, the working people of the U.S.S.R. have made good Russia's century-long lag in industry and have built up a mighty industry ensuring the economic and political independence of the Soviet state. Today, as regards industrial output, the U.S.S.R. holds first place in Europe and second place in the world.

8

In 1958 we produced about 55 million tons (these are metric tons. One metric ton=2,204.6 lb.) of steel and extracted 113 million tons of oil. This means that today more steel and more oil are being produced in a month than in the whole of 1913. The output of electricity in 1958 reached 233,000 million kilowatt-hours. We are now generating as much electricity every three days as tsarist Russia did in the space of a whole year. Today the U.S.S.R. is second in the world for the volume of chemical output.

The successes achieved in the advancement of the engineering industry are particularly great. Whereas in 1913 the country produced turbines whose total capacity amounted to 6,000 kilowatts, in 1958 the total capacity of the turbines produced was some 6.6 million kilowatts. In 1913 the country produced only 1,500 metal-cutting machine-tools, but in 1958 it has turned out more than 138,000. At the present time industry in the U.S.S.R. is producing 220,000 tractors a year, more than 10,000 excavators, and more than half a million motor vehicles.

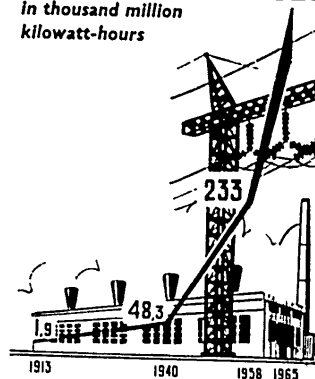
The whole of the U.S.S.R.'s heavy industry is developing at an accelerated pace: in 1958 output of the means of production was more than five times as great as in 1940.

The high rate of development in heavy industry and the growth of agricultural production have laid a firm foundation for bringing about the advance of all branches of the light and food industries. In 1958 the output of consumer goods was nearly fourteen times greater than in 1913. This includes a more than forty-five-fold increase in articles intended for cultural and household purposes. Even though during the Great Patriotic War some branches of the light and food industries were thrown back many years as regards their production levels, 170 per cent more consumer goods are now being produced than in 1940.

Socialist industry has won great successes because its development is based on the latest scientific and technical achievements, on the increasing creative initiative and selfless endeavour of the factory workers, scientists, engineers and technicians.

A most important factor speeding up

ELECTRIC POWER OUTPUT in the USSR
in thousand million kilowatt-hours



economic development was the reorganization of the management of industry and construction. The short space of time in which the economic councils have been working has revealed the tremendous advantages of the new form of industrial management. The rate of growth of industrial output has increased; internal production reserves are being used to better advantage; the working class and the engineering and technical personnel are displaying more initiative and activity.

Great successes have been achieved in the further strengthening of the collective farm system and in the development of agricultural production since the plenary meeting of the C.P.S.U. Central Committee held in September 1953. The major economic task of bringing into cultivation 36 million hectares* of virgin and long-fallow land was carried out in a short space of time. In this way there was created a big granary in the East and also the conditions for the zonal specialisation of agricultural production in the country. The total area under

* One hectare=2.47 acres.

9

crops in the Soviet Union has exceeded 195 million hectares.

In 1958, as compared with 1953, the output of meat (taking into account the increase in the herd) rose 40 per cent; the production of milk rose 60 per cent; eggs 50 per cent and wool 40 per cent; the last figure including a more than two-fold increase in fine and semi-fine wool. In the last five years, ending with 1958, the average annual rate of growth in the gross output of agriculture was over 8 per cent for the U.S.S.R., as compared with less than 2 per cent for the United States.

The successes achieved in agricultural development are the result of the all-round organisational activity of the Party and the Government to strengthen the collective farm system and develop the state farms, and of the implementation of the major organisational, political and economic measures taken, especially in order to increase the material incentives for the collective farm peasantry and all the workers in the countryside to bring about the growth of commonly-owned production.

In the period from 1954 to 1958 inclusive, agriculture received 664,000 tractors (or more than 1 million in terms of 15 h.p. units), 361,000 grain combine harvesters, 571,000 lorries and much other machinery. Agriculture now employs some 500,000 specialists with a higher or specialised secondary education.

The collective farms have become big, economically sturdy establishments. For products sold to the state and the co-operative societies, the collective farms and their members received over 100,000 million roubles more in cash in 1958 than in 1952.

Major measures in the development of socialist agriculture have been: the reorganisation of the machine and tractor stations, the change in the practical production and technical servicing of the collective farms, and the introduction of a new system of procurement and new procurement prices for agricultural products.

In the years of Soviet government large-scale construction has been carried out in all spheres of the economy and

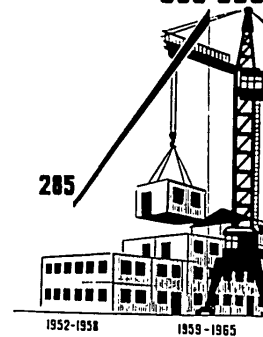
culture. Between 1946 and 1958 alone, some 12,000 big state industrial enterprises and a large number of medium and small enterprises have been built and put into operation.

Housing construction has assumed particularly great proportions. In the last five years alone, 223 million square metres of new housing have been erected in cities, towns and factory housing estates. This is far in excess of the total amount of urban housing in tsarist Russia in 1913. In the last five years the collective farmers and members of the rural intelligentsia have built more than 3 million houses in rural localities.

The cultural and general educational standards of the population are steadily rising. More than 50 million people are now engaged in some form of study. At the present time the U.S.S.R. has 766 higher educational establishments and

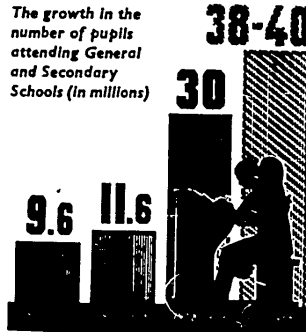
HOUSING in the Soviet Union

in million square metres



3,344 specialised secondary schools and other specialised secondary educational institutions, with a total of more than 4 million students. The number of specialists, with a higher or secondary specialised education, employed in economy is about 7.5 million. The higher educational establishments in the U.S.S.R.

EDUCATION



now graduate nearly three times as many technical engineers as similar establishments in the United States.

An extensive network of scientific establishments with the most up-to-date equipment has been set up in the U.S.S.R. At the close of 1958 there were more than 280,000 scientific workers, that is twenty-eight times more than before the Revolution.

The close pooling, in production, of the efforts of scientists, engineers and designers to use atomic energy has made possible a general rise in scientific levels and has brought the U.S.S.R. to the fore in this leading field of natural science and technique. A powerful atomic industry has been built up in the U.S.S.R.

Soviet scientists are making successful headway in the peaceful use of thermonuclear energy. The serial production of international ballistic rockets has been organised. The launching of the first Soviet artificial Earth satellite has opened up a new era in human history, that of the conquest of outer space. The second and third Earth satellites and a space rocket which became the first artificial planet of the solar system have been launched, and preparations are being made for travel to celestial bodies.

The material well-being of the Soviet people is steadily improving. Real wages

and salaries—taking into consideration pensions, grants, free tuition and free health services—in comparison with 1940 almost doubled in 1958, while the real incomes of the peasants more than doubled, for each person employed.

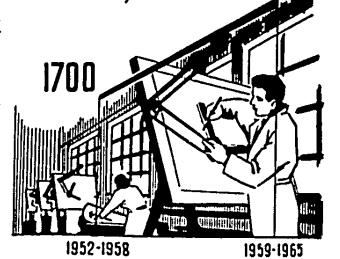
In accordance with the decisions of the Twentieth Party Congress, there have been carried out such significant measures as the raising of wages and salaries of lower-paid factory and office workers, the reduction of the working day on Saturdays and the eves of holidays, the transfer of workers in several branches of heavy industry to a shorter working day, as well as several measures to improve the system of grants to working people under the social insurance scheme. Maternity leave has been extended and a new law on state pensions has been passed considerably improving pensions for factory and office workers.

Every year the Soviet state earmarks tremendous sums for social insurance payments, for grants, pensions, scholarships for students, for free tuition and health services, for paid holidays, and so on. In 1958 alone total appropriations for these purposes topped 215,000 million roubles, against the 1953 figure of 134,500 million roubles.

In 1958 the people received, from the state, pensions totalling the sum of 64,000 million roubles, which is nearly

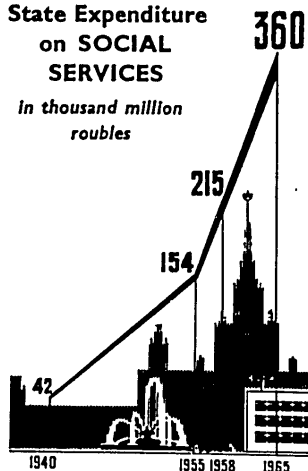
Education TRAINING of SPECIALISTS

(in thousands, graduating from Universities and Institutes)



State Expenditure on SOCIAL SERVICES

In thousand million
roubles



two-and-a-half times as much as in 1953.

As a result of the consistent carrying out of a Leninist national policy and of fraternal mutual assistance, the former economically and culturally backward national Republics have built up a powerful modern industry, a large-scale, mechanized system of farming and a large network of educational establishments and scientific and cultural institutions, and have produced a vast army of skilled personnel. In Soviet times the output of large-scale industry has increased fifty times over in the Central Asian Republics and Kazakhstan, thirty

2. Basic Tasks in the Development of the National Economy of the USSR for 1959-1965.

THE chief task of the Seven-Year Plan for the development of the national economy of the U.S.S.R., 1959-1965, is a further mighty upsurge of all branches of the economy on the basis of the priority expansion of heavy industry, and a substantial improvement of the country's economic potential so as to ensure a continuous rise in people's living standards.

times in the Transcaucasian Republics, and nine and a half times in the Baltic Republics (the last figure is in comparison with 1940).

In recent years the Party and the Government have taken steps to grant the Union Republics considerably wider powers to develop their economy and culture. This is making it possible to employ our country's natural resources and manpower more efficiently and to develop the economy and culture of each Republic more rapidly.

The Soviet Union has surpassed Britain, West Germany and France in the actual volume of production of pig iron, steel, coal, electricity, cement, commercial timber, sawn timber, cotton fabrics and certain other industrial items. We have considerably shortened the gap between our country and the United States in the output of iron and steel, iron ore, several types of machines, instruments and cotton fabrics. In several important industrial and agricultural items, such as coal, woollen fabrics, timber and sawn timber, butter, wheat, sugar beet and potatoes, the U.S.S.R. has surpassed the level of the United States. In the last eight years the U.S.S.R. has overtaken the United States in the actual annual increment of many items, notably, steel, pig iron, iron ore, oil, coal, cement, sulphuric acid, cotton and woollen fabrics and leather footwear.

The Soviet Union, which has blazed the trail into socialism for mankind, has now reached such a level of development of its productive forces that it can now turn to the solution of new great tasks in building communism.

By completing this plan, a decisive step will be taken towards the creation of the material-technical base of communism and the accomplishment of the main economic task of the U.S.S.R.: to overtake and surpass, in the shortest historical time, the most highly developed capitalist countries in output per head of population.

The Communist Party regards it as a

major task to ensure, in this seven-year period, a further substantial increase in the real incomes of the population in town and country, and a considerable rise in the wages of lower- and medium-paid groups of factory and office workers. The target figures for 1959-1965 envisage a large expansion in the production and consumption of foodstuffs and manufactured goods. Housing construction will take place on a large scale.

The Twenty-First Congress of the C.P.S.U. regards as the main tasks of the Seven-Year Plan:

A high rate and the necessary proportions in the development of the national economy.

A substantial increase in the output of ferrous and non-ferrous metals to satisfy more fully the growing needs of the national economy.

A more rapid development of the chemical industry and especially of the production of artificial and synthetic fibres, plastics and other synthetic materials. The chemical industry will become a major source of raw materials for the production of consumer goods.

A change in the pattern of fuel production by priority development of the extraction and production of the most economical fuels, namely, oil and gas.

A rapid development of electrification of all branches of the national economy by building, chiefly, large-scale thermal electric power plants.

Further development of machine building, particularly heavy machinery, the production of electric machines and apparatus, instruments and automation devices, as an important condition for the further rise of labour productivity.

The technical reconstruction of the railways on the basis of electrification and wide use of diesel locomotives.

A further advance of all branches of agriculture, ensuring the satisfaction of the country's constantly rising needs for foodstuffs and agricultural raw materials.

A rapid development of housing construction so as to accomplish successfully the task set by the Party and the Government to eliminate the shortage of housing for working people.

An important task of the forthcoming seven-year period is that of intensively exploiting the rich natural resources of our country, improving the distribution of the productive forces on its territory, bringing industry still closer to the sources of raw materials and fuel. Special attention should be devoted to the further development of the natural resources of the eastern parts of the U.S.S.R.

The forthcoming seven-year period will be marked by technological progress in all branches of the national economy.

This is to be achieved primarily by the development of the Soviet engineering industry, particularly the machine-tool manufacturing, instrument-making, radio-electronic and electrical engineering industries; the production of new and more efficient types of equipment for the metallurgical, chemical, oil and gas industries; the development of the production of polymer materials; still wider use of atomic energy for peaceful purposes, and so on.

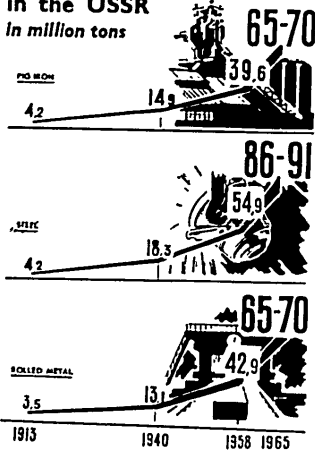
The accomplishment of the tasks posed by the Party and the Government for the next seven years will be of immense political and economic significance for the further strengthening of our country's might.

DEVELOPMENT OF SOCIALIST INDUSTRY

The Communist Party of the Soviet Union attaches major significance to the development of industry, particularly heavy industry, which is the bedrock foundation of our socialist economy, of the country's might, a decisive factor for developing the productive forces and raising the productivity of labour in all branches of the national economy.

Gross industrial output in 1965 is to increase, as compared with 1958, by approximately 80 per cent, including production of the means of production—by 85 per cent to 88 per cent, and production of consumer goods—by 62 per cent to 65 per cent. The average annual increase of gross output in 1959-65 for industry as a whole will approximate to 8.6 per cent. The average annual increase of industrial output in the forthcoming seven-year period will amount to about

OUTPUT of IRON and STEEL in the USSR
In million tons



135,000 million roubles, as against 90,000 million roubles in the preceding seven-year period.

The development of the major branches of industry is to be determined as follows:

A. HEAVY INDUSTRY

In 1965, 65-70 million tons of pig iron, or 64-77 per cent more than in 1958; steel, 86-91 million tons, or 57-66 per cent more; rolled metal, 65-70 million tons, or 53-63 per cent more; commodity iron ore, 150-160 million tons (230-245 million tons of crude ore) shall be produced.

Compared with 1958, a 180 per cent to 200 per cent increase in the output of aluminium, 90 per cent increase in the output of refined copper, and a substantial increase in the output of nickel, magnesium, titanium, germanium, silicon is envisaged. The output of other non-ferrous and, especially, rare metals will likewise increase.

The discovery of diamond fields has created a dependable raw material base

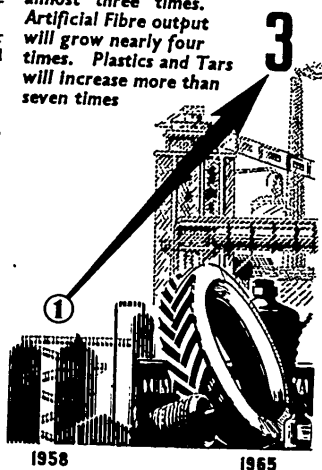
for the organisation in the U.S.S.R. of a large-scale diamond extraction industry. The output of Soviet diamonds will increase approximately fifteen to sixteen times in 1965, as compared with 1958.

Over-all output of chemicals will increase nearly three-fold. The production of synthetic materials is to be widely developed, the output of artificial fibres will increase by 300 per cent, including the most valuable synthetic fibres twelve to thirteen times and plastics and synthetic resins by more than 600 per cent. Large-scale production of new types of synthetic materials will make it possible to expand sharply the output of high-quality and cheap consumer goods, as well as to raise the technical level and make more efficient all branches of the national economy. The seven-year period should see the construction or the completion of more than 140 new large-scale

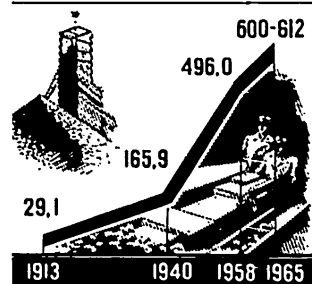
Development of the SOVIET CHEMICAL INDUSTRY

Total output will increase almost three times.

Artificial Fibre output will grow nearly four times. Plastics and Tars will increase more than seven times



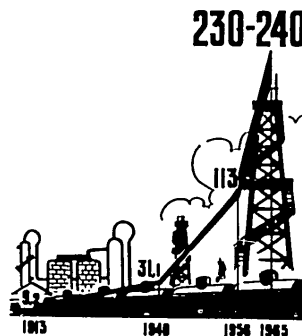
COAL MINING in the Soviet Union
In millions of tons



chemical enterprises and renovations to more than 130 enterprises.

For a further improvement in the structure of the country's fuel pattern, priority development of oil and gas industries will be ensured. It is planned to bring up the extraction of oil in 1965 to 230-240 million tons, a more than two-fold increase over 1958, the extraction and production of gas in 1965 to 150,000

OIL EXTRACTION in the Soviet Union
In millions of tons

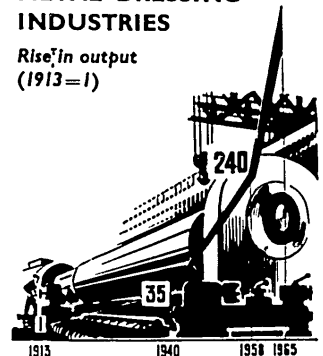


million cubic metres, as against 30,000 million cubic metres in 1958. In the coal industry production should be brought up in 1965 to 600-612 million tons.

The seven-year period will be a decisive stage in implementing Lenin's idea concerning the all-round electrification of the country. In 1965 electric power output in the country will rise to 500,000-520,000 million k.w. hours, i.e. 110 per cent to 120 per cent, and the fixed capacity of electric power plants shall increase more than 100 per cent. Besides putting into operation large

MACHINE BUILDING and METAL DRESSING INDUSTRIES

Rise in output (1913=1)



thermal electric power plants, it is envisaged to complete the construction of the Stalingrad, Bratsk, Kremenchug, and a number of other hydro-electric stations, to put into operation a number of atomic electric power stations with various types of reactors.

The high rate of development of the engineering industry, as is envisaged by the Seven-Year Plan, will ensure the supply of new equipment to industrial establishments and a radical improvement in the technology of production, which will be a decisive factor for the growth of labour productivity, will ease working

conditions and enable a further reduction in the working day. Transition to integrated mechanisation and automatic control of production, with the use of electronic devices, represents the most outstanding feature of contemporary technical progress and must become the main trend in the designing of new machines.

It is planned to manufacture the latest equipment for all branches of the economy, to design and manufacture

machines on the basis of utilising the latest achievements and discoveries in science and technology, particularly radio - electronics, super - conductivity, super-sound, radio-isotopes, semi-conductors, nuclear energy, and so on. The output of the engineering and metal-working industries will nearly double in seven years.

Production of major types of machines and instruments will be as follows:

	1965	Increase compared with 1958
Metal cutting machine-tools including special, specialised and aggregate machine-tools	190-200 thousands 38 thousands	Percentage 40-50 100
Forging and pressing machines Automatic and semi-automatic machine lines	36.2 complete sets 280-300	50 approx. 210-230
Precision instruments including computers and mathematical machines	18,500-19,200 million roubles 2,000-2,100 million kw.	150-160 350-370
Turbines	18.7-20.4 million kw.	180-210
Generators for turbines	17.5-18.4 million kw.	240-250
Electric motors of alternating current	32-34 thousand tons	120-130
Rolling mill equipment	200-220 million roubles	130-160
Chemical equipment	3,500-3,700 million roubles	220-240
Technological equipment for the textile industry	2,500 million roubles	120
Technological equipment for the food and flour milling industries	3,800-4,100 thousand tons	110-130
Motor vehicles	750-856 units	50-70
Trunk-line, electric and diesel locomotives	2,550-2,700 thousand tons	140-160
Technological equipment for the cement industry	180-220 million roubles	150-210
Technological equipment for foundry production	360-410	130-160

B. PRODUCTION OF CONSUMER GOODS

The light and food industries are growing continuously and the production of consumer goods is expanding in our country on the basis of the high level

A substantial growth in the output of the timber, paper and wood-working industry is envisaged. The production of paper and cardboard, prefabricated houses, furniture, etc., will increase considerably.

of development reached in heavy industry and agriculture.

The gross output of light industry will increase in seven years approximately by 50 per cent.

Production of cotton fabrics in 1965 will reach 7,700-8,000 million metres, woollens—500 million metres, linen fabrics—635 million metres, silk fabrics—1,485 million metres, leather footwear 515 million pairs, etc.

In 1959-1965 it is planned to build approximately 156 new, large light-industry establishments and to complete the construction of 114 enterprises which were started prior to 1959. Together with the building of new enterprises, a substantial number of existing factories will be reconstructed.

Gross output of the food industry is to increase by 70 per cent in the seven-year period. About 250 new meat processing enterprises, over 1,000 milk processing factories, over 200 canneries and other factories will be put into operation. The capacities of sugar refineries will be increased by more than twice over.

The output of household goods and also of machines and appliances which

lighten women's work in the home will be doubled, reaching 88,000 million roubles in 1965. There will be a substantial increase in the output of furniture, sewing machines, refrigerators, washing-machines, dish-washers, wireless sets, radiograms and television sets, clocks and watches, bicycles, motorcycles and motor-scooters, cameras, and electric household appliances.

C. INTEGRATED MECHANISATION AND AUTOMATION OF PRODUCTION
Specialisation and Co-ordination in Industry

Integrated mechanisation and the automation of production processes constitute the chief and decisive method for ensuring further technical progress in economy and, on this basis, a new increase in labour productivity, the lowering of costs and an improvement in the quality of output.

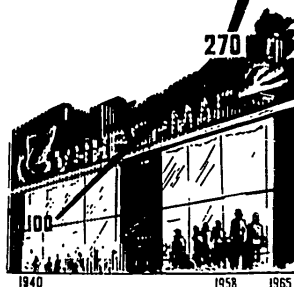
Apart from carrying out the over-all programme of automation in all fields of industry, it is planned to set up more than fifty experimental model enterprises where the latest models of integrated automation will be put into effect.

Large undertakings in specialisation and co-ordination in industry are envisaged. These include:

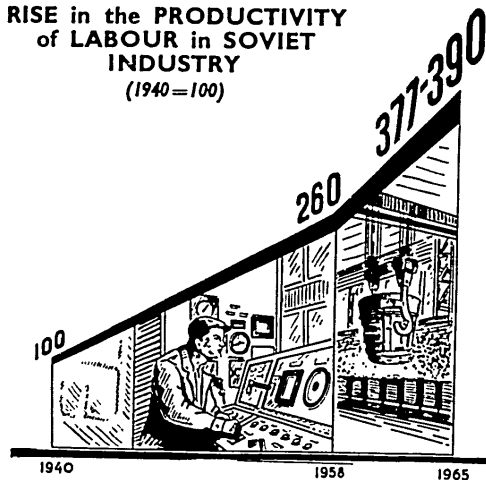
- the further integrated development of the economic areas through the most rational use of natural resources, bearing in mind the need to specialise and improve co-ordination and to eliminate wasteful methods of transportation;
- the far better use of the productive capacity at existing enterprises;
- the carrying out of specialisation not only in industry but also in other spheres of economy—in transport, building, repair and other jobs

Productivity of labour in industry, which is the decisive factor to increase output and raise the living standards of the working people, will considerably increase on the basis of measures to be carried out in the next seven years in the integrated mechanisation and automation of production processes and the development of specialisation and co-ordination in industry. Productivity of labour, per employee, in industry will increase by

GROWTH of RETAIL TRADE
In the USSR
1940 - 100



**RISE in the PRODUCTIVITY
of LABOUR in SOVIET
INDUSTRY**
(1940=100)



from 45 per cent to 50 per cent over 1959-65, while, taking into account the reduction of working hours, the output per hour will increase still more.

Alongside the planned volume of gross output and the growth of labour productivity, it is envisaged that over 1959-1965 production costs will be reduced, in comparable prices, by no less than 11.5 per cent.

**DEVELOPMENT OF SOCIALIST
AGRICULTURE**

The task, in the coming seven years, is to make agricultural production grow to an extent where it will make possible the satisfaction of the demands for staple foods and a big increase in the resources of agricultural raw materials, in order to provide the population with a wide range of high-quality foodstuffs in abundance and to meet all the other requirements of the state for agricultural products.

The targets for 1959-1965 envisage: a further expansion of grain production, so as to ensure by the end of the seven-year period a grain harvest

of 10,000 to 11,000 million poods (164-180 million tons) a year;

an increase in the production of the main industrial crops in 1965 as follows: raw cotton, to 5,700,000 to 6,100,000 tons, or 30 per cent to 40 per cent more than in 1958; sugar beet, to 76 to 84 million tons, or 40 per cent to 55 per cent more; oil-bearing seeds, to approximately 5,500,000 tons, or 10 per cent more; flax fibre, to 580,000 tons, or 31 per cent more than in 1958;

an increase in 1965 of the gross potato crop to approximately 147 million tons, as against 86 million tons in 1958;

Increased output of vegetables to satisfy fully the needs of the population;

an increase in the production of hard and soft fruit during the seven years, by no less than 100 per cent; grapes by no less than 300 per cent;

an increase in the output of the chief animal products in 1965, as compared with 1958: meat (slaughter weight), to at least 16 million tons, or double; milk, to 100 to 105 million tons or a 70 per cent to 80 per cent increase;

**TOTAL AGRICULTURAL
OUTPUT in the
U.S.S.R.**
(1958=100)



wool, to approximately 548,000 tons, or 70 per cent more; and eggs to 37,000 million, or 60 per cent more.

Gross farm output as a whole will be up by 70 per cent in 1965, as compared with 1958.

The utmost expansion of the output of grain as the basis of all agricultural production will be the chief line in the development of crop production for the forthcoming period, too.

High stable yields of all agricultural crops must be obtained and gross harvests must be raised to the planned levels by using a scientifically substantiated farming system, applicable to the conditions of the given economic zones of the country and of each farm, by the further specialisation and improvement in the distribution of agricultural production, and the wide application of the achievements of science and advanced experience.

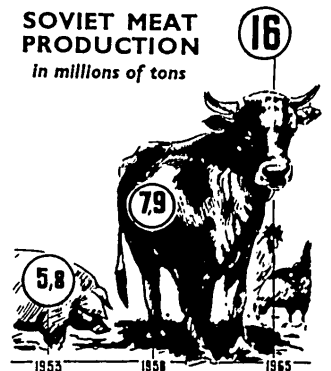
In animal husbandry the chief task in the forthcoming seven years is to increase the output of meat, milk, eggs and wool. While the average annual increase in meat production in 1952-58 amounted to approximately 500,000 tons (slaughter weight), in 1959-65 it must exceed 1,100,000 tons; milk, respectively, 3,100,000 tons and 5,900,000 to 6,600,000 tons; wool, 18,000 tons and 33,000 tons. Milk yields must rise to no less than 2,600 kilograms per cow on the collective farms.

At the same time it is necessary to ensure a sharp increase in the number

of all kinds of livestock and poultry.

The chief requisite for the successful accomplishment of the programme for developing animal husbandry is the creation of a solid fodder supply base. The planned increase in grain production will make it possible to allocate 85 to 90 million tons of concentrated fodder for livestock in 1965. Maize must play a decisive part in increasing fodder production. The production of concentrated

**SOVIET MEAT
PRODUCTION**
in millions of tons



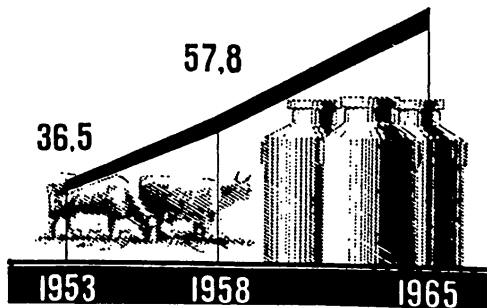
fodder must be increased to 18-20 million tons as against 3,900,000 tons in 1957.

The purchases of the basic agricultural products shall be increased in 1965 as follows:

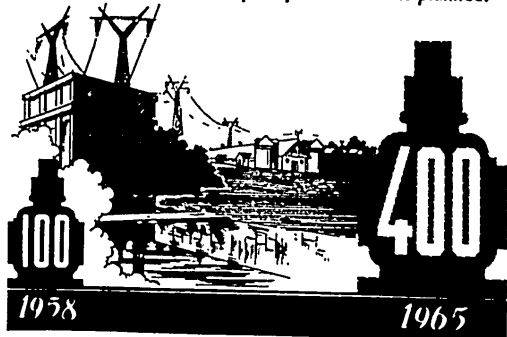
	1965 (thousand tons)	1965 per cent of 1958
Raw cotton	5,700-6,100	130-140
Sugar beet	81,000	159
Oil-bearing seeds	3,920	136
Potatoes	11,720	174
Flax fibre	530	137
Livestock and poultry (live weight)	11,050	196
Milk	40,610	184
Wool	540	172
Eggs (million)	10,000	221

MILK OUTPUT in the SOVIET UNION
(In million tons)

100-105



ELECTRIC POWER CONSUMPTION in SOVIET AGRICULTURE—a four-fold increase is planned.



The output of agricultural products in state farms will be greatly increased in the forthcoming seven years.

It is planned to produce for agriculture in seven years over 1 million tractors, about 400,000 grain harvester-combines and large quantities of other machinery and equipment.

It is envisaged to complete in the main the electrification of all collective farms in the country by the end of the seven-year period, while the electrification of state farms and repair and technical service stations will be completed much sooner. Consumption of electric power in agriculture will increase approximately by 300 per cent in seven years.

In the seven-year period labour productivity in the collective farms should approximately double, and in the state farms should increase by 60 per cent to 65 per cent.

DEVELOPMENT OF TRANSPORT AND COMMUNICATIONS

The coming seven-year period will see the radical technical reconditioning of the main types of transport, especially rail and air transport.

Goods traffic on the railways will increase in the seven-year period to 1,800,000-1,850,000 million ton-kilometres or by 39 per cent to 43 per cent. In 1965 between 85 per cent and 87 per cent of the entire freight carriage on the railways will be hauled by electric and diesel locomotives, against 26 per cent in 1958. The length of track to be switched to electric and diesel traction will reach approximately 100,000 km. The construction of the biggest South-Siberian and Middle-Siberian trunk-lines will be completed and several new railway lines will be laid in the districts of Kazakhstan, the Urals and the Volga area.

The cargo carriage of sea transport will roughly double.

Freight carried by river transport will increase approximately 60 per cent in the seven-year period. The Volga-Baltic waterway will go into operation.

With the rapid development of the oil industry, the length of trunk pipe-lines will almost treble while the volume of transport by pipe-line will increase approximately by 450 per cent.

Goods carried by motor transport will increase roughly by 90 per cent. It is planned to build 180 per cent more motor roads of state-wide importance, over 1959-65, than in the past seven-year period.

Due to the introduction of fast and large turbo-jet and turbo-prop airlines, air transport will become one of the main forms of passenger transport. Passenger traffic by air will increase approximately by 500 per cent.

The network of inter-city cable lines will double, while the length of radio-relay communication lines will increase approximately by 740 per cent.

CAPITAL INVESTMENTS IN ECONOMY AND CAPITAL CONSTRUCTION

The coming seven-year period will see construction get under way on an unprecedentedly sweeping scale all over the country, especially in the Eastern regions.

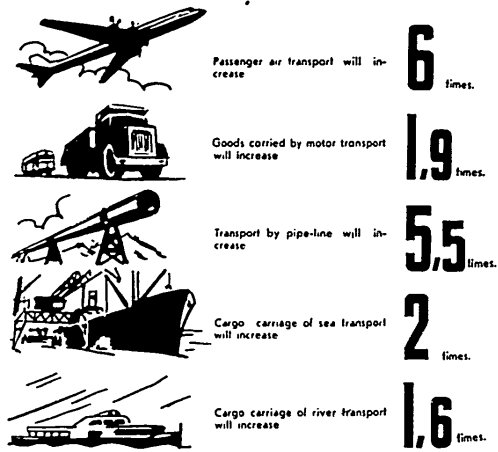
In 1959-65 the volume of state capital investments will increase to 1,940,000-1,970,000 million roubles, or by 80 per cent as compared with the previous seven-year period. It will almost equal the total volume of capital investments in economy during the entire period that Soviet power has been in existence.

As regards certain branches, especially the processing industry, the Seven-Year Plan proceeds from the premise that the radical reconstruction, extension and the technical reconditioning of existing establishments on the basis of integrated mechanisation, automation and new technological processes, providing for the sweeping renewal and modernisation of equipment, should be the main trend during the coming period.

While the total volume of state capital investments in economy in general will increase 80 per cent over 1959-65, capital investments in industry will roughly double compared with investments made in the past seven-year period.

Some 100,000 million roubles will be earmarked for the construction of iron and steel establishments, which is 140 per cent more than the capital invested in this industry in 1952-58.

THE DEVELOPMENT OF SOVIET TRANSPORT

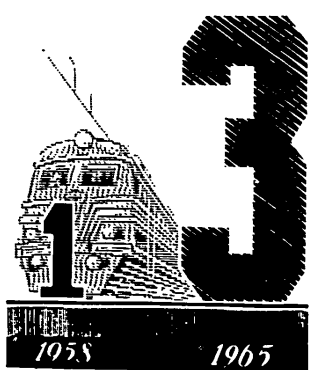


GROWTH in the TRANSPORT of GOODS BY RAIL

(In thousand million ton-kilometres)

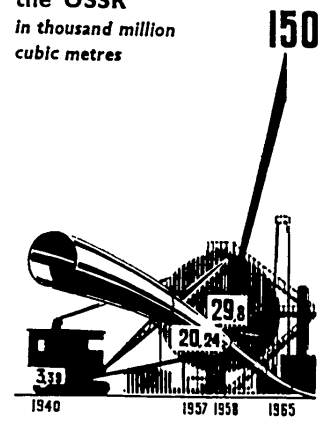


Growth of network of ELECTRIC RAILWAYS in the USSR



GAS EXTRACTION in the USSR

in thousand million cubic metres



approximately two-fold increase over the preceding seven-year period.

The construction of housing and public building will be given 375,000 to 380,000 million roubles. More than 80,000 million roubles will be allocated for building schools, hospitals, child welfare establishments and other cultural and public health services.

Some 150,000 million roubles will be invested by the state in agriculture.

Total capital investments in agriculture by the state and by the collective farms will amount to about 500,000 million roubles in 1959-65 and will nearly double the actual investments made in 1952-58.

For the development of railway transport 110,000 to 115,000 million roubles will be allocated, or 85 to 94 per cent more than has been spent in the preceding seven years. Capital investments for electrifying the railways will increase 170 per cent.

The projected sweeping programme of capital construction will be carried out with the utmost saving of state funds.

It is planned to ensure the further extensive application of mass production methods to building, to convert building work into a mechanised process of assembling and erecting buildings and structures from precast blocks, parts and elements. Capital investments amounting to 110,000 to 112,000 million roubles are being allocated for the development of the building industry and the building materials industry, an increase of 79 per cent to 82 per cent over the preceding seven-year period. The building materials industry will be further developed. It is planned to expand the production of building materials on a scale sufficient to make it possible to satisfy fully the needs of state capital construction and also individual house building in cities and the repair of buildings, and to satisfy to a greater extent the main needs of collective-farm and private housing construction in the countryside. Production of cement in 1965 will be increased up to 75 to 81 million tons, i.e. 120 per cent to 140 per cent more compared with the output in 1958; precast reinforced concrete elements and parts up to 42-45 million cu. m., or approximately 150 per cent more; slate to 6,000 million

The chemical industry will be given 100,000 to 105,000 million roubles for its development. About half of all the allocations for the development of the chemical industry will go to construct enterprises for manufacturing plastics, artificial and synthetic fibres, synthetic rubber and alcohol.

Capital investments in the oil and gas industry will amount to 170,000 to 173,000 million roubles, an increase of 130 per cent to 140 per cent.

For the development of the coal industry, 75,000 to 78,000 million roubles will be earmarked.

Capital investments in the construction of electric power plants, electric grids and heating systems will be fixed at 125,000 to 129,000 million roubles, an increase of approximately 70 per cent, priority to be given to the construction of thermal electric power plants.

In the timber, paper and woodworking industries a total of 58,000 to 60,000 million roubles will be invested, an increase of more than 100 per cent.

In 1959-65 80,000 to 85,000 million roubles will be allocated for the development of the light and food industries, an

**CAPITAL INVESTMENTS
in the
NATIONAL ECONOMY
of the USSR**

In thousand million roubles

1940-1970



24

standard pieces, or 150 per cent more.

The experience of the foremost building organisations shows that the U.S.S.R. has tremendous possibilities of reducing building times in all branches of the economy. In 1958, for example, large blast furnaces were built in six to eight months. Big successes have been registered lately in reducing the times required for housing construction.

With the increase in the volume of capital construction ever greater significance is acquired by the saving of material and financial resources used in construction, the reduction of building costs and the profitable running of all

building organisations and enterprises. With the present scale of construction, a reduction in the estimated cost of building and assembly work by 1 per cent alone means a saving of over 1,000 million roubles a year.

Labour productivity in construction is scheduled to increase 60 per cent to 65 per cent in 1959-65 on the basis of the further industrialisation of construction, the completion of the integrated mechanisation of the large-scale labour-consuming jobs, the improvement of the organisation of building work and the wide application of the best experience of innovators.

3. Distribution of the Productive Forces and the Economic Development of the Union Republics.

IN working out plans for the national economic development of the U.S.S.R., the Communist Party is guided by the Leninist national policy and proceeds from the need to distribute the productive forces properly in the country's territory with the object of achieving the greatest economic effect and ensuring the economic advance of all the Union Republics.

The Seven-Year Plan for the national economic development of the U.S.S.R. in 1959-65 takes into account the interests of a further advance in the economy and culture of all the Union Republics.

It is envisaged to make use of the natural resources which are richest in content and most advantageous as regards conditions of exploitation, particularly in the eastern areas of the country, to make fullest use of labour resources in accordance with the experience gained in production, and the available production facilities in various areas and in all the republics; further to bring industry closer to the sources of raw materials and fuel, to develop specialisation and co-ordination in industry to the utmost, to improve economic ties between areas and to make rational use of all forms of transport.

The main changes in the distribution of the productive forces in the forthcoming seven-year period are envisaged first of all in the direction of a big development of the eastern areas. Over 40 per cent of all the capital investments in

1959-65 will go for the development of the eastern areas, including the Urals, Siberia, the Far East, Kazakhstan and Central Asia. The share of those areas in the country's entire output of major items will rise and reach in 1965: in the production of pig iron approximately 44 per cent, steel 48 per cent, rolled metal 49 per cent, coal approximately 50 per cent, oil 30 per cent, electric power 46 per cent and sawn timber over 45 per cent.

Provision is made for putting into operation the country's third iron and steel centre, which will include a productive capacity of approximately 9,000,000 tons of pig iron.

The coal industry in Siberia and Kazakhstan will be developed at a faster rate than in other areas. These areas will contribute in seven years about 60 per cent of the total increase of coal production in the entire country. A large power industry will also be built up in Siberia and Kazakhstan. Production of electric power here will rise 230 per cent to 250 per cent in seven years and these areas will account for nearly 35 per cent of total expansion in the output of electric power production. The big growth of power potential and cheap electricity in the eastern areas will create favourable conditions for the development of industries consuming much power, the non-ferrous metals industry in the first place.

25

Changes are planned in the distribution of the oil and gas industry which will enjoy priority development in the European part of the U.S.S.R. and Central Asia on the basis of the rich oil and gas deposits discovered in these areas. Construction of oil refineries in almost all the main oil-consuming areas, and the building of a large network of oil and gas pipe-lines will be an essential element in the distribution of the oil and gas industry in the seven-year period.

Total output of industry in the Russian Soviet Federative Socialist Republic will rise approximately 80 per cent.

Agriculture is set the task of substantially increasing grain production in the seven years. For other crops production in 1965 will increase by the following approximate percentages: sugar beet 100 per cent to 120 per cent, flax fibre 40 per cent, meat 120 per cent, milk, eggs and wool 60 per cent to 70 per cent. Capital investments of 954,000-974,000 million roubles will be allocated for the development of the Republic's economy.

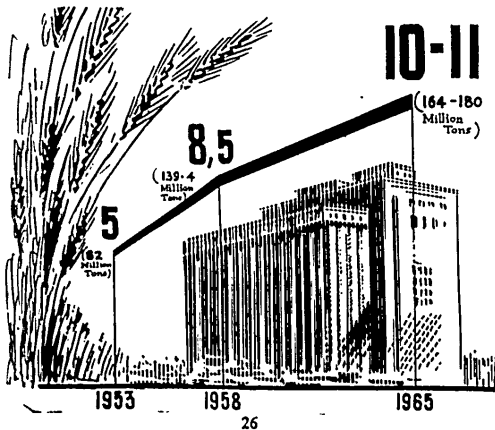
In the European part of the R.S.F.S.R. a rapid growth of the oil and gas industry is planned in the Volga area and the

North Caucasus, which will make it possible to replace power coal by more economical types of fuel: oil and gas. Provision is made for the building of large trunk gas pipe-lines from the North Caucasus to Leningrad. On the basis of oil and gas it is planned to expand existing chemical plants and to build a large number of new ones in the European part of the Republic, particularly plants for the production of chemical fibres, mineral fertilisers and others. Of great significance is the planned development of the iron ore deposits of the Kursk Magnetic Anomaly.

Districts of the Urals will retain a leading place in the Republic for the output of ferrous and non-ferrous metals and heavy engineering. The further growth of the metallurgical, oil, chemical, timber and engineering industries and increased productive capacity in power are planned here in the seven-year period.

Productive capacity will be enlarged at the Magnitogorsk, Orsk-Khalilovo and Nizhni-Tagil iron and steel works and also at the Chelyabinsk and other iron and steel works. In the Urals, Chelyabinsk Region alone will produce in 1965

SOVIET TOTAL GRAIN HARVEST
(larger figures are in thousand million poods—1 pood=36 lb.)



more pig iron than is produced in France today.

Large chemical works, using casing head gases for the manufacture of new types of synthetic rubber and products of organic synthesis, are to be built in Bashkiria.

In districts of Siberia the huge natural resources will be very much developed. It is planned to build two large iron and steel works which will constitute the foundation for the third iron and steel centre of the U.S.S.R.

Large thermal-electric stations working on cheap coal will be built. The world's biggest hydro-electric station, Bratsk, with a capacity of over 3,500,000 kw., will go into operation and construction will begin of the Krasnoyarsk hydro-electric station with a capacity exceeding 4 million kw. The timber and wood-working industry should develop at a rapid pace. One of the world's biggest diamond mining centres is being built up in the Yakut A.S.S.R.

The huge funds invested in Siberia's economy will make possible the fuller use of the natural resources available here for developing the economy of the entire Soviet Union.

Total industrial output in the Ukrainian S.S.R. will rise by approximately 77 per cent in the seven years. Further development is contemplated of such major branches of industry as iron and steel, coal, chemical, power, oil and gas, engineering and sugar.

Capital investments of 214,000 million to 219,000 million roubles are earmarked for developing the Ukraine's economy, of which over 50 per cent will go to the key heavy industries. A number of large industrial establishments will be built in the western regions.

The output of consumer goods will go up substantially. Large textile mills will be built and the production of furniture will be doubled. The output of sugar will grow to 4,900,000 to 5,300,000 in 1965.

In agriculture the main task is to expand further the output of industrial crops by raising yields, and to develop fruit and grape growing. Compared with 1958 meat output in 1965 increases 90 per cent; milk, 90 per cent to 100 per

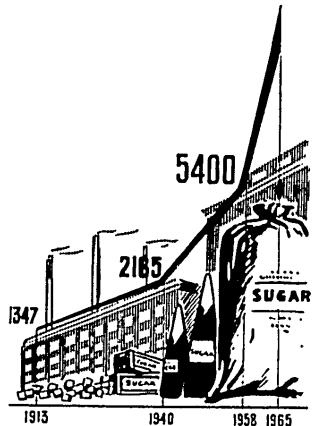
cent; eggs, 80 per cent; wool, 60 per cent.

As a result of the fulfilment of its planned targets the Ukrainian S.S.R. will greatly exceed the most developed capitalist countries for per capita output of a number of main industrial items. Thus, in 1965 the Ukrainian Republic will exceed the 1957 per capita output of pig iron in the United States by approximately 70 per cent, Western Germany by 90 per cent and France and Britain by 150 per cent; in the production of steel the level of the United States will be topped approximately by 20 per cent, Western Germany 40 per cent, Britain 60 per cent, France 120 per cent.

In the Byelorussian S.S.R. it is planned to set up oil refining and chemical industries, to develop the engineering, light and food industries and expand considerably fuel and power. The capital investments for 1959-1965 will more than double the capital investments in the preceding seven years.

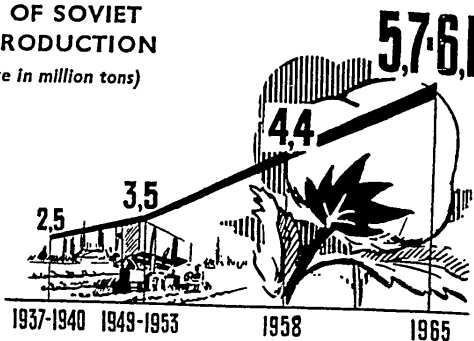
SOVIET SUGAR OUTPUT
in thousands of tons

9250-10000



GROWTH OF SOVIET COTTON PRODUCTION

(Annual average in million tons)



Total output of industry in the republic will increase 80 per cent in seven years. The production of electric power will go up 160 per cent, the output of tractors will grow substantially, the production of lorries will increase 40 per cent to 50 per cent, chemical fibres 230 per cent to 250 per cent, cement 220 per cent to 230 per cent, cotton fabrics eighteen times, and granulated sugar 450 per cent to 510 per cent.

Agriculture will continue to specialise in intensive dairy and meat farming, the breeding of water fowl, the production of potatoes, flax fibre and sugar beet.

The Uzbek S.S.R. will remain the main cotton producer of the country.

Capital investment of 35,000 to 36,000 million roubles are earmarked for developing the republic's economy, or approximately 140 per cent more than in 1952-58. Irrigation construction will be conducted on a large scale. Total industrial output will rise about 80 per cent in seven years.

The gas deposits discovered in the Bukhara district will make it possible to build up a large gas industry which will provide gas not only to a large part of Central Asia but also to major industrial centres in the Urals. The Angren district electric station working on cheap local coal will go over to full capacity.

The chemical and non-ferrous metals industries will be developed on a large scale. The production of copper, lead and zinc is being organised. The output

of cement will grow approximately four-fold.

In agriculture the production of raw cotton in 1965 will increase 20 per cent to 30 per cent compared with 1958, silk cocoons approximately 30 per cent, vegetables 150 per cent, meat 90 per cent, milk 40 per cent to 50 per cent, wool 20 per cent, and karakul skins 40 per cent. The area under orchards and vineyards is to be extended.

In the Kazakh S.S.R. it is planned to develop further non-ferrous metals, power, engineering, chemical, oil, coal, cement, food and light industries and to build up the iron and steel industry on a large scale.

Total capital investments in the Republic's economy will amount to 116,000 to 119,000 million roubles, or approximately 130 per cent more than in the preceding seven-year period. Total industrial output in 1965 will rise approximately by 170 per cent above 1958.

The Karaganda works and the Yermakov ferro-alloys plant will be the major construction projects of the iron and steel industry. The Sokolovka-Sarbai mining and concentration works with an annual capacity of 19 million tons of iron ore, the biggest in the country, will be put into operation in Kustanai Region during 1959-65. The production of pig iron is being organised in Kazakhstan for the first time.

The production of artificial fibres will grow approximately ten times; the output

of mineral fertilisers will increase substantially, and the production of synthetic rubber, automobile tyres and caustic soda will be organised.

The textile, shoe and leather, meat-packing and sugar industries will see the biggest development among branches of the light and food industries.

In agriculture a further increase in grain production is envisaged. The northern districts of the Republic should specialise in meat and dairy farming, the breeding of fine wool-bearing and semi-fine wool-bearing sheep; the areas of desert and semi-desert steppes should specialise in raising livestock for meat, the breeding of sheep yielding semi-fine wool, meat and fats and of Karakul sheep.

In the Georgian Republic the chemical industry, engineering, the growing of tea and citrus fruit, horticulture and sericulture, viticulture and wine making, and also other branches of the food industry will be further developed.

Total capital investments in the economy will amount to 16,800 million roubles. Total industrial output will rise nearly 75 per cent in seven years.

The electrical equipment and instrument-making industries will account for the biggest development in engineering; the manufacture of electric locomotives is being organised on a large scale. The output of the chemical industry will grow approximately six-fold; the production of mineral fertilisers will increase by 120 per cent; the manufacture of new chemical products will be organised. Fifteen tea factories will be built; the production of tea will increase by 60 per cent.

In the Azerbaijan S.S.R. the major economic tasks are to develop oil, gas, chemicals, ferrous and non-ferrous metals, engineering and textiles. In agriculture to develop cotton growing, animal husbandry, horticulture and viticulture.

Capital investments in the Republic's economy in 1959-65 are envisaged at approximately 29,000 million roubles, 60 per cent more than in the preceding seven years. Total industrial production will increase approximately 90 per cent in seven years.

Oil production will grow by 33 per cent, gas 160 per cent, the manufacture of oil equipment by 120 per cent and electric motors by 140 per cent. The production of electric power is being nearly doubled and the output of the chemical industry is going up substantially. The production of cotton goods will increase by 63 per cent, woollen fabrics by 230 per cent and grape wine by 88 per cent.

In the Lithuanian S.S.R. it is planned to industrialise the republic's economy further, to develop the engineering, light, food and fish industries and to build up a chemical industry.

About 12,500 million roubles of capital investments are assigned for the economic development of the republic, i.e., twice as much as in the preceding seven years. Total industrial output will grow approximately 80 per cent.

The republic's agriculture will specialise along the lines of breeding pedigree dairy livestock, and pigs for the production of pork and bacon, in combination with the growing of potatoes and other vegetables, sugar beet and flax. Grain growing will also be further developed.

In the Moldavian S.S.R. there is planned the further development of the engineering, building materials, and food industries, the power industry, and agriculture, particularly viticulture, fruit-growing, vegetable growing and beet cultivation.

The gross output of industry is to increase approximately 2.2 times. Capital investments in the republic's economy are to comprise approximately 8,800 million roubles.

It is planned to build and put into operation more than 100 vineries, 5 sugar factories, 3 meat combines, 6 canned food factories, engineering factories, a factory producing technological equipment for the food industry, and a cement factory. The collective and state farms of the republic are to lay out vineyards over an area of about 180,000 hectares, and orchards for hard and soft-fruits over an area of 116,000 hectares.

In the Latvian S.S.R. the most important tasks are the development of the electrical- and radio-engineering industries, instrument making, transport machine-building, and the fishing industry.

Capital investments in the republic's national economy during 1959-65 will amount to about 10,800 million roubles, or twice as much as in the preceding seven years.

The republic's gross industrial output will increase more than 60 per cent, with output of the engineering and metal-working industries being more than doubled. It is planned to build and reconstruct a number of factories in the chemical, electrical engineering and machine building industries. A big increase is envisaged in the fishing fleet and the Riga fishing port is to be enlarged.

The republic's agriculture will be specialising in dairy cattle-breeding, pork and bacon pig-breeding and in pedigree livestock raising.

In the Kirghiz S.S.R. non-ferrous metals, oil, gas, coal, and the light and food industries will be further developed.

Capital investments in the republic's economy will amount to 10,500 million roubles, or 130 per cent more than in the preceding seven years. Total industrial output in the republic will increase by 120 per cent.

The supply of electric power to the

economy will be sharply increased. The republic will continue to occupy a leading place in the Soviet Union for the production of mercury and antimony. The output of oil will be trebled and gas extraction will be organised on a large scale. Enterprises of the engineering, building materials, light and food industries will be constructed.

The republic's agriculture will specialise in the production of cotton, sugar beet and meat, and the breeding of fine wool and semi-fine wool sheep.

In the Tajik S.S.R. it is planned to develop further cotton growing, the light and food industries, the building materials industry, horticulture and viticulture; power facilities are being extended. The chemical and cement industries are being built up.

It is planned to invest 8,600 million roubles in the republic's economy, 160 per cent more than in 1952-58. Total industrial output will rise by more than 80 per cent.

In agriculture the production of raw cotton, primarily of fine staple varieties, is to increase in 1965 by 30 per cent compared with 1958, silk cocoons by approximately 50 per cent; meat 100 per cent, milk 130 per cent and wool 40 per cent.

In the Armenian S.S.R. it is envisaged to develop further the chemical industry on the basis of utilising natural gas, to develop precision machinery and instrument making and also the food and light industries, and to expand power facilities.

Capital investments will amount to 12,000 million roubles in seven years, 120 per cent more than in 1952-58. Total industrial output will grow by approximately 120 per cent.

In agriculture the production of grapes is to increase by approximately 180 per cent in 1965 compared with 1958, fruit, 170 per cent, tobacco by 20 per cent, silk cocoons 60 per cent, meat 70 per cent and milk 60 per cent. The production of high quality wines and cognacs will be increased considerably.

In the Turkmen S.S.R. the oil, gas, chemical, light and food industries will be further developed.

About 15,700 million roubles are to be

allocated for developing the Republic's economy, 140 per cent more than in 1952-58. The Republic's total industrial output will be nearly doubled. The production of oil will increase by 80 per cent and gas by 370 per cent. The production of fertilisers is being organised. The output of cotton and silk fabrics and leather footwear will rise sharply.

The Republic's agriculture will continue to specialise in the production of cotton, particularly fine-staple varieties.

In the Estonian S.S.R. the task is to develop the shale, chemical, electric power, machine-building, textile and fish

industries, and increase the output of butter and meat.

Capital investments in the Republic's economy are envisaged at over 8,000 million roubles, or 80 per cent more than in 1952-58. Total industrial output will rise approximately 80 per cent. The output of electric power will go up more than 400 per cent.

The fishing fleet will be greatly developed and a fishing port in Tallinn will be built to serve it.

Agriculture will continue to specialise in pedigree dairy farming, the breeding of pigs for meat and bacon.

4. Increase in the Well-Being of the Soviet People.

THE law of development of Soviet society is a continuous improvement in the people's living standards on the basis of the development of social production and the raising of labour productivity. Under socialism production develops in the interests of the whole of society, with a view to satisfying the growing material and cultural needs of all members of society, and the growth of production leads to a steady improvement in well-being of the entire people.

The decisive superiority of the socialist system over the capitalist one is that under socialism there takes place an accelerated development of the productive forces of society and the ensuring, as distinct from capitalism, of a just distribution of the products of social labour between all workers in the socialist society. Functioning in the Soviet Union is the socialist principle of distribution according to labour, in keeping with its quantity and quality, which gives to the worker a personal material incentive in the results of his labour and is an important stimulus in increasing the productivity of labour and the growth of production.

At the present stage of development, when through the efforts of the Soviet people a mighty industry and large-scale agricultural production have been established, there are all the conditions for our working class, collective-farm peasantry, intelligentsia, for all the Soviet people to live still better in the near future, to meet more fully their

growing material and spiritual requirements.

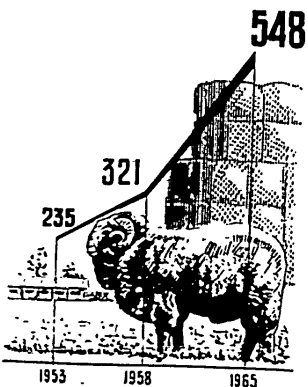
Nourishment for the population will be substantially improved, particularly by such products as milk, butter, meat, sugar, vegetables and fruit. In the U.S.S.R. increased food production leads to a continuous growth of consumption, where an improved diet is achieved for the entire population, for all the nationalities of the Soviet Union without exception.

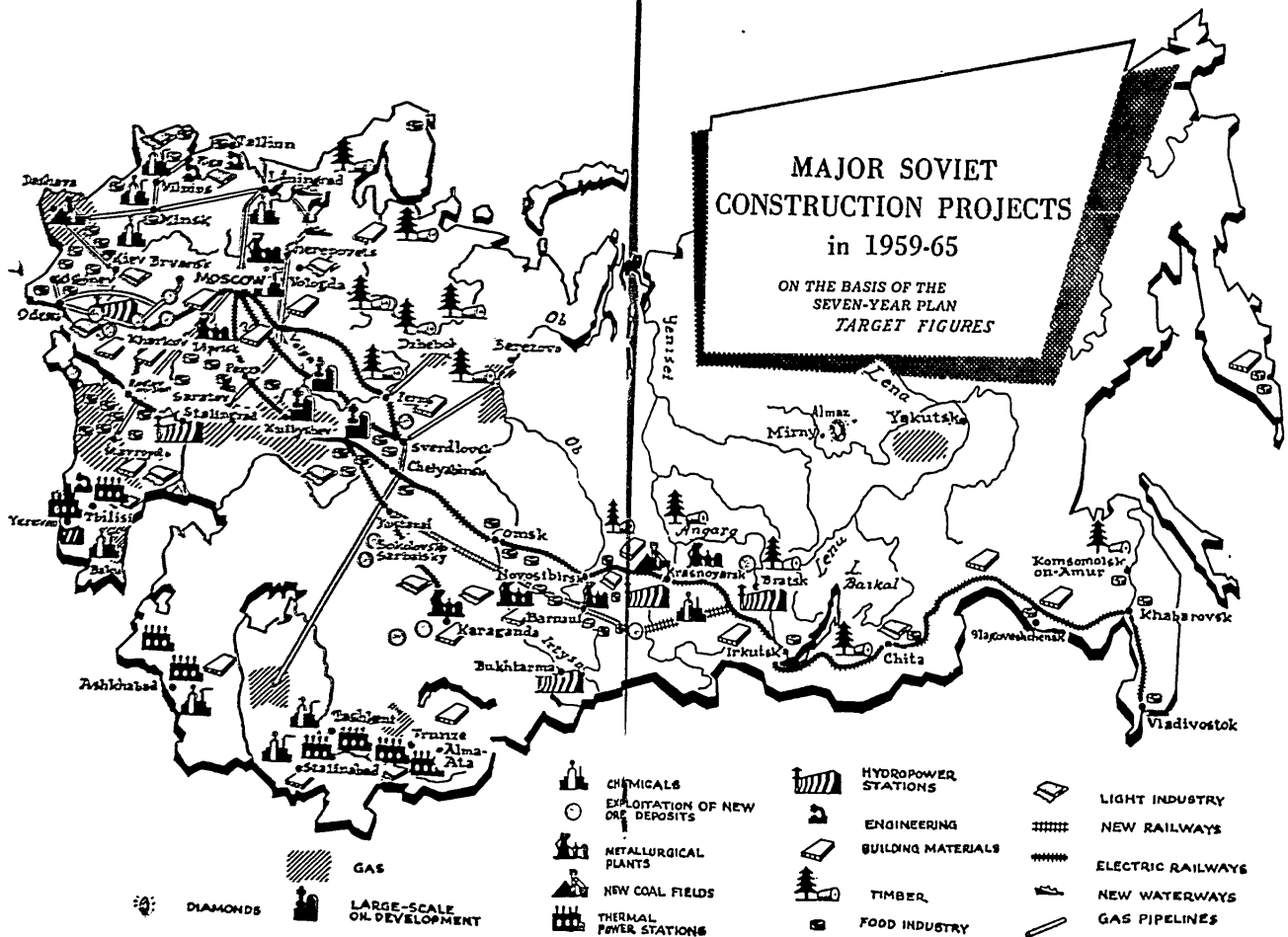
There will be a plentiful supply for the Soviet people of high-quality and beautifully designed clothing and footwear. The people's housing conditions will be fundamentally improved by the implementation of a wide-scale housing programme in towns, workers' settlements and country districts. The production of furniture and other household goods will be considerably expanded. Great attention is to be paid to expanding production and improving the quality of products and goods for children.

Provision is made for increased wages and, in particular, a substantial increase for low- and medium-paid sections of workers and office employees. In the coming seven-year period the state will allocate large sums for the payment of pensions and grants, for organising the upbringing of children, for expanding and improving public catering and reducing prices in this field.

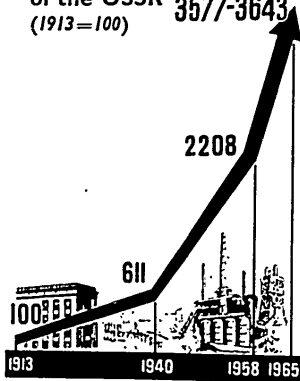
The target figures for the development of the national economy, which envisage a steady rise in the material well-being

SOVIET WOOL OUTPUT in thousands of tons





GROWTH in the NATIONAL INCOME of the USSR
(1913=100) **3577-3643**



alongside the further price reductions in public catering.

On the basis of an increase in agricultural production and higher labour productivity the real incomes of the collective farmers too will increase by not less than 40 per cent, mostly due to the growth of common husbandry of the collective farms.

The overhauling of wages of factory and office workers in all branches of the national economy, started in recent years, should be completed in the coming seven-year period together with a general increase in wages for factory and office workers. The wages of low-paid workers in the course of the seven-year period will be raised from 270-350 roubles to 500-600 roubles a month.

A further improvement of working conditions, industrial hygiene and safety engineering at enterprises and construction projects will be ensured in 1959-1965. The widespread introduction of new techniques, mechanisation and automation in production will fundamentally

and the cultural level of the people of the U.S.S.R., serve as a fresh and vivid expression of the ceaseless concern of the Communist Party and the Soviet Government for the welfare of the Soviet people.

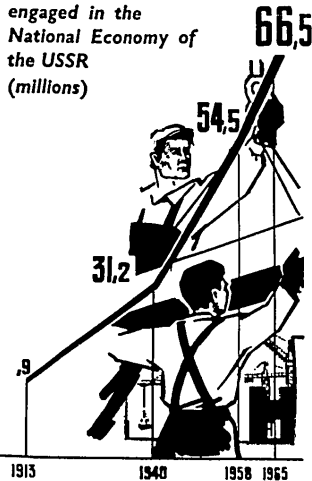
The national income, a truly people's income in the U.S.S.R., is used for a steady rise in people's living standards and for expanding socialist production. The national income will increase by 62 to 65 per cent in 1965 as compared to 1958, and with its increase a further rise in public consumption will be effected. The consumption fund will go up by 60 to 63 per cent in the seven-year period.

In the seven-year period the number of factory and office workers in all branches of the national economy is to increase approximately by 12 million people, or by 22 per cent. The aggregate number of factory and office workers in the national economy will reach 66.5 million people by the end of the seven-year period.

The real income of factory and office workers per worker will rise on an average by 40 per cent as a result of the increase in wages, pensions and grants

FACTORY and OFFICE WORKERS

engaged in the National Economy of the USSR (millions) **66.5**



change working conditions for factory and office workers.

Larger funds will be allocated for free education and advanced training, free medical aid, sanatoria and rest homes, state social insurance benefits for factory and office workers, state grants to unmarried mothers and mothers of large families, state pensions, the upkeep of homes for the aged, holiday pay for factory and office workers, and for other payments and grants to working people. State expenditure for the above-mentioned purposes in 1965 will amount to approximately 360,000 million roubles as compared to 215,000 million roubles in 1958.

The pension system will be further improved. In connection with the increase in the minimum wage it is planned to effect, in 1966, a new rise in minimum pensions to about 450-500 roubles a month for old-age pensioners in towns, and correspondingly boost the minimum in rural localities, and also to increase minimum pensions for the disabled and in case of the loss of a breadwinner.

In keeping with the decisions of the Twentieth C.P.S.U. Congress it is intended to complete, in 1960, the transfer of factory and office workers to a seven-hour working day, and of workers of leading trades in the coal and mining industries occupied in underground work to a six-hour working day, and also to complete in 1962 the transfer of factory and office workers with a seven-hour working day to a forty-hour working week. Starting from 1964 there will be a gradual transfer to a thirty-five or thirty-hour working week, i.e. for workers engaged in underground work, and on work involving harmful labour conditions to a thirty-hour working week (five working days of six hours each with two full days off) and a thirty-five-hour working week (five working days of seven hours each with two full days off) for the rest of the workers. All these measures are to be completed by 1966-68. The transfer to a thirty- to thirty-five-hour working week, with the present one full day off, means introducing correspondingly a five- or six-hour working day.

Since for the majority of factory and office workers it is more convenient to

have six- or seven-hour working days with two full days off each week instead of a five- or six-hour working day in a six-day working week, it is intended to introduce a five-day working week, i.e. establish two full days off each week.

It is intended to make this change-over to a shorter working day and fewer working days in a week without reducing wages.

As a result of this, the U.S.S.R. will have the shortest working day and the shortest working week in the world.

As industrial and agricultural production and the income of the population grow, the volume of retail trade turnover through state and co-operative trading organisations will rise in the seven-year period approximately 62 per cent (in comparable prices).

The sales of livestock products to the population in the seven-year period will increase 120 per cent, vegetable oils 90 per cent, fruit including citrus 200 per cent. Sugar production will rise sharply; by the end of the seven-year period *per capita* output of sugar in the Soviet Union will reach 41 to 44 kilograms a year as against 26 kilograms in 1958. There will be a substantial increase in sales to the population of important manufactured goods, such as fabrics, clothing, underwear and footwear.

There will be bigger sales to the population of cultural and welfare and household commodities, particularly those making the work of housewives easier: washing machines, vacuum cleaners, electric floor-polishers, electric irons and refrigerators. In comparison with the previous seven-year period sales of refrigerators to the population will rise by 480 per cent, washing machines and accessories 810 per cent, sewing machines 110 per cent, television sets 360 per cent, radio receivers and radiolas 80 per cent, motorcycles and motor scooters 170 per cent. To meet the demand for individual housing and also for the construction of farm buildings at the collective farms it is intended to launch large-scale trade in building materials. The sales to the population of standard-type houses will rise by nearly ten times.

It is planned to build in 1959-65 in towns and workers' settlements, at state

farms, repair and technical service stations, and in timber settlements a total of 650 to 660 million square metres of housing, or nearly 15 million flats, which is 130 per cent more than the number completed in the previous seven-year period. Close to 7 million dwellings will be put up in rural areas by the collective farmers and rural intelligentsia themselves. Housing facilities in towns and workers' settlements by the end of the seven-year period will increase by 60 per cent. Economical and well-appointed flats to be occupied by one family each will be built in urban and rural districts.

It is intended to make a big improvement in communal and shopping facilities in the 1959-65 period. The output of public catering establishments will be more than doubled.

It is proposed to expand considerably the system of catering establishments and improve their work, and also to reduce prices at catering establishments. This will help in particular the budgets of working men's families and make work

easier for millions of women. There will also be a reduction of prices on some other commodities.

A further improvement in safeguarding the people's health is envisaged. Capital investments earmarked for the construction of public health institutions, social maintenance, physical culture and sport and also for the medical industry, will amount to over 25,000 million roubles. This will enable, through new construction, accommodation in hospitals to be doubled in 1959-65 and the accommodation in nurseries to be increased by more than 150 per cent in comparison with the increase in the previous seven-year period.

The medical industry will be considerably developed, particularly the production of anti-biotics and other modern effective curative means.

With the purpose of creating more favourable conditions for aged citizens, it is planned to organise large-scale construction of homes for the aged both in town and country.

5. Questions of Communist Upbringing, Public Education, the Development of Science and Culture.

FOR the transition to communism what is needed is not only a powerful material and technical base, but also a highly conscious attitude on the part of all citizens of socialist society.

The realisation of the sweeping plan of communist construction calls for a decisive improvement in all the work of educating Soviet people, raising their communist consciousness and activity, forming a new man in the spirit of collectivism and diligence, with an understanding of his social duty, in the spirit of socialist internationalism and patriotism, in the spirit of the observance of the lofty moral principles of the new society.

Special attention must be paid to bringing up the rising generation in the spirit of communism, to bringing education closer to life, to combining instruction with productive work, to mastering the scientific knowledge accumulated by mankind, to overcoming the survivals of capitalism in the consciousness of people.

It is planned, in the years 1959-65, considerably to develop general second-

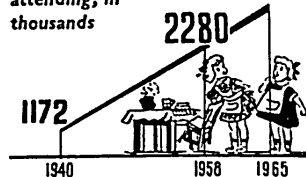
ary-school education in town and country, to extend evening and correspondence higher and specialised secondary education, and to increase the network of evening schools for working youth in town and country. The number of pupils in the primary and secondary schools in 1965 will be increased to 38-40 million as against 30 million in 1958.

The system of boarding schools will be greatly developed, as they are one of the most important forms for bringing up the younger generation. In 1965 the number of pupils in these schools will be no less than 2,500,000.

The number of children in kindergartens will increase from 2,280,000 in 1958 to 4,200,000.

The measures outlined by the Central Committee of the C.P.S.U. for a radical improvement in the entire system of public education mark a new stage in the development of the Soviet school. Education is faced with the cardinal task of preparing the rising generation for life, for useful labour, and of inculcating in

KINDERGARTENS in the Soviet Union
number of children attending, in thousands



our youth a deep respect for the principles of socialist society.

It is planned to carry out the following measures in the period 1959-65:

To effect a transition from seven-year to eight-year universal, compulsory education.

To reorganise the network of ten-year schools (their upper forms) into various types of urban and rural secondary labour schools, the pupils of which, by combining study with work at factories, on collective farms and in special workshops, receive both a complete secondary general and poly-technical education and a special training for a mass trade, depending on the local needs in personnel.

Considerably to extend the network of city and village schools which provide their pupils with a secondary school education while they continue to work.

In connection with the tasks for developing the national economy and culture, it is planned further to extend and improve the training of specialists with a higher and secondary specialised education. During the years 1959-65 the higher educational institutions will graduate 2,300,000 specialists, as against 1,700,000 in the period of 1952-58, that is, 40 per cent more. The number of engineers trained for industry, construction, transport and communications will increase by 90 per cent, and that of agricultural specialists by 50 per cent as compared with the preceding seven-year period. The greatest increase in the number of engineers graduated will take place in the

fields of chemical technology, automation, computing engineering, radio-electronics, and other branches of new technique. Over 4 million people will be admitted to the secondary specialised schools in the period 1959-65, including those who study while working.

During the coming seven-year period the necessary conditions will be created for an even more rapid development of all branches of science, for the making of important theoretical studies and new important scientific discoveries. It is with this aim in view that a broad programme of scientific research is planned, and the concentration of scientific forces and means on the most important investigations, such as are of theoretical and practical significance. The state allocates huge sums of money for the construction of new scientific institutions, and the equipment of institutes and laboratories with the most modern instruments. Soviet scientists who have penetrated the secret of the atom and thermonuclear reactions, and who have created artificial Earth satellites and a man-made planet of the solar system will enrich our science with even greater discoveries and achievements.

The physical sciences occupy the leading place in natural science, as the advance of associated sciences and of national economy depends on their successful development. The efforts of Soviet physicists will be concentrated on the solution of problems of cosmic rays, nuclear reactions, and semi-conductors.

In the field of the chemical sciences, a most important task is the utmost extension of theoretical studies which contribute to the development of new, improved technological processes and the creation of synthetic materials possessing properties that satisfy the demands of modern technique.

The development of biology is a necessary theoretical prerequisite for the advance of medicine as well as for the agricultural sciences. The importance of the group of biological sciences will rise especially as the achievements of physics and chemistry are used in biology. In this connection such branches of science as biochemistry, agrochemistry, biophysics, microbiology, virology, selec-

tion, and genetics will play an important part.

In the field of the technical sciences the chief goal of investigation is to ensure major qualitative advances in the effective use of implements of labour, raw and other materials, fuel and electric energy, in raising labour productivity, reducing production costs and in improving the quality of output while simultaneously increasing efficiency and labour safety.

The network of scientific institutions will be considerably extended, particularly in the eastern parts of the country, and the training of scientific personnel will be increased, especially in the most important fields of science.

The cinema, press, radio and television will be greatly developed in the seven-year period.

6. International Significance of the Seven-Year Plan for the Development of the National Economy of the USSR.

THE experience of the construction of socialism and communism in our country has international significance. V. I. Lenin foresaw that the Soviet Union would influence the entire course of world development primarily by its economic construction.

The realisation of the Seven-Year Plan for the Development of the National Economy (1959-65) will be a new highly important stage in the peaceful economic competition of the two systems—socialist and capitalist. This plan is an expression of the Soviet Union's consistent policy of peace, of the Leninist principle of peaceful co-existence as opposed to the aggressive policy of the imperialist countries.

As a result of the fulfilment of the Seven-Year Plan, the Soviet Union's "per capita" industrial output will be higher than the present output in the most developed capitalist countries of Europe—Britain and West Germany—and will advance to first place in Europe.

If the pace of industrial growth in the U.S.S.R. and the U.S.A. is considered, the Soviet Union will, for the gross output of some most important items, surpass, and for other items approach the

present level of industrial output in the United States. By that time, our gross and *per capita* output of the most important agricultural products will exceed the present level in the United States.

It is planned to bring the total number of cinema projectors up to 118,000-120,000 by the end of 1965. This will make it possible to provide every state and collective farm with a cinema projector.

It is planned to increase considerably the number of public libraries and clubs. The further development of physical culture, sports and tourism will be ensured. Approximately 100 new TV centres and TV stations will be built. The number of radio-reception points will increase by almost 30 million in 1965, which will include 12½ million TV sets. In 1965 the number of books published will increase to 1,600 million copies, the number of magazines printed will be more than doubled and the annual circulation of newspapers will rise over 50 per cent

The superiority of the U.S.S.R. in the rate of growth of production will create a real basis for overtaking and surpassing the United States within approximately five years following 1965, in the level of *per capita* output. Thus, by this time, or perhaps even earlier, the Soviet Union will have moved to first place in the world both in gross and in *per capita* output, which will ensure its people the highest living standards in the world. It will be an epoch-making victory for socialism in peaceful competition with capitalism.

The fulfilment of the Seven-Year Plan will bring about a considerable increase in the share of the Soviet Union and the entire system of socialism in world industrial output. Whereas in 1917 the share of the Soviet country in world industrial output was less than 3 per cent,

and in 1937, about 10 per cent, in 1958 the Soviet Union's share in world output has reached almost 20 per cent. As to the socialist countries, they account for about a third of the world's population and over a third of the entire industrial output of the world. The socialist countries account for almost half of the world's grain output and 43 per cent of cotton.

Estimates show that as a result of the fulfilment and overfulfilment of the Seven-Year Plan for the Development of the National Economy of the U.S.S.R., as well as of the high rate of economic development of the People's Democracies, the world socialist system will turn out more than half of the entire industrial production of the world. [Diagram on back cover.—Ed.]

Thus absolute superiority of the world system of socialism over the capitalist system in the production of material values, the decisive sphere of human activity, will be ensured.

The Seven-Year Plan for the Development of the National Economy of the U.S.S.R. opens up new, truly remarkable prospects for the development of the economic, scientific and technical co-operation of socialist states, which will help to bring out more fully all the advantages inherent in the world system of socialism and will speed up economic progress in every socialist country.

The Soviet Union is constantly extending its international economic contacts. Whereas in 1946 the Soviet Union traded with forty countries, at the present time trade is conducted with more than seventy countries.

In 1965, the Soviet Union's trade turnover with socialist countries will register a more than 50 per cent increase over 1958. The Soviet Union's economic ties with economically under-developed countries are growing: in 1957 the Soviet Union's trade with them was more than five times the 1953 level. The Soviet Union expects that its economic contacts with these countries will steadily continue to grow.

The economic programme of peaceful construction in the U.S.S.R. for 1959-65 opens up broad prospects for developing

the foreign trade of the Soviet Union. The U.S.S.R. can, and is prepared to, develop economic contacts and trade with all countries.

The Seven-Year Plan for the Development of the National Economy of the U.S.S.R., the successes of the construction of socialism in the U.S.S.R. and all socialist countries lay bare the inventions of our enemies to the effect that socialist revolution brings with it the destruction of civilisation. As a matter of fact, only under socialism begins a rapid, really mass movement forward in all spheres of public and private life, a rapid growth of material production, an improvement in the well-being of the working people, an unheard-of flowering of science and culture. Only the socialist revolution enabled the Soviet Union to turn from a backward, semi-literate country into an advanced, industrial power setting before itself a perfectly practicable task of advancing, within a historically short period of time, to first place in the world in guaranteeing the material and cultural well-being of its citizens.

The successes of the Soviet Union and other socialist countries, far from threatening anyone, are a guarantee of the preservation of peace and the security of the peoples.

In the present international situation, poisoned as it is by imperialist provocations, the arms drive and the threats of the most terrible, destructive war, the Seven-Year Plan for the Development of the National Economy of the Soviet Union is a powerful means of preserving and strengthening peace.

Peace is indispensable for the fulfilment and overfulfilment of the colossal tasks set in the new stage of communist construction. The Seven-Year Plan is further proof that in the Soviet Union and in the entire world socialist system there are no, nor can there be any, social forces interested in expansionism, in international tension, in predatory aggressive wars.

The Seven-Year Plan is a concrete offer of the Soviet Union to the capitalist world to compete in peaceful economic pursuits, for the Soviet Union is against a competition in the arms race.

The realization of the Seven-Year Plan will bring about the further consolidation of the economic and defensive power, of the unity and solidarity of the world socialist system, will greatly strengthen the positions of peace-loving forces throughout the world, put up new insurmountable obstacles in the path of the warmongers and will be a new proof of the correctness of the Marxist-Leninist

tenet of the Twentieth Congress of the C.P.S.U. that war can be averted in the present epoch.

The economic and political results of the competition between the two systems and the prospects of their further development convincingly testify that the onward march of socialism is irresistible, that its victory in peaceful competition with capitalism is inevitable.

7. The Communist Party—the Leading and Organising Force of the Soviet People in the Struggle for the Victory of Communism.

THE great successes in the development of socialist industry, agriculture, science and culture, in increasing the well-being of the working people, are the result of the tireless creative work of the Soviet people and the enormous political and organisational work of the Communist Party.

As a result of steadily implementing the epoch-making decisions of the Twentieth Congress of the C.P.S.U., the leading role of the Party in the struggle for the fulfilment of plans for communist construction and in the state, social, economic and cultural life of the country has grown still more, and the unity and cohesion of the Communist Party of the Soviet Union have become stronger. The Party and the people have come closer, the Party's contacts with the people have extended and strengthened immeasurably, and the Party has acquired rich experience in its political and organisational activities among all sections of the working people.

In solving problems of communist construction, our Party and its Central Committee constantly seek the advice of the workers, collective farmers and intelligentsia, rely on their experience and knowledge, and take notice of their suggestions and critical remarks. Such measures as the nation-wide discussion of draft bills on important problems of state, economic and cultural development, the convening of conferences of workers in various branches of the national economy, science and culture, and appeals to the working people on vital

problems of the country's life, have become part and parcel of the Party's work and have strengthened still more its ties with the people.

Implementing the decisions of the Twentieth Congress of the C.P.S.U. and relying on the great power of the people, the Party has carried out in recent years radical measures for improving the management of the national economy. Chief among these measures are: reorganisation of the management of industry and construction, the organisation of Economic Councils in the economic administrative areas, the extension of the rights of the Union Republics, local organs and enterprises, the reorganisation and strengthening of planning bodies, the drawing up of long-range national economic plans, the re-organisation of the machine-and-tractor stations and the implementation of measures for the further development of the collective farm system, the change in the system of procurement and the fixing of uniform prices for farm produce, the extension of the rights and the re-organisation of the work of the trade unions, and so on.

All this signifies the triumph of the Leninist principles of democratic centralism, ensuring the proper combination of centralised management of communist construction with the maximum development of the creative activity and initiative of the working people.

Creatively developing Marxism-Leninism, the Party wages a resolute struggle against those who cling to old outmoded forms and methods of work, who are in-

fectured with conservatism and who resist the implementation of the Party's Leninist general line. The June plenum of the Central Committee of the C.P.S.U. exposed and defeated the anti-Party group of Malenkov, Kaganovich, Molotov, Bulganin, and Shepilov, which had fought against the Party's Leninist general line, against the political line adopted at the Twentieth C.P.S.U. Congress, against the leading role of the Party, and had taken the path of factional, splitting activities. The anti-Party group came out against such urgent and vitally important measures as the development of virgin and long-fallow lands, the reorganisation of national economic planning, especially in agricultural production, the reorganisation of the management of industry and construction, against the Party's measures aimed at further raising the working people's well-being, and also against the Party's foreign policy which is aimed at relaxing international tension, consolidating peace, developing co-operation and strengthening friendship between the peoples. Having cast the anti-Party group aside from its path, our Party has consolidated still more the Leninist unity of its ranks and rallied them still closer under the great banner of Marxism-Leninism.

The further strengthening of our state, the intensification of its economic, organisational, cultural and educational activities are important prerequisites for the successful fulfilment of the Seven-Year Plan for the Development of the National Economy. In recent years the Party and the Government have put through a number of important measures ensuring the further development of Soviet democracy and the strengthening of socialist law.

Only a socialist, a really popular, democracy is capable of bringing out the talents of the working people and providing an outlet for the inexhaustible reserves of the people's creative energy.

As our society advances towards communism, the activities of the Soviets of Working People's Deputies in guiding economic and cultural construction acquire ever greater scope. The Supreme Soviets and the Councils of Ministers of the Union and Autonomous Republics,

the territorial, regional, city, district, village and rural Soviets should deal daily with important problems concerning the work of industrial enterprises and construction projects, and of collective and state farms in fulfilling the targets of the Seven-Year Plan, they must ensure the fullest use of all possibilities and local resources for boosting production, they must raise the well-being and culture of the people by the fulfilment of construction plans for housing, cultural and public services; they must develop and support the creative initiative of the people.

An important part in mobilising the working people for the successful carrying out of the plan for the development of the Soviet Union's national economy in 1959-65 belongs to the trade unions, they being the organisation with the largest membership, uniting in their ranks over 50 million workers and office employees.

The struggle for the implementation of the great programme of communist construction outlined in the Seven-Year Plan represents the most vital, the most important task of trade union organisations. They are called upon to mobilise the working class and all working people for the fulfilment and overfulfilment of the state plan at each enterprise, to develop still further socialist emulation, which is a tried and tested method of communist construction in our country. It is necessary to develop such forms of attracting the masses to industrial management as permanent production conferences, meetings of workers, managerial personnel and trade union functionaries.

The trade unions must continue to improve their work in the field of housing and everyday services for workers and office employees, to improve their supervision over labour protection in industry, the fulfilment of housing construction plans, the distribution of housing, the work of shops and catering establishments and medical and public services.

The Leninist Young Communist League, which has a membership of 18 million young people, has always been the Party's true assistant in carrying out plans of communist construction. In recent years the Y.C.L. and the entire

Soviet youth have played an outstanding role in the solution of such tasks of great importance to the state as developing the virgin and long-fallow lands, constructing important enterprises in the country's East, and accelerating the construction of enterprises in the iron and steel, coal, and chemical industries. This is a manifestation of the militant spirit, ideological firmness and communist consciousness of Soviet youth who wholeheartedly respond to the Party's appeals. The Party and the people highly value the heroic labour of the young men and women of our country.

At this new stage in the development of our country, the Y.C.L. and the entire Soviet youth are confronted with still more majestic tasks. The great pro-

gramme of building communism opens up enormous vistas for the greater creative initiative of young men and women.

Communism presupposes the all-round spiritual and physical development of man. Consequently, special attention should be paid to the formation of a communist outlook in young people, to the rearing of active, conscious builders of communist society.

As a result of the triumph of socialism the Soviet Union has entered a new historical stage of gradual transition from socialism to communism.

Outlining great plans for building communism, the Party is confident that this time, too, they will be successfully carried out.

RESOLUTION
of the
21st CONGRESS of the
COMMUNIST PARTY
of the
SOVIET UNION

*Resolution of the 21st Congress of the Communist
Party of the Soviet Union*

*On N. S. Khrushchov's Report on the Target Figures for the
Economic Development of the USSR from 1959 to 1965*

THE 21st Congress of the Communist Party of the Soviet Union has been convened at an exceedingly important moment in history when, as a result of deep-going transformations in all spheres of social life and on the basis of the triumph of socialism, the Soviet Union has embarked upon a new period in its development—the period of the comprehensive building of communist society. The great goal of building communism, for which many generations of people have striven, is now being reached in practice by the Soviet people under the leadership of the Communist Party.

The programme for building communism in the Soviet Union—the programme for a new and mighty advance in the economy, culture and the material wellbeing of the people—is on a vast scale unparalleled in history. The Seven-Year Plan for the development of the national economy of the U.S.S.R. is a concrete embodiment of the Leninist general line of the party at the present stage.

The congress expresses its profound satisfaction at the course and results of the pre-congress discussion on the theses of the report by Comrade N. S. Khrushchov on the target figures for the economic development of the U.S.S.R. from 1959 to 1965. This discussion developed into a mighty demonstration of the creative initiative and activity of the Soviet people and of their solidarity with their tried and tested leader—the Communist Party. All the Soviet people have unanimously approved the target figures for the development of the national economy, have welcomed the Seven-Year Plan as their own vital concern and have expressed their complete readiness to fulfil and overfulfil its targets.

The 21st Congress of the C.P.S.U. resolves:

To approve the theses and report by Comrade N. S. Khrushchov on the target figures for the economic development of the U.S.S.R. from 1959 to 1965;

To endorse the target figures for the economic development of the U.S.S.R. from 1959 to 1965, with the amendments and addenda introduced on the basis of the discussion at the congress and during the pre-congress discussion on the theses;

To instruct the central committee of the C.P.S.U. and the U.S.S.R. Council of Ministers to introduce into the annual plans for the development of the national economy of the U.S.S.R., drawn up on the basis of the target figures endorsed by the congress, the necessary amendments dictated by the course of the U.S.S.R.'s economic development.

I

The period that has gone by since the 20th Congress of the party has been one of the most important in the history of the Communist Party and the Soviet state. In carrying out the decisions of that congress and of subsequent plenary meetings of the central committee of the C.P.S.U., the Soviet people have achieved outstanding successes in their advance along the road to communism. That period has shown the tremendous importance which the decisions of the 20th Party Congress have had for communist construction in the U.S.S.R. and for the whole international communist and working-class movement, and for strengthening world peace.

The 21st Congress of the C.P.S.U. wholly and completely approves the

work of the central committee and the important measures it has taken in home and foreign policy. The party's major decisions on reorganising the management of industry and construction, on accelerating the development of the chemical industry, on reorganising the machine and tractor stations and further developing the collective-farm system, on increasing the output of agricultural produce, on establishing closer ties between the school and life and further developing the system of public education are of immense importance for developing the economy, promoting the advance of culture, improving the wellbeing of the people, and for the building of communism.

The might of the Soviet state and its international prestige have increased still further as a result of the Leninist line of the central committee and the Soviet government and of the selfless work of the Soviet people.

The entire activity of the central committee of the party has been based on the creative application of Marxist-Leninist theory in solving the tasks of communist construction and has been built up on the basis of a profound study of the experience of the masses of the people and constant and close ties with the life of the people, on an ability to find the main link in the chain of historical development, to open up prospects, to mobilise the masses of the people and boldly and resolutely to do away with everything obsolete that hinders the forward movement.

The congress approves the decisions of the June (1957) plenary meeting of the central committee which, unanimously supported by the whole party and the entire people, exposed and ideologically routed the anti-party group of Malenkov, Kaganovich, Molotov, Bulganin and Shepilov. Resorting to the basest methods of factional struggle, this group tried to shatter the party's unity and to divert the party and the country from the Leninist path. It opposed all the most important measures taken in accordance with the decisions of the 20th Congress of the C.P.S.U., measures which made it possible to achieve big successes in developing industry and agriculture and improving the wellbeing of the

people, and in foreign policy—to ease international tension and strengthen the cause of peace. The central committee acted correctly when it emphatically condemned and cast aside the despicable group of factionalists and splitters. Exposing and ideologically defeating the anti-party group, the party rallied still more closely round the central committee under the banner of Marxism-Leninism.

The Communist Party has always triumphed, and will continue to triumph, thanks to its loyalty to Marxism-Leninism, the unity and solidarity of its ranks and its unbreakable ties with the people. In the Leninist party the Soviet people see their tried and tested leader and teacher, and in its wise leadership they see the guarantee of the further successes of communism.

It is with profound satisfaction and revolutionary pride that the 21st Congress of the Communist Party sums up the great gains of the Soviet people. The chief result of the heroic struggle and labour of the Soviet people is the new society they have established—socialism, with its corresponding political system—the Soviet socialist state.

Our country has become a great socialist power with a highly developed economy and advanced science and culture. For volume of industrial output the U.S.S.R. now holds first place in Europe and second place in the world. In 1958 total industrial output was 36 times greater than in 1913, while the output of means of production—the basis of the whole of the national economy—has increased 83 times over, and the output of the engineering and metal-working industries, 240 times over. In 1958 our country produced nearly 55 million tons of steel, extracted 113 million tons of oil, mined 496 million tons of coal and generated 233,000 million kilowatt-hours of electric power. Substantial successes have been achieved in developing the light and food industries. As compared with 1913, output of consumer goods had increased nearly 14-fold in 1958, while over 45 times more articles were produced for household and cultural purposes. Today 170 per cent. more consumer goods are being produced than in 1940.

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The tremendous scale of industrial output and the unparalleled rate of industrial development have been attained thanks to the advantages of the socialist system of economy, combined with the utilisation of the latest achievements of science and engineering and the country-wide socialist emulation movement. On this basis labour productivity is rising continuously in all branches of the national economy. In 1958 labour productivity in industry was 10 times greater than in 1913 and 2.6 times greater than in 1940, although the length of the working day had been reduced.

Side by side with the rapid growth of socialist industry, agriculture is also developing successfully. The party has fearlessly and sharply criticised mistakes and shortcomings in the guidance of agriculture in past years, has discarded everything that was blocking the development of collective and state farm production and has outlined a programme for bringing about a rapid advance in agriculture. The measures to further the development of agriculture drawn up and carried out by the party and the Soviet people have brought our country remarkable fruits. In 1958 the country procured 3,500 million poods* of grain, i.e., 1,600 million poods more than in 1953. The development of tens of millions of hectares of new land has given the country thousands of millions of poods of additional grain. In the past five years grain production has increased by 39 per cent as compared with the previous annual volume. Considerable successes have been achieved in the production of other crops, particularly sugar beet and cotton, and in developing socialised animal husbandry.

The Soviet state has a powerful industry, developed in an all-round way, and a highly mechanised agriculture. The country's social wealth and the standard of living and cultural level of the people are rising continuously on the basis of the general advance of the socialist economy. In Soviet years the national income has increased 15 times over per head of the population. As compared with 1940, the real incomes of the workers had almost doubled in 1958, while the real incomes of the farmers

* About 56½ million tons. 62 poods = one ton

per working person had more than doubled.

In pursuance of the decisions of the 20th Congress of the C.P.S.U. such important measures were carried out as raising the wages of the lower-paid categories of factory and other workers, shortening the working day on Saturdays and on the eve of holidays, introducing a shorter working day for the factory and other workers of a number of branches of heavy industry, establishing a six-hour and four-hour working day for juveniles, and increasing social insurance benefits for the people; maternity leave has been extended and pensions for factory workers and other employees have been increased. The Soviet state is allocating increasing sums of money to satisfy the material and cultural requirements of the people.

The Communist Party has educated millions of new people—socially conscious builders of communism. This is a most remarkable achievement of the socialist system.

In the Soviet Union the culture of all the nations and nationalities is really flourishing and unlimited opportunities have been created for the all-round and free development of science, engineering, literature and the arts. The launching of the world's first earth satellites and of the first artificial planet, which is revolving round the Sun, is a striking expression of the high industrial and technical level of our country and of the creative genius of the Soviet people. With its magnificent victories in scientific and engineering thought, the Soviet Union has opened a new era in the cognition of the world. The far-reaching importance of these victories is that they have demonstrated the mighty creative forces of socialism, which work in the interests of mankind and of its progress and prosperity. All Soviet people take great patriotic pride in their country, which is advancing at the head of world scientific and technical progress and boldly paving the way into the future.

The historic gains of the Soviet people in the economy and culture and the measures of the party and the government that have been carried out in recent years have led to a further consoli-

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dation of the Soviet system and of its firm foundation—the alliance between the working class and the peasantry.

The friendship and political unity of all the fraternal peoples of the Soviet Union have become stronger than ever before. The Union of Soviet Socialist Republics is setting the whole world an example of a communist community of free and equal peoples.

The Soviet Union, which has blazed the trail of socialism for mankind, has reached a level in productive forces, socialist production relations and cultural development that enables the building of a communist society to be started on a broad front.

II

The 21st Congress of the C.P.S.U. considers that in the coming seven years the principal tasks of the party are the following:

In the economic field—all-round development of the productive forces in our country and, on the basis of priority expansion of heavy industry, the achievement of a level of production in all branches of the economy which will enable a decisive step to be taken towards the establishment of the material and technical basis of communism and the Soviet Union's triumph in the peaceful economic competition with the capitalist countries to be ensured. The increase in the country's economic potential, further technical progress in all spheres of the economy and the continuous growth of the productivity of social labour must secure a substantial rise in the standard of living.

In the political field—further consolidation of the Soviet socialist system, the unity and solidarity of the Soviet people, development of Soviet democracy and of the activity and initiative of the broad masses of the people in the building of communism, extension of the functions of public bodies in matters of state importance, enhancement of the organisational and educational role of the party and the socialist state, and the all-out strengthening of the alliance between the workers and the peasants and of the friendship of the peoples of the U.S.S.R.

In the ideological field—intensification of the ideological and educational work

of the party, the raising of the level of communist consciousness of the working people, and particularly of the rising generation, instilling in them a communist approach to work and developing the spirit of Soviet patriotism and internationalism, eliminating survivals of capitalism from the minds of people and combating bourgeois ideology.

In international relations—consistent pursuance of a foreign policy aimed at preserving and consolidating world peace and international security on the basis of Lenin's principle of the peaceful co-existence of countries with different social systems; implementation of a policy aimed at putting an end to the cold war and easing international tension; all-out strengthening of the world socialist system and the community of fraternal peoples.

The fundamental problem of the coming seven years is to make the most of the time factor in socialism's peaceful economic competition with capitalism. Fast rates and the necessary proportions must be ensured in the development of the national economy.

Attaching primary importance to the development of industry, and heavy industry in particular, the 21st Congress of the Communist Party of the Soviet Union considers it necessary to make provision in the Seven-Year Plan for increasing total industrial output by about 80 per cent.: in Group A (output of means of production) by 85-88 per cent. and in Group B (output of consumer goods) by 62-65 per cent. In industry as a whole the average annual increment in gross output is to amount to about 8.6 per cent. in the 1959-65 period: in Group A to 9.3 per cent. and in Group B to about 7.3 per cent.

The congress considers it necessary that:

Provision be made in the Seven-Year Plan for a considerable increase in the output of ferrous and non-ferrous metals to meet the requirements of the national economy more fully. The target for 1965 is to raise the output of pig iron to 65-70 million tons, steel to 86-91 million tons, rolled metal to 65-70 million tons, and marketable iron ore to 150-160 million tons; to increase the output of aluminium by 180-200 per cent

and refined copper by 90 per cent., and to step up substantially the production of other non-ferrous metals, and particularly rare metals;

An accelerated expansion of the chemical industry, particularly in the output of artificial and synthetic fibres, plastics, other synthetic materials and mineral fertilisers. By the end of the seven years, the output of artificial fibres must be increased fourfold, that of plastics and synthetic resins more than sevenfold, and mineral fertilisers about threefold;

A change in the structure of the fuel pattern through priority development of the output of the cheapest kinds of fuel oil and gas. In 1965, the output of oil must reach 230-240 million tons, gas 150,000 million cubic metres,* and coal 600-612 million tons;

Rapid electrification of all branches of the national economy by building mainly big thermal power stations. In 1965, the output of electric power must be brought up to 500,000-520,000 million kilowatt-hours;

High rates of development for the engineering and instrument-making industries in order to equip factories with new and highly productive equipment, machines and instruments and to achieve comprehensive mechanisation and automation in industry. In the coming seven years the output of the engineering and metal-working industries must be approximately doubled.

The congress considers that on the basis of a high level of development in heavy industry and the further advance of agriculture provision must be made for a substantial growth in the output of consumer goods so that within seven years there is an ample supply of fabrics, clothing, footwear and other goods to satisfy all the requirements of the population.

In pursuance of this task, the following increases over the 1958 level must be achieved in 1965: total output of the light industry by approximately 50 per cent., including the output of cotton textiles by 33-38 per cent., woollen fabrics by 65 per cent., silks by 76 per cent., and leather footwear by 45 per cent.; total output of the food industry by

* 5,295,000 million cubic feet.

about 70 per cent., including meat by 110 per cent., butter 58 per cent., milk 120 per cent., sugar 76-90 per cent., and fish 60 per cent.

Special attention must be paid to extending the variety and improving the quality of manufactured goods and foodstuffs and to increasing the output of household utensils and appliances.

Party organisations must ensure the rhythmic work of all enterprises so that the state plans are fulfilled and overfulfilled with regard to all quantitative and qualitative indices from day to day and from month to month. The inner potentialities and the possibilities of the enterprises for stepping up production with the existing capacities must be more fully brought to light, and the technology and organisation of production, and also the utilisation of equipment and raw and other materials must be improved.

In agriculture, the chief task is to obtain a level making it possible to satisfy to the full the food requirements of the population and the raw material requirements of industry and to meet all the state's other demands for agricultural produce. This problem must be solved primarily by considerably raising the yield of all farm crops, increasing the number of livestock and further promoting the productivity of socialised animal husbandry.

With a total increase of 70 per cent. in gross agricultural production in the next seven years, the output of staple products must be raised as follows: grain to 10,000-11,000 million poods, sugar beet to 76-84 million tons, cotton to 5,700,000-6,100,000 tons, meat (slaughter-weight) to 16 million tons, milk to 100-105 million tons, potatoes to 147 million tons, and other vegetables to a quantity that will fully meet the requirements of the population.

The main line in crop farming will continue to be the utmost expansion of grain growing as the basis of all agricultural production. The collective and state farms now have the prerequisites for increasing the yield by an average of three to four centners of grain per hectare throughout the country within the next few years. In livestock breed-

† 2.39-3.18 cwt. per acre

ing the main task is to raise the production of meat, wool and eggs by sharply increasing the number of livestock, raising the productivity of all branches of animal husbandry and developing poultry and rabbit-breeding on collective and state farms. Fodder resources must be increased even more persistently than before, mainly by cultivating maize, potatoes and sugar beet and growing protein feeds such as clover, lucerne, vetch and oats, peas, lupin, etc., depending on the features of this or that zone. The output of soya beans must be increased.

It is important that the annual plans for the purchase of all kinds of agricultural produce should be successfully fulfilled or overfulfilled.

The congress expresses its confidence that the movement started in the country for fulfilling ahead of schedule the tasks envisaged by the target figures in agricultural production, particularly the output of meat and other livestock products, will enable the country not only to fulfil but also to overfulfil the Seven-Year Plan as regards both the timetable and the volume. Every encouragement must be given to the initiative of the republics, territories and regions which have worked out concrete measures to increase agricultural output in the next few years and have given pledges to double or treble the output of meat already in 1959. The fulfilment of the pledges given by republics, territories, regions, districts and collective and state farms will be a worthy contribution in response to the call of leading collective and state farms to overtake the United States in *per capita* output of meat and other agricultural products within a short space of time. The contribution of each republic, territory, region and district, and of every collective and state farm must be evaluated on the basis of the output of livestock products per 100 hectares of farmland.

In order to cope with the big tasks facing agriculture in the coming seven years, party, government and agricultural bodies must do their utmost to consolidate the socialist assets of the collective farms, carry out sweeping measures to promote the mechanisation and elec-

trification of agricultural production, improve labour organisation and, on this basis, secure a considerable growth in labour productivity and reduction in the cost of agricultural produce. The role of the state farms, as the leading socialist enterprises in agriculture, must be enhanced still further.

Side by side with measures aimed at further extending agricultural output it is necessary to start the construction of enterprises for processing farm produce by the collective and state farms and the consumer co-operatives, to extend housing development and the construction of cultural and public facilities in the countryside and to organise communal services and amenities in the villages. With the incomes of the collective farms growing, the practice of several collective farms pooling resources to build power stations, roads, building materials enterprises, big and well-equipped inter-collective farm canning factories, bakeries and other enterprises should become widespread.

The 21st Congress of the C.P.S.U. considers that in future as well the questions connected with developing all branches of agricultural production must have the full attention of party, government and agricultural bodies, of all collective farmers and state-farm workers.

All means of transport must be developed in order to achieve high rates of economic growth in the country. In the course of the next seven years fundamental technical reconstruction must be carried out in the basic branches of transport, especially railway transport, where it is necessary to replace steam engines with modern, economical locomotives—electric and diesel locomotives. At the same time, everything must be done to increase carriage by sea, river, air and motor transport and to extend the network of pipelines, with emphasis on the most economically profitable means of transport for the given district and type of freight. Telephone communications and the network of radio and television stations must be developed.

The congress considers that the decisive condition for the successful fulfilment of the Seven-Year Plan and the creation of the material and technical foundation of

communism is the broad application of new techniques, comprehensive mechanisation and automation of production processes and specialisation and co-ordination in all branches of the national economy. The task in the coming seven years is to eliminate arduous manual work through the comprehensive mechanisation of production processes in industry, agriculture, construction and transport. Inasmuch as the measures aimed at the mechanisation and broader automation of production are not only of economic but also of great social importance, the congress instructs the central committee of the party and the local party organisations to exercise day-to-day control over the implementation of all measures related to comprehensive mechanisation and automation of production.

The further over-all development of the economic regions must be persistently promoted through the most effective use of natural resources, with provision being made for expedient specialisation by enterprises, an improvement in co-ordination between enterprises and economic regions and the elimination of un-economic transporting.

In order to achieve high rates in extended socialist reproduction, the congress considers it necessary to implement important measures in the sphere of capital construction in the coming seven years. The volume of capital investments by the state will go up by 80 per cent. in the next seven years and will amount to approximately 1,940,000-1,970,000 million roubles, which is nearly equivalent to the capital investments made in the national economy in all the years of Soviet power. In order to make most effective use of capital investments, large funds should be earmarked for the reconstruction, expansion and technical re-equipment of operating establishments and the renewal and modernisation of equipment, which will make it possible to fulfil the task of increasing output and raising labour productivity with smaller outlays and to do this more rapidly than by building new industrial plants.

The 21st Congress notes that for the timely execution of projected capital construction it is necessary to maintain a policy of the comprehensive industrialisation of building, of turning the building

industry into a mechanised conveyor process for the assembling of buildings and structures from large prefabricated panels and blocks. It is necessary to develop the building materials industry, particularly the cement industry, at accelerated rates and to extend the production of reinforced concrete sections. A bolder approach should be encouraged in merging building organisations. Designing must be improved, capital investments must be concentrated on key projects and on projects that are nearly completed, building times must be shortened and the cost of building and assembly must be lowered and the quality of building improved.

In view of the unprecedented scale of construction in the coming seven years and the need to achieve the maximum economy in social labour and time, special attention should be paid to the correct distribution of the productive forces. Attention should be devoted to the further development of the economy of the country's eastern areas, which possess tremendous natural resources. In solving problems connected with the further increase of production capacities, preference should be given to districts where the invested funds will yield the best economic effect. It is essential that party organisations should work for the strictest consideration of the interests of the state, and the slightest signs of a narrow, local approach should be nipped in the bud.

The Soviet Union is a multinational socialist state, based on the friendship of equal peoples united by the single desire and aspiration to advance steadfastly along the path of communist construction. Our plans give vivid expression to the Leninist national policy, which furnishes extensive possibilities for the all-round development of the economy and culture of all peoples.

The Seven-Year Plan makes provision for the large-scale expansion of the economies of all the Union republics. In each republic emphasis is to be laid on branches of economy for which it possesses the most favourable natural and economic conditions, so as to make more effective use of the resources of each republic and ensure the proper harmony of interests of the individual republics

and the Soviet Union as a whole.

The congress considers that one of the main tasks of the Seven-Year Plan is to achieve a considerable rise in the productivity of social labour, this being the chief source of extended socialist reproduction and accumulation—the basis for the further improvement of the people's living standards. In the course of the seven years, labour productivity is to rise by 45-50 per cent. in industry, 60-65 per cent. in building, 34-37 per cent. in railway transport, 60-65 per cent. on state farms, and about 100 per cent. on collective farms.

It is necessary to reduce expenditures in production so as to achieve a reduction in the cost of production in industry of not less than 11.5 per cent. in the seven years, and in building and assembly of not less than 6 per cent.

All party, economic, trade-union and Young Communist League organisations must intensify the drive for fulfilling and overfulfilling the targets of the Seven-Year Plan, for higher labour productivity, lower production costs and stringent economy. It is necessary to launch a country-wide drive against all aspects of mismanagement, extravagance and negligence as regards public property, to make greater demands on managers for improving all qualitative indices in running establishments and building projects and, above all, for reducing costs of production and improving the quality of output. The self-supporting operation of establishments in industry, transport and agriculture must be strengthened in every way.

The 21st Congress of the C.P.S.U. considers that under present conditions, when tremendous successes have been achieved in the development of industry and agriculture, there exist all the conditions necessary to provide still better living standards for the Soviet people in the immediate future and to meet their material and spiritual needs to a still fuller extent. For this purpose, the Seven-Year Plan should provide for the following:

A 62-65 per cent. increase in the national income, which will ensure a considerable extension of consumption;

A 60-63 per cent. rise in the volume

of consumption in the next seven years;

An average increase of 40 per cent. during the seven years in the real incomes of industrial and office workers and also a rise of not less than 40 per cent. in the real incomes of collective farmers;

The abolition of taxes levied on the population;

Measures to put the wages system in order and in the course of the next seven years to raise the wages of factory and other workers in the lower income brackets from 270-350 roubles to 500-600 roubles a month;

An increase in the minimum old-age pension from the present 300 roubles per month to 400 roubles in the towns, and from 255 roubles a month to 340 roubles for pensioners permanently residing in rural localities and connected with agriculture, and also a rise in the minimum disability pensions and pensions paid to families which have lost their breadwinner;

A considerable improvement in the trade and utility services for the population, the extension of the network of public catering establishments, and a reduction in prices at public catering establishments;

An increase in the number of boarding schools, nurseries, kindergartens and homes for the aged;

All-out promotion of building and public utility construction so as to build houses with a total floor space of 650-660 million square metres, or nearly 15 million flats, in towns and workers' settlements in the next seven years, and to build about seven million houses with the resources of the collective farmers and rural professional workers;

The introduction of measures to shorten the working day and the working week. The transfer of factory and other workers in a seven-hour working day, and of workers in leading trades in the coal and mining industries occupied in underground work to a six-hour day must be completed in 1960. The transfer of factory and other workers with a seven-hour working day to a 40-hour working week must be completed in 1962. The

gradual transfer of workers engaged in underground work and in work with harmful working conditions to a 30-hour working week, and the rest of the workers to a 35-hour working week with two days off per week and a 6-7-hour working day is to be started in 1964;

An increase of approximately 62 per cent. in the volume of retail sales by state and co-operative trade establishments. Provision must be made for considerably extending the sale to the population of livestock products, vegetable oils, sugar, fruit (including citrus fruit), and staple manufactured goods such as fabrics, clothes, underwear and footwear, as well as general merchandise, especially items that lighten the work of the housewife,

Implementation of all these measures will signify a further major gain by the people of our country and will be a striking expression of the Communist Party's and the Soviet government's Soviet people.

The 21st Congress of the C.P.S.U. constant care for the welfare of the considers that the carrying out of the great plan of communist construction demands from party, government, trade-union and Young Communist League organisations a further improvement in all their work of educating the Soviet people, increasing their social consciousness and activity, and shaping the new man in a spirit of collectivism and industriousness and awareness of his social duty, in a spirit of socialist internationalism and patriotism and steadfast observance of the high principles of communist morality.

The communist education of the working people, the elimination of the survivals of capitalism in the mind of the people must be placed in the centre of attention and activity of party, government, trade union, Young Communist League and other public organisations. It is necessary to continue an uncompromising struggle against bourgeois ideology. Propaganda and agitation, the press, the cinema, radio and television, and cultural and educational establishments must play an important role in the party's ideological work.

Special attention should be paid to the communist education of the rising generation. Party and government organisations must ensure unwavering implementation of all measures connected with the reorganisation of the secondary and higher school so that the Soviet school, closely linking study with production and with the practice of communist construction produces socially conscious citizens with an all-sided education, specialists with a secondary school or higher school education.

In the present period of the building of communist society, science is acquiring increasing importance. Noting the tremendous achievements of Soviet science in all fields of knowledge, particularly in the field of nuclear physics and atomic power engineering, jet aircraft and rocketry, the congress considers that in the next seven years it is necessary to attain a still faster development in all branches of science and the implementation of major theoretical researches ensuring further scientific and technical progress. For this purpose it is necessary to provide for a broad programme of scientific research, concentrating scientific forces and means on major fields that are important scientifically and practically. The link between scientific institutions and practice must be constantly strengthened. The latest achievements of science and engineering must be broadly and rapidly introduced, and experimental and designing work must be carried on more daringly.

The social sciences, especially economics, have the task of creatively generalising the experience of our economic and cultural development and examining the new problems being posed by life. It is necessary to make a profound study of the laws governing the transition to communism, to analyse comprehensively the most important processes taking place in the capitalist world, to expose bourgeois ideology and uphold the purity of Marxist-Leninist theory.

The coming seven years must be marked by a further development of socialist culture. Workers in literature, the theatre, the cinema, music, sculpture and painting are called upon to raise still higher the ideological and artistic level

of their art, to continue being the party's and the country's active assistants in promoting the communist education of the working people, in propagating communist morals, in developing the multinational socialist culture.

III

In determining the tasks of the present stage of communist construction, the 21st Congress of the C.P.S.U. proceeds from the fact that the Soviet Union has entered a new period of historical development. The victory of socialism in our country is complete and final. The time has gone by when the Soviet Union was the only socialist state in a hostile capitalist encirclement. Now there are two world social systems: capitalism, which is breathing its last, and socialism, which is brimming over with a growing vital force and enjoys the support of the working people of all countries. Nothing in the world could restore capitalism in our country, could overcome the socialist camp.

Under the leadership of the party, the Soviet people have achieved triumphs of socialism in all spheres of economic and social-political life which make possible the practical accomplishment of the task of building the material and technical basis of communism and of a balanced and gradual transition to communism. Communism can be achieved on the sole condition that we surpass the production level of the developed capitalist countries and attain a higher productivity of labour than exists under capitalism.

Comprehensive communist construction must, along with material plenty, provide for a genuine blossoming of spiritual culture and an ever fuller satisfaction of the requirements of all people, must provide for the further development of socialist democracy and for the upbringing of socially-aware working people of communist society.

With the growth of the productive forces, socialist social relations, based on principles of comradely co-operation, friendship and mutual assistance, must also be further enhanced. In step with technical progress in all branches of the economy and the closer merging of schooling and production there will take

place an eradication of the essential distinctions between mental and physical work and a rise in the cultural and technical level of all working people. Reduction of the working day and the further improvement of working conditions on the basis of the comprehensive mechanisation and automation of production must facilitate the transformation of work into a vital urge and necessity of the harmoniously developed man.

As a result of the measures taken in recent years to advance agriculture and the growth of the socialised assets of the collective farms, the collective farm system is gaining new strength and its advantages and ample possibilities are unfolding ever more fully. All this shows that the collective farm-co-operative form of relations of production promotes the development of the productive forces of agriculture, and will do so for a long time to come.

In the process of communist construction the socialised nature of collective farm production will be extended, there will be an approximation of collective farm-co-operative property and public property, an elimination of the distinctions between them. The indivisible funds of the collective farms will expand and strengthen, and inter-collective farm production contacts will become broader. The merger of the collective farm-co-operative and public forms of property will occur in the future not through the gradual effacement of collective farm-co-operative property, but by way of raising its level of socialisation to that of public property with the assistance and support of the socialist state.

In the present-day conditions of communist construction the distribution of material wealth is based on this guiding principle: From each according to his ability, to each according to his work. Distribution according to work stimulates the material interest of people in the results of production and promotes the growth of labour productivity, the greater proficiency of the working people, and the improvement of production techniques; it also plays a big educational role, accustoms people to socialist discipline and makes work universal and obligatory. Equalitarian distribution would lead to the consump-

tion of accumulated means and impair communist construction.

With the development of socialist society and the growth of the social awareness of the masses of the people, the labour enthusiasm of the Soviet people is rising ceaselessly, and so is their concern for the wellbeing of society. The urge for personal enrichment is losing ground and moral incentives to work for the good of society are steadily taking precedence.

The transition to distribution according to needs is to take place gradually, as the productive forces develop, when there will be an abundance of all the necessary consumer goods and all people will work voluntarily according to their ability, regardless of the measure of material benefits they receive from it, conscious of the fact that their work is needed by society.

Even now in Soviet society a substantial and ever-growing portion of material and cultural benefits is being distributed free of charge in the form of pensions, grants for students, allowances to mothers of many children and funds for the building and maintenance of schools, hospitals, kindergartens, nurseries and boarding schools, and also of clubs, libraries and other cultural facilities. This portion of the socialised consumption fund will progressively grow, which is an important premise for the gradual transition to the communist principle of distribution.

The congress takes note that in present-day conditions the main emphasis in the development of the socialist state is to be laid on the all-round development of democracy, on drawing all citizens into taking part in the management of economic and cultural affairs and conducting public affairs. It is necessary to enhance the role of the Soviets as mass organisations of the working people. Many of the functions now performed by state agencies should gradually pass to public organisations. Questions related to cultural services, public health, physical culture and sport should be handled with the active and broad participation of public organisations. In the matter of enforcing the rules of socialist human relations an increasingly important role is to be played by the People's Militia, courts of

honour and similar volunteer public bodies, which, hand in hand with the state institutions, must perform the functions of preserving public order, protecting the rights of citizens and preventing acts harmful to society.

The transfer of some functions from state agencies to public organisations will not weaken the role of the socialist state in the building of communism, but will rather extend and reinforce the political groundwork of socialist society and ensure the further development of socialist democracy. The Soviet state will be able to concentrate even more on developing the economy, which is the material basis of our system.

The socialist state is called upon to perform extremely important tasks in the defence of peace, and the defence of the country from the threat of armed imperialist attack. As long as there exists an aggressive imperialist camp, the Soviet state is obliged to strengthen and improve its glorious armed forces—the army and navy—which stand guard over the socialist gains and the peaceful endeavours of the Soviet people. It is necessary to strengthen the organs of state security, which are aimed first and foremost against agents sent in by the imperialist states. The functions of defending the socialist country, now performed by the state, will not wither away until after the danger of an imperialist attack has been completely eliminated.

IV

The congress is confident that the accomplishment of the Seven-Year Plan will add still more to the strength of the position of the Soviet Union and the world socialist camp as a mighty fortress of peace and progress, and will lead to a further growth of the forces of peace and to a weakening of the forces of war. The successes of the Seven-Year Plan will be a major triumph of the all-conquering teaching of Marxism-Leninism, a token of the superiority of socialism over capitalism. They will attract millions of new followers to socialism.

The Seven-Year Plan ushers in a new stage in the economic competition between socialism and capitalism. The mammoth labour effort of the Soviet

people, who are following the path indicated by Lenin, has elevated our country to so great a height that it can now successfully compete with the United States in the economic sphere and can win this competition and leave that leading capitalist power well behind. In this, the high rates of growth of production in our country will be of decisive importance.

With the accomplishment of the Seven-Year Plan the industrial output per head of the population in the Soviet Union will be greater than that in the most developed capitalist countries of Europe—Britain and Western Germany—and will rank first in Europe. In the physical output of some key items of production the Soviet Union will surpass, and in others approach, the present level of industrial output in the United States. By that time the production of key agricultural products, physically and *per capita*, will exceed the present level of the United States. After that it will take about another five years to catch up and outstrip the United States in industrial output per head of the population. The Soviet Union, therefore, will by that time, or sooner, take first place in the world both for physical volume of production and for production per head of the population. That will be a world-historic victory of socialism in its peaceful competition with capitalism.

A different course of development is typical for the capitalist countries. The general crisis of capitalism continues to deepen owing to the growth of the forces of socialism, the disintegration of the colonial system and the exacerbation of internal social antagonisms. The instability of the capitalist economy is growing, and it is going through one production slump after another. Neither the armaments race nor any other measures taken by the capitalist states will eradicate the cause of crises. The contradictions of capitalism continue to accumulate, setting the stage for new upheavals.

Economic competition between the world socialist system and the world capitalist system is unfolding on the world arena. The economy of all the countries of the world socialist system is

developing at rapid rates. High rates of production growth are a general objective law of socialism, now confirmed by the experience of all the countries of the socialist camp. In consequence of socialist industrialisation and the transition of the peasantry to the co-operative mode of production, some people's democracies have already entered the period of completing the building of socialism.

As a result of fulfilling and over-fulfilling the Seven-Year Plan and also as a result of the high rates of economic development in the people's democracies, the world socialist system will, economists estimate, produce more than half the world's industrial output. This will establish the superiority of the world socialist system over the world capitalist system in material production—that decisive sphere of human activity.

The distinctive feature of the economic development of the socialist countries lies in the fact that as they stride forward their mutual relations grow stronger and the world socialist system becomes ever more united. A diametrically opposite tendency obtains in the capitalist world, where the growth of production in one country or another serves to aggravate contradictions between capitalist states, to heighten competition and incite conflicts between them.

With the further growth and consolidation of the world socialist system all the socialist countries will develop successfully. Countries that were economically backward in the past are benefiting by the experience of the other socialist countries, by co-operation and mutual assistance, and are rapidly developing their economies and culture. In this way, the general line of economic and cultural development in all the socialist countries is levelling out. The prerequisites for their transition from the first phase of communism to its second phase will be built up at accelerated rates. The time is near when these countries will, like the Soviet Union, tackle the building of communist society.

The Soviet Union considers it to be its prime task to continue promoting the greater unity of the socialist countries, the development of close economic and

cultural links between them, and the still greater solidarity of the fraternal family of free nations on the basis of the great ideas of Marxism-Leninism, the principles of proletarian internationalism.

The congress considers that the accomplishment of the Seven-Year Plan and also of the plans of the other socialist countries will create even more favourable conditions for solving the principal problem of our time—the preservation of universal peace. The conclusion drawn by the 20th Party Congress to the effect that war is not fatally inevitable has proved to be perfectly justified. There now exist tremendous forces capable of defending peace and of delivering a crushing blow to any imperialist aggressor who tries to start a war. Aggression by imperialist states against the socialist camp can have only one outcome—the downfall of capitalism.

Fresh successes of the socialist countries will induce an expansion and strengthening of the peace forces throughout the world. The countries working for enduring peace will be joined by more and more countries. The idea that war is intolerable will take ever-firmer root in the conscience of the nations. Backed by the might of the socialist camp, the peaceful nations will then be able to compel the bellicose imperialist groups to abandon their plans of starting new wars. In this way, even before the complete victory of socialism in the world, with capitalism still existing in a part of the world, there will take shape a realistic possibility of excluding world war from human society.

However, at present the possibility that the imperialists might start a war exists, and the threat of war must not be underestimated. For this reason, the socialist countries and all the forces of peace must exercise the utmost vigilance and must extend their struggle for safeguarding peace.

The aggressive policy of American imperialism, which reflects the ambition of the United States capitalist monopolies to gain world domination, remains the main source of the war danger. The rulers of the United States, and those of Western Germany, Britain, France and the other member-countries of the aggressive

North Atlantic bloc, are continuing to stockpile atomic weapons, are rejecting every peaceful settlement of international problems, and are continuously provoking armed conflicts in various regions of the world. In this, the part of the main shock force of the North Atlantic Alliance is handed to Western Germany, which is becoming the principal nuclear and rocket base of that alliance. Militarism and revenge-seeking have reared their heads in Western Germany and are threatening the peaceful nations.

Imperialist aggression, as recent experience shows, threatens peoples in different regions of the world. The imperialists are provoking armed conflicts in the Middle East and the Pacific basin, are engaged in military operations against the peoples of Africa who are fighting for their freedom, and are continuously threatening armed intervention in the domestic affairs of the Latin American countries. All this makes particularly insistent the struggle of the peaceful peoples for collective security and for the rejection of war as a means of settling international disputes.

The aggressive policy of the western powers is opposed by the peaceful policy of the Soviet Union and all the socialist countries, a policy which is supported by the peaceful nations. Thanks to the firm stand of the countries of the socialist camp and the peaceful countries of the East it has been possible in recent years to nip in the bud hotbeds of war in the Middle East and the Far East, and to frustrate other imperialist schemes.

The 21st Congress unanimously approves the peaceful Leninist foreign policy of the Soviet government, which is erecting insuperable obstacles to imperialist aggression. Timely and correct are the recent measures of the Soviet Union as regards a peaceful solution of the German problem, agreement on the discontinuance of tests of nuclear weapons and their complete prohibition, on disarmament, ending the cold war, and arranging a conference of heads of government.

The congress authorises the central committee of the party and the Soviet government to continue to work consistently for the implementation of these

and other proposals designed to safeguard peace and international security.

By the efforts of all peaceloving nations the international atmosphere must be cleared of all inflammatory calls for armed attack. Efforts must be made to enhance mutual confidence and co-operation among states, regardless of their social systems. An important part in relieving international tension and promoting mutual confidence must be played by the extensive development of world trade, cultural exchanges and other forms of international contacts. Better relations between the Soviet Union and the United States—the two great powers bearing special responsibility for the destiny of world peace—could be decisive in effecting an improvement in the international situation.

Guided by Lenin's principle of peaceful co-existence, the Soviet Union will work persistently for all-round co-operation among all countries. The growing might of the Soviet Union, like that of the entire socialist camp, and the fresh achievements of Soviet science and technology are placed in their entirety in the service of peace and international security.

The congress considers the accomplishment of the Seven-Year Plan to be fresh evidence of the fulfilment by the working people of the Soviet Union of their international duty to the international working-class and communist movement, to all progressive mankind. The new successes in the building of communist society will serve as powerful moral support to all the forces fighting for peace, democracy and social progress. This support is of special importance at this time, when in the capitalist countries signs are appearing of a new offensive of reaction and fascism.

The going over of the reactionary bourgeoisie to open dictatorship is a sign of its weakness, of its inability to maintain its domination by parliamentary methods. At the same time, it should be borne in mind that in conditions of unbridled dictatorship reaction has great opportunities of redoubling repressions and terror, suppressing the opposition, of acting upon the masses of people in the spirit that suits its ends, poisoning them

with the venom of chauvinism, and untying its own hands for military gambles. The peoples must be vigilant, constantly ready to rebuff the onslaught of reaction and the threat of a revival of fascism. It must not be forgotten that fascism may reappear in new, and not only in its old, forms, which have been discredited in the eyes of the peoples. The unity of the democratic forces, and of the working class in the first place, is the most reliable barrier to the fascist threat. The successful advance of the Soviet Union to communism, the victories of all the socialist countries, and the consistent struggle for peace create favourable prospects for achieving working-class unity of action both on the international and the national scale. In the process of the class struggle the broad masses of social-democratic workers and their organisations in the capitalist countries will become increasingly aware of the new possibilities that present themselves to the international working class in connection with the successes of socialism, and it is to be hoped that they will fall in step with the other sections of the working class and the broad democratic movement with the purpose of barring the road to fascism and war.

The congress notes with satisfaction that the meetings of representatives of Communist and Workers' Parties in November 1957 demonstrated the complete unity of viewpoints of the fraternal parties. The Declaration of the conference was unanimously approved by all the Communist and Workers' Parties and has become a fighting programme of action for the world communist movement. The conclusions of the Declaration were proved completely right by the course of events. Since the November meetings the solidarity in the ranks of the Communist Parties and the entire international communist movement has been cemented on the basis of Marxism-Leninism.

The revisionist programme of the League of Communists of Yugoslavia has been unanimously condemned by all the Marxist-Leninist parties. The theory and practice of the Yugoslav leadership are a deviation from the positions of the working class, the principles of inter-

national proletarian solidarity. The views and policy of the leaders of the League of Communists of Yugoslavia are jeopardising the gains of the people's revolution and socialism in Yugoslavia.

The Soviet communists and the whole Soviet people have friendly feelings for the fraternal peoples of Yugoslavia, for the Yugoslav communists. The Soviet Union will continue to work for co-operation with Yugoslavia on all questions of the struggle against imperialism and for peace on which our positions will coincide.

While continuing to expose revisionism as the main threat within the communism and sectarianism must go on unabated, for they impede the creative application of Marxist-Leninist theory and lead away from the masses of the people.

The congress considers it essential to strengthen in every way the might of the socialist camp and to consolidate further the unity of the international communist movement in accordance with the principles of the Moscow Declaration.

The fraternal co-operation of the Communist and Workers' Parties must be developed and extended on the basis of the complete independence of each party, on the basis of proletarian internationalism, voluntary co-operation and mutual assistance. The Communist Party of the Soviet Union, reared by V. I. Lenin in the spirit of proletarian internationalism, considers itself one of the component detachments of the international working-class and communist movement. Together with the other Communist Parties, the C.P.S.U. bears responsibility for the destiny of the socialist camp, the destiny of the world communist movement. It will continue to follow faithfully the great international teaching of Marx, Engels and Lenin, to combat revisionists of all shades, uphold the purity of Marxism-Leninist movement, the struggle against dog-Leninism, and work for the new successes of the world communist and working-class movement.

V

The historic victories of socialism in our country that have created the conditions for the transition to a new stage of

communist construction are the result of tireless creative work on the part of the Soviet people and of the tremendous political and organisational work of the Communist Party. The party, basing itself on the collective wisdom of the working class and of the entire people, on their wealth of experience, is elaborating and implementing the plans for communist construction. Our party has come to its 21st Congress more united and monolithic than ever before and is capable of successfully carrying out gigantic new tasks.

The boundless love and trust displayed by the people for their own party is clearly manifested by the growth in the membership of the C.P.S.U., with reinforcements being drawn from the finest people among the working class, the collective-farm peasantry and the Soviet intelligentsia. In the time that has passed since the 20th Congress, the party has consistently followed the line of expanding inner-party democracy and criticism and self-criticism and of increasing the activity of the party membership. The central committee and local party organisations have been conducting a determined struggle for the restoration and further development of the Leninist standards of party life and principles of collective leadership.

The entire experience gained in the struggle for the victory of socialism and communism shows that in the course of the building of communist society the role of the party, as the tried and tested vanguard of the people and the highest form of social organisation, is growing to a still greater extent.

The fulfilment of the Seven-Year Plan will require a still higher level of party ideological, political and organisational work and the active mobilisation of the creative forces of the Soviet people. It is essential that the targets of the plan be made clear to all working people, that the efforts of every collective be organised and directed towards their fulfilment, that shortcomings be resolutely eradicated and that difficulties met with in work be overcome.

The success of the plan will be determined directly at the factories and construction sites, on the collective and state farms and in the research institutions.

In view of this the role of local and lower party organisations will be still more greatly increased, since these are called upon to mobilise and organise the masses of the people for the fulfilment of concrete tasks in production. It is the duty of party organisations to ensure that at every factory, on every collective and state farm and in every institution an atmosphere of creative work and production enthusiasm prevails. It must be remembered that victories will not come of themselves, they must be won and consolidated.

Party organisations, lecturers and propagandists, while calling for the fulfilment of the plans of communist construction, must explain clearly and simply what communism is and what great benefits it will bring the people, and must in every way support and develop communist forms of work. The organisational and educational work of the party, all methods of ideological work, must be devoted to the successful fulfilment of the targets for communist construction. It is essential to ensure that every worker makes better use of his machine, machine tool, installation, tractor or harvester combine and employs progressive methods of work.

The congress is of the opinion that a priority role in the fulfilment of the Seven-Year Plan belongs to party and government cadres. The placing and training of cadres must be improved, we must promote to responsible positions people who are well-trained and of high principle, who have a feeling for what is new, who will give all their strength and knowledge for the benefit of the people, who will introduce Bolshevik ardour into the work and be implacable in respect of shortcomings. It is essential to promote young cadres more boldly and to give them an opportunity to display their ability in practical work.

Party organisations must strengthen backward factories, collective and state farms and districts by allotting them qualified cadres, selecting good organisers and specialists who will be able to make use of hidden potentialities, organise people and bring lagging elements up to scratch.

It is the duty of all party organisations to train our cadres and all communists to be exacting towards themselves, to be

conscious of their responsibility for the tasks entrusted to them, to train them in the spirit of loyal service to the people and to the cause of communism. We should systematically raise the level of theoretical knowledge and Marxist-Leninist training of our cadres.

Of great significance in improving the organisational work of the party and mobilising the masses of the people to carry out the tasks of communist construction is the consistent application of inner-party democracy and the development of criticism and self-criticism as a powerful means to overcome shortcomings and achieve a further advance.

At the present stage of social development the role of the Soviets of Working People's Deputies is growing to a still greater extent. Republican, territorial, regional, city, district and village Soviets must tackle from day to day the most important problems of work at factories, building sites and collective and state farms for the fulfilment of the Seven-Year Plan targets, and must pay heed to raising the living and cultural level of the working people. The work of Soviet bodies will be the more fruitful the greater the extent to which they rely on the activity of the masses of the people, achieve a further extension of socialist democracy and check with determination elements of red tape and bureaucracy.

It is necessary to make certain amendments and addenda to the Constitution of the U.S.S.R. Important changes in the political and economic life of the Soviet Union have taken place since the constitution was adopted; the international situation has also changed. All these changes should be reflected and given legal force in the Constitution of the Union of Soviet Socialist Republics.

The trade union organisations will have to carry out considerable work in mobilising the masses of the people to struggle for the successful fulfilment of the Seven-Year Plan. The trade unions are called upon to develop the activity of the working class and all working people, to bring about a still greater development of socialist emulation for the fulfilment and overfulfilment of state targets at every factory, and to support the initiative of inventors and rationalisers, the leading people in production,

and to popularise their experience. The trade unions must increase their control over the application of safety measures in production, fulfilment of housing plans, the distribution of housing, and the work of trade and catering establishments and of medical and communal services for the working people. A most important task of the trade unions is that of developing educational work among the people and improving the work of cultural and educational institutions.

The programme of communist construction drawn up by our party for the coming seven years opens up wide vistas for activity and the growth of creative initiative on the part of the rising generation and its vanguard, the Lenin Young Communist League. The Young Communists are called upon to continue setting an example of selfless work to the young people. Every Young Communist organisation must become a militant, vitalising collective that maintains close ties with the young people. The Young Communist League will have to take an active part in industrial building, housing construction and the erection of public buildings, in the struggle for the further development of socialist agriculture and for exploiting the natural resources of the newly developed districts of the country.

Party and Young Communist League organisations must pay special attention to creating a communist world outlook among the youth, to training active, conscientious builders of communist society, whose love for their country is boundless and who live and work in the communist manner.

The chief task of the Communist Party and the Soviet people today is to ensure the unconditional fulfilment of the Seven-Year Plan for the development of the national economy. The fulfilment of the targets set by the party and the government for the next seven years will have tremendous importance in further strengthening the might of our country. The fulfilment of the Seven-Year Plan for the development of the national economy of the U.S.S.R., the main line in which is the peaceful development of the economy and raising the living standards of the people, will at the same

time further strengthen the country's defence capacity, increase its preparedness to give a crushing rebuff to any attacks made by imperialist aggressors against the great gains of socialism. The successes of peaceful economic construction in the U.S.S.R. and all the socialist countries will be a new expression of the advantages of socialism over capitalism and will to a still greater extent increase the power of attraction of the great ideas of Marxism-Leninism.

The Soviet people, in the course of socialist construction, have performed great feats of labour that have been recognised by the whole world. The 21st Congress of the Communist Party expresses its firm conviction that the entry of our society into the period of the extensive construction of communism will give rise to a mighty wave of labour enthusiasm, to new forms of countrywide emulation for the fulfilment and overfulfilment of the Seven-Year Plan and will be marked by outstanding victories.

The magnificent plan for communist construction elaborated by the party opens up before the Soviet people wide and bright prospects for the advance to communism. Our cherished goal is close. We have to go through the decisive stage in the peaceful economic competition with capitalism and in the shortest time win that competition. We have everything necessary to win that position. And when we have solved those problems and have cleared the way forward it will be easier for us to advance. For the sake of the great aim of the construction of communism we can and must work well.

In paving the road to communism the Soviet people are maintaining close unity with the peoples of all the countries of the socialist camp. Day by day the mighty camp of socialism is growing stronger. The ideas of communism have become the leading force of our time.

The 21st Congress of the Communist Party calls upon all the working people of our great country to struggle actively for the fulfilment and overfulfilment of the Seven-Year Plan. The congress is fully confident that the workers and col-

lective farmers and Soviet intelligentsia will do everything to strengthen further the might of our socialist country and to implement the communist ideals inscribed on the victorious banner of Marxism-Leninism.

The heroic Soviet people, led by the Communist Party, are marching confidently forward, building the finest and most just society on earth—communist society.

(February 5, 1959)

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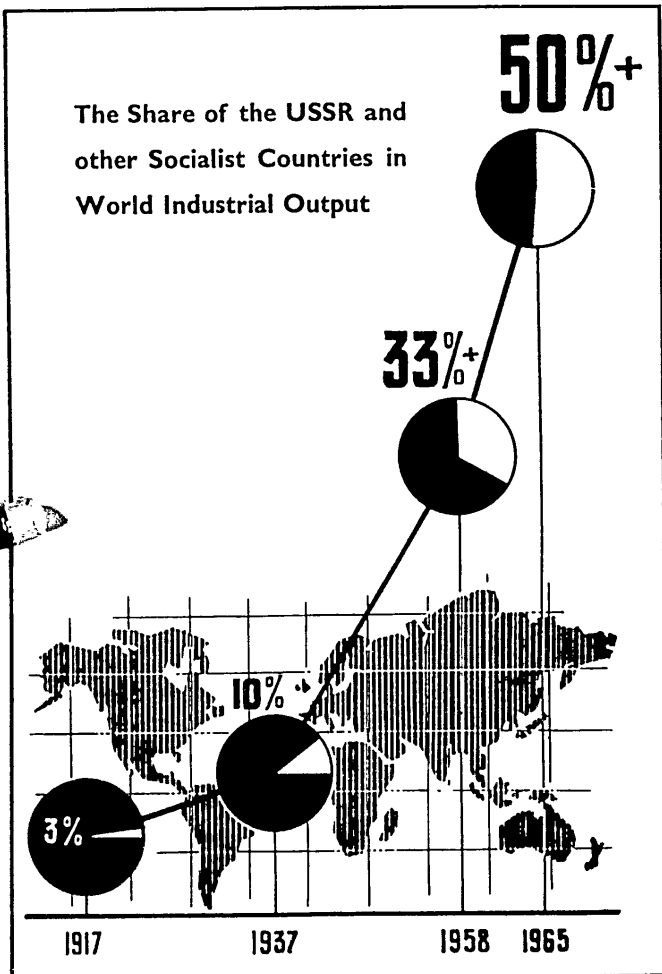
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Bringing Soviet Schools Still Closer to Life^{STAT}

★ Full Text of the Theses of the Central Committee of the Communist Party of the Soviet Union, and the USSR Council of Ministers on the question of

STRENGTHENING THE TIES OF THE SCHOOL WITH LIFE, AND FURTHER DEVELOPING THE SYSTEM OF PUBLIC EDUCATION

Soviet Booklet
No. 44
December 1958

STAT

Strengthening the Ties of the School with Life, and Further Developing the System of Public Education

*Theses of the Central Committee of the Communist Party
of the Soviet Union and the USSR Council of Ministers*

1. The Soviet Union is now in the midst of a great advance. The country's economy is developing rapidly, science and culture are making unprecedented progress and the standard of living of the working people is steadily rising. The Soviet people—real masters of life and makers of history—have won outstanding victories in all spheres of economic and cultural development—victories of which they are justly proud, victories which inspire the hearts of millions of friends of peace and socialism in all parts of the world with joy and hope and which fill the enemies of the working class with fear and despondency.

The Soviet people have achieved great successes as a result of the wise home and foreign policy of the Communist Party and the Soviet state. In the years that have gone by since the historic 20th Congress of the Communist Party of the Soviet Union, Soviet society has taken another big step forward in the gradual transition from socialism to communism. These years have been marked by a tremendous acceleration of the rate of communist construction, and by wide-scale encouragement of the working people's initiative in the political life of the country and in economic and cultural endeavour. Consistently applying the great behests of Lenin, the party has rallied the masses of the people still closer around itself.

The Soviet Union is now faced with the need to carry out new and far-reaching tasks. The 21st Congress of the C.P.S.U. will discuss and approve the target figures for the development of the national economy from 1959 to

1965. The Seven-Year Plan will be a great programme of communist construction and its fulfilment will make the Soviet Union still stronger and richer and will be of decisive significance for victory in the peaceful competition between the socialist and capitalist systems. The Soviet people are fully confident that they will carry out the plans that have been outlined.

2. The decisive part in carrying out these creative plans will be played by Soviet men and women. Their loyalty to the cause of communism, their will to work, their ability to translate into reality the great outlines drawn by the Communist Party are the foundation for our victories. In the Soviet Union the well-spring of the people's talents is inexhaustible. Ever new millions of builders of communism are joining the ranks of the conscious and energetic workers of Soviet society. Vladimir Ilyich Lenin taught us that for the Communist Party and the Soviet state the upbringing and education of the younger generation and the training of highly qualified personnel for all branches of the economy, science and culture must always be the object of special concern.

The Soviet school system has prepared millions of educated and cultured citizens, playing an active part in socialist construction. It has created remarkable forces of outstanding scientists, engineers and designers, whose searchings and whose creative work are embodied in such historic scientific and technical victories as the artificial earth satellites, atomic power stations, the atomic icebreaker and high-speed jet

airliners. But Soviet people must not rest on their oars. Life itself is setting the school new tasks. Our systems of general and higher education are lagging behind the demands made by the building of communism and suffer from serious shortcomings. The most serious of these is that instruction is to some extent divorced from life. This shortcoming in the educational system is all the more intolerable at the present stage in building communism.

"Every boy and every girl," said Comrade Khrushchov, speaking at the 13th Congress of the Young Communist League, "should know that in studying at school they must prepare themselves for work, for creating values that are useful to man, to society. Everyone, regardless of the position occupied by his parents, must have only one road—to study and, having acquired knowledge, to work."

It is necessary to reorganise the edu-

cational system so that the secondary and higher educational establishments play a more active part in all the creative endeavours of the Soviet people. The paths to be followed in this reorganisation are outlined in the memorandum of Comrade N. S. Khrushchov, first secretary of the central committee of the Communist Party of the Soviet Union, on "Strengthening the Ties of the School with Life, and Further Developing the System of Public Education." The proposals made in that memorandum have been approved by the presidium of the central committee of the C.P.S.U. and are warmly supported by the Soviet public, which regards the reorganisation of the school system as an urgent task. These proposals are aimed at raising to a still higher level the communist education of the younger generation and the training of personnel for all branches of the economy, science and culture.

THE SCHOOL AND THE BUILDING OF COMMUNISM

3. The Communist transformation of society is inseparably bound up with the education of the new man, in whom spiritual wealth, high ethical standards and perfect physical fitness must be harmoniously combined. The man of the communist future will be free from the mean characteristics bred by a system of exploitation: the selfishness of private ownership, the desire to live at the expense of other people's labour, philistinism, individualism, etc.

One of the principal evils of the old society was the great gulf between manual and mental labour. The separation of manual work from mental work took place with the appearance of private ownership of the means of production and the division of society into hostile, antagonistic classes. The growth of the contradictions of capitalism has increased still more the contrast between mental and manual labour. Marxist teaching has exploded the bourgeois legend that there must inevitably exist for ever, on the one hand, a drab

mass of people, doomed to a subordinate position and arduous physical toil, and, on the other hand, a small group of people, allegedly predestined by nature to think, to rule and to develop science, literature and the arts. The experience of the Soviet Union, the experience of the Chinese people and of the peoples of the other socialist countries has shown in a conclusive way that the working men and women, on ridding themselves of the fetters of exploitation, irrespective of racial, national or other distinctions, administer the state, not worse, but better than the exploiters, and are developing the economy, science, literature and the arts at an unprecedented pace.

4. The divorce of mental labour from manual labour and the conversion of mental endeavour into a monopoly of the ruling classes have done tremendous harm to the intellectual development of mankind. For centuries culture was forbidden fruit for the millions of ordinary people. For centuries the old society

organised the school system in such a way that it was, in fact, out of reach of the masses of working people and served the interests of the exploiters. The development of all aspects, not only of production, but also of the spiritual activity of the broadest masses of working people is being accelerated on a gigantic scale in socialist society, where the essential distinctions between manual and mental work are gradually being obliterated and their unity is being established. The socialist state is organising its school system so that it will serve the people, give knowledge to the working people and promote the development of all the people's talents. The Soviet school is bringing up the rising generation in the spirit of the most progressive ideas—the ideas of communism and is shaping in the minds of the young people a materialist world outlook, the basis of genuinely scientific cognition of the world. Socialism has opened up boundless scope for the growth of the material and spiritual wealth of society, for the all-round development of the personality. In socialist society all the achievements of world culture become the possession of the masses.

5. Thanks to the establishment of the socialist system, work in our country has been transformed from the heavy burden it is under capitalism into a matter of honour and civic duty for everyone. Socialist society, of course, applies the principle: "From each according to his ability, to each according to his work." But this principle is not eternal. In communist society another principle will prevail: "From each according to his ability, to each according to his needs." This naturally does not mean that under communism there will be a lordly life in which laziness and idleness reign supreme. In the communist future people will lead interesting, creative, industrious and cultured lives. Work will become the prime vital necessity of man. At the same time people will have much more time to devote to science, literature, music, painting, sports and other things they like. Marx wrote that in communist

society "the development of the productive forces will advance so rapidly that although production will be designed to provide riches for all, nevertheless the free time of all will increase."

What Marx foretold with such great foresight is coming true. The productive forces of Soviet society have developed to such an extent as to place on the agenda the question of shortening working time and increasing free time. The transition to a seven-hour working day, and in some branches of industry to a six-hour day, is gradually being carried out in the U.S.S.R. Together with the further development of the productive forces and the increase in the social wealth of the Soviet Union, the free time of the working people will steadily increase. This means that all Soviet men and women will have ever greater opportunities for combining work with study, for broadening their horizon and satisfying their intellectual requirements, which are increasing all the more rapidly the nearer we draw to communism.

Proceeding from the Leninist premise that communism means, in the first place, a higher productivity of labour than under capitalism, the working people, both in industry and agriculture, must introduce the most efficient methods and the latest achievements of science and technology. Accelerated development of mechanisation and automation and the application of chemical processes in production, the introduction of electronics and computers on a wide scale, the maximum development of electrification and other highly efficient methods are radically changing the nature of work. The labour of workers and collective farmers is drawing ever nearer in essence to the work of technicians, engineers, agronomists and other agricultural specialists. What is now being required of the workers is the ability to operate improved machine tools and the finest precision instruments and devices for measurement and control, and an understanding of intricate technical calculations and blueprints. The immediate and long-term prospects for the Soviet Union's technical and economic development are thus making ever greater

demands on all the working people of our society. An all-round education is becoming a vital necessity for them.

It is a very great mistake to assert that with the automation of production manual labour will disappear in communist society. It goes without saying that gigantic technical progress will immeasurably lighten manual labour, and many trades that exhaust people are disappearing and will disappear in the future. Yet the harmonious development of man is inconceivable without manual work—creative and joyous—which strengthens the organism and stimulates its vital functions. "Just as in nature itself the head and the arms belong to one and the same organism, so is mental and manual labour also combined in the process of work," wrote Karl Marx. The new generations of builders of communist society, participating in socially useful activities, must join in manual work within their powers and in the most varied forms.

6. The idea of combining instruction with productive work has attracted the best minds of mankind for a long time. Already the utopian socialists Campanella, Fourier and Owen, and the great Russian revolutionary democrat Chernyshevsky, in describing the society of the future, said that under socialism instruction would be closely linked with productive work. The great thinkers Marx, Engels and Lenin placed the idea of combining instruction with productive work on the realistic foundation of the proletarian struggle for socialism and communism and organically linked it with the polytechnical training of the youth in socialist society. Marx wrote that in bringing up children it was necessary, from a certain age, to combine productive work with instruction and gymnastics. This "will be not only a method of increasing social production, but also the only method of bringing up people of all-round development." Engels stressed that "in socialist society work and education will be combined and in this way the rising generation will be assured an all-round technical education as well as a practical foundation for scientific upbringing." Already before

the October Revolution Lenin planned the bringing up of children and the youth in socialist society on the basis of combining instruction with productive work.

7. The experience of the Soviet school confirms the scientific foresight of Marx, Engels and Lenin. In his historic speech at the Third Congress of the Young Communist League, Lenin explained that the younger generation must learn to build communism, closely linking up each step in their training, upbringing and education with the struggle of the working people against the old, exploiting society. The young people must not confine themselves to the schools but must combine all their learning and education with the labour of the workers and peasants. "Only in labour together with the workers and peasants is it possible to become a real communist," Lenin pointed out. Giving concrete expression to this proposition, he said that the young people must link up their studies with work, with the struggle to reconstruct industry and agriculture on the basis of electrification, with the struggle for culture and the education of the people. The principle of combining instruction with productive work has been formulated in major documents of the Communist Party.

8. A genuine cultural revolution has been accomplished in the U.S.S.R. The Soviet school system has played a decisive part in this revolution and has facilitated the advance of the culture of all the peoples in our multi-national homeland. The Soviet Union today has no backward national "borderlands," as was the case in tsarist Russia. All the peoples in the Soviet Union have schools where their children are taught in their native language. The well-springs of education and culture are freely available to all, illiteracy has been eradicated, universal seven-year education has been accomplished and secondary and higher education have been extensively developed. More than 50 million people are now studying in the U.S.S.R.

Whereas in Russia before the Revolution, a total of 9,650,000 pupils were attending elementary and secondary

schools in 1914, in the 1957-58 school year which has ended there were 28,700,000 pupils in our general educational schools and, if schools for adults are included, the figure was 30,600,000. During this period the number of pupils in the senior forms of secondary schools increased nearly 40 times over. In 1958 alone 1,600,000 boys and girls completed their studies at secondary schools providing a general education and at schools for young workers and peasants.

Particularly great successes in public education have been achieved in Union republics whose population was almost completely illiterate in the past. For example, more than 1,340,000 pupils are now attending schools in the Uzbek Republic, whereas in 1914 there were only a little more than 17,000 school children on the territory of what is now Uzbekistan.

More than four million students are now studying at higher educational establishments and specialised secondary schools, as against 182,000 in 1913. The universities and colleges of the U.S.S.R. have nearly four times as many students as such big European capitalist countries as Britain, France, the Federal Republic of Germany and Italy combined, whose population is nearly 200 million, i.e., almost as large as that of the U.S.S.R. About 7,500,000 people with a higher or specialised secondary education are now working in our country's national economy, while in 1913 there were fewer than 200,000 specialists of this kind.

The Soviet Union has advanced to one of the first places in the world in the development of science and technology and has surpassed all countries in the scale and quality of the training of specialists. When the first Soviet artificial earth satellite was hurled into the boundless expanses of outer space, many sober-minded and thinking people in the capitalist world recognised that the extensive development and high level achieved by secondary and higher education in the U.S.S.R. was the primary reason which had determined that brilliant victory of Soviet science and technology. The American press wrote with alarm

about how much time and attention is being given to the study of mathematics, physics, chemistry and biology in the Soviet secondary school as compared with United States schools. The United States of America, whose leading circles used to pride themselves on being, so they claimed, in the lead, now declare that the United States must overtake the Soviet Union in the training of specialists. This is an achievement of which we cannot fail to be proud.

A splendid generation of young people who are devoting all their knowledge, energies, abilities and talents to building communism, has been brought up in Soviet society. The high moral qualities of the Soviet youth have been manifested in a striking way at the labour fronts in building socialism during the first five-year plans, in the Great Patriotic War, in the heroic feats performed in cultivating virgin and long-fallow lands, in the construction of big power stations, mines and blast furnaces, in the construction of new industrial centres in the East and North of our country, and in many other feats of labour in our day.

9. The progressive development of the productive forces in the process of building communist society, the perfecting of socialist relations in society and the further development of Soviet democracy are creating favourable conditions for posing new tasks of the communist upbringing and education of our young people and for successfully carrying them out.

It was pointed out at the 20th Congress of the Communist Party of the Soviet Union that a big shortcoming of our school system is that instruction is to some extent divorced from life and that when they leave school, young people are not sufficiently prepared for practical work.

"To strengthen their ties with life the schools must not only introduce new subjects which teach the pupils the fundamentals of technology and production, but must also systematically accustom the pupils to working in factories, collective and state farms, experimental plots and school workshops," it was stated in

the report of the central committee of the Communist Party of the Soviet Union to the congress. "The secondary school curriculum should be revised to include greater production specialisation, so that boys and girls who complete their studies at a ten-year school have a good general education, opening the way to a higher education, and are, at the same time, prepared for practical activity, since the greater part of those leaving school will immediately begin working in various branches of the national economy"

Since the congress a certain amount of work has been done to bring the school closer to life. The first experiences in combining instruction with productive work, already accumulated in a number of schools in the R.S.F.S.R., the Ukraine and other Union republics, are undoubtedly valuable and promising. A remarkable example of initiative in forming teams of pupils on collective farms has, for instance, originated in the Stavropol Territory. These teams are made up of pupils of the 8th and 9th forms. The collective farms allocate definite areas of land to the teams. The pupils do a whole range of jobs in agriculture which are within their powers and fit in with the school curriculum. These jobs are not done to the detriment of the curriculum. In the winter and spring definite hours are assigned to work and in the summer the pupils are mainly engaged in working on the collective farm. The boys and girls are brought up to work, are becoming accustomed to discipline and are preparing to be good agriculturists.

A profound study of the experience accumulated by a number of schools which are combining instruction with production and work will help to reorganise the educational system

Yet in the overwhelming majority of secondary and higher educational estab-

lishments the situation has remained practically unchanged and the ties of the schools with life, as in the past, are completely inadequate. That is why the central committee of the party and the U.S.S.R. Council of Ministers consider it necessary to examine in all its scope the question of practical measures to strengthen the ties of the schools with life and further to develop education in the country.

"The system of bringing up our rising generation in the schools must be reorganised drastically," it is stated in Comrade Khrushchov's memorandum on strengthening the ties of the school with life. "The most important thing here is to issue a slogan, and make this slogan sacred for all children entering school, namely, that all children must prepare for useful work, for taking part in building communist society. And any work at a factory, a collective farm, an industrial establishment, a state farm, a machine and tractor station, a repair and service station, or in an office—any honest, useful work for society—is sacred work and necessary for every person who lives in and enjoys the benefits of society. Every person living in communist society must contribute by his work to the construction and further development of this society. The main task of our schools must become that of preparing our younger generation for life, for useful work, and of inculcating in our youth a deep respect for the principles of socialist society."

The Soviet school is called upon to prepare people with an all-round education who have a good knowledge of the fundamentals of science and, at the same time, are capable of systematic manual work, and to foster in the young people a desire to be useful to society and to take an active part in the production of the values which society needs.

THE SECONDARY SCHOOL

10. The educational system now existing in the U.S.S.R. was created more than 20 years ago. In the 'thirties, in the period of socialist reconstruction of the economy, the school was set the task of

preparing well-educated people, with a good knowledge of the fundamentals of science, for the higher educational establishments. The school concentrated its main attention on giving the pupils the

general educational grounding necessary for entering a university or institute. This led to one-sidedness and a certain abstract quality in the teaching provided for the young people, to the divorce of the school from life, which made for serious shortcomings in educational work as well. The school limited itself primarily to verbal methods of instruction and did not pay the necessary attention to accustoming the children and young people to take part in socially useful work within their powers.

As a result of this, many boys and girls who have completed their studies at secondary schools consider that the only road in life suitable for them is to continue their education in a higher educational establishment or, if the worst comes to the worst, in a specialised secondary educational establishment, they go unwillingly to work in factories, mills, collective farms and state farms, while some of them consider it degrading to do manual work. Yet the continuous expansion of secondary education naturally leads to a situation in which the overwhelming majority of the young people who leave school must go straight to productive work. At the same time, technical progress demands the replenishment of industry and agriculture with young people who have a sufficiently high general educational grounding.

In present conditions the higher educational establishments annually enrol about 450,000 people, including those who study at evening classes or through correspondence courses. Between 1954 and 1957 more than two and a half million people from among those who completed their studies at secondary schools did not enter higher educational establishments or specialised secondary schools. In view of the fact that the curriculums of the secondary schools are divorced from life, many young people have no work skills and are not familiar with production, which creates serious difficulties in placing them in jobs and gives rise to dissatisfaction among a considerable section of the young people and their parents.

All this has created an imperative need

for reorganising the work of the schools.

11. The initial starting point for a proper solution to the problem of reorganising the school system is first of all the premise that from a certain age all young people should join in socially useful work and that their instruction in the fundamentals of science should be linked with productive work in industry or agriculture. From this there follows the need for properly correlating, in the secondary school, the general, polytechnical and vocational education, based on a rational combination of work and instruction, with rest and leisure and the normal physical development of children and young people.

Thus, the key principle in teaching the fundamentals of science at school—the principle which determines the content, organisation and methods of instruction—must become the close linking of instruction with life, with production, with the practical work of building communism. Instruction must psychologically prepare the children from their very first years, so that they will in the future take part in socially useful activities, in work.

The education and upbringing of the younger generation on the basis of linking up instruction with life and with work that is within their powers, must be organised in such a way that the age of the school children is taken into account. It is desirable for all young people to be drawn into socially useful work from the age of 15 or 16. It is therefore necessary to divide secondary education into two stages.

12. The first stage of secondary education must be the compulsory eight-year school, set up in place of the seven-year school that exists at present. The compulsory eight-year school will be a considerable step forward in developing education, as compared with the seven-year school. The young people who complete their studies at an eight-year school will have a greater general knowledge and, both psychologically and practically, will be better prepared for taking part in socially useful activities. Such a school

will solve the problems of communist education and of labour and polytechnical instruction more successfully; it will provide the pupils with a wider range of knowledge, and will make it possible to eliminate the overloading of the pupils with studies that has existed in the seven-year school, and to organise in a more thorough way the physical training of children and the development of good artistic taste. The specific features of woman's work should be taken into account in the work training given to girl pupils in the eight-year school.

In the process of instruction and upbringing the school is called upon to familiarise the pupils with the varied forms of work in our society and to help them to discover their particular bent and make a conscious choice of their future occupation.

The eight-year school will be an incomplete secondary labour polytechnical school providing a general education. Primary schools consisting of the first four forms should be preserved in small communities. When they have been through the fourth form at these schools the pupils will enter the fifth form at the nearest school.

On leaving the eight-year school, all young people must join in socially useful work at industrial establishments, collective farms, etc. This will create more equal conditions for all citizens as regards work and education, and it will be a good means of bringing up young people in the spirit of the heroic traditions of the working class and the collective-farm peasantry.

13. Young people will receive a complete secondary education during the second stage of instruction. A secondary education can be completed on the basis of combining studies with productive work in the following ways.

The first and main way is for young people, who upon finishing at the eight-year school go to work, first of all to receive initial vocational training and then, while working in production, to study at schools for young workers and peasants. These schools should give their pupils a

complete secondary education and help to increase their vocational skill.

The second way is for young people who have completed their studies at the eight-year school, to be taught at a secondary labour polytechnical school providing a general education together with production training (of the type of factory or agricultural vocational schools) which, on the basis of nearby industrial establishments, collective farms, state farms, repair and service stations, etc., will combine instruction with productive work and give the pupils a complete secondary education and vocational training for work in a branch of the economy or culture.

The third way is to teach a section of the young people in specialised secondary schools which will function with the eight-year school as a basis, and at which the pupils will obtain a complete secondary education, a speciality and the status of specialists with medium qualifications.

The new system of education will enable every boy and girl to prepare for life better, to have a definite trade and to choose the way of obtaining a complete secondary education that suits them best.

14. The purpose of the secondary schools for young workers and peasants is to enable young men and women working in production or in offices to obtain a complete secondary education. These can be shift, evening, seasonal (in rural localities) or correspondence schools. It is necessary to create conditions which will ensure that the working youth are brought into these schools, that they study in a normal way, and that there is a decided improvement in the quality of the instruction given. For those who study successfully while working, it is desirable to institute a shorter working day or to release them from work for two or three days a week.

The pupils of these schools must be given the opportunity, not only to receive a complete secondary education, but also to improve and deepen their vocational training. The period of study at schools for young workers and

peasants should be three years. It is necessary to provide encouragement in every way for the working youth to obtain a secondary education and to encourage the passing of secondary school examinations without compulsory attendance at classes.

In raising the trade rating of young workers and collective farmers and in giving them promotion at work, it is desirable to take into account successful studies at school and a favourable assessment of social and production activities.

In view of the fact that a certain number of the working youth do not have a seven-year education, schools for young workers and peasants can continue for a certain time to have all forms, beginning with the third. In case of necessity these schools can also arrange classes for adults.

Youths and girls who complete their studies at schools for young workers and peasants will receive a certificate of secondary education and will have the right to enter a higher educational establishment.

15. Secondary labour polytechnical schools providing a general education together with production training (of the type of factory or agricultural vocational schools) are to be set up in towns and rural localities and will have a three-year period of study. They will combine general polytechnical and vocational education. In production training the correlation of theory and practice and the periods of instruction and work will be fixed in accordance with the nature of the special training being given to the pupils and with the local conditions. In schools in the countryside the school year should be arranged so that the seasonal nature of agricultural work is taken into account.

Production training and socially useful work can be carried on in the training and production shops of industrial establishments, in teams of pupils on collective and state farms, on training and experimental farms, and at the

training and production workshops of a school or group of schools.

Those who complete their studies at secondary labour polytechnical schools will receive a certificate of secondary education and a diploma giving them a rating in the trade they have chosen, and they will have the right to enter a higher educational establishment. Secondary schools can be set up either separately from an eight-year school or together with it.

16. A new type of institution for the education and upbringing of children has been established and is being ever more extensively developed in the Soviet Union—the boarding school, where the best conditions are provided for the education and communist upbringing of the younger generation. In accordance with the reorganisation of the system of secondary education, the boarding schools may be either eight-year or 11-year schools, depending on local conditions. They should follow the curricula and syllabuses of the eight-year and secondary labour polytechnical schools giving production training. The boarding schools are to set examples of a really efficient combination of educational instruction and productive labour.

17. Besides the aforementioned schools for the second stage of secondary education, it is desirable to retain schools for children showing superior abilities in music, choreography and the fine arts. When necessary, these schools are to provide facilities for children living out of town and children from large families to attend them as boarders. The parents' contribution to the upkeep of their children should be fixed on the same principles as at boarding schools.

The schools for children and young people with superior abilities in the arts will give their pupils a general secondary education, work training, and special training in some field of art. On completing their studies at these schools pupils can go direct to appropriate higher educational establishments.

The schools and public education authorities must pay more attention to developing the abilities and inclinations

of all children, both in the arts and in mathematics, physics, biology and other sciences. Circles, studios and special lecture bureaus should be organized on a wide scale at higher educational establishments and schools; societies of young mathematicians, physicists, chemists, naturalists and engineers should be formed; gifted young people should be discovered and their talents should be carefully fostered. Thought should be given to the question of establishing special schools for young people with a particular inclination and aptitude for mathematics, physics, chemistry and biology. It goes without saying that such schools, when organized, may admit youths and girls who have been recommended by their school's teaching board and who have passed a special examination.

18. The schools for the second stage in secondary education should provide a higher level of general and polytechnical education than is now established for the 10-year schools. Special attention should be paid to teaching physics, mathematics, chemistry, draughtsmanship and biology. The study of foreign languages must be fundamentally improved at all schools throughout the country; the network of schools in which a number of subjects are taught in foreign languages should be expanded.

The reorganization of the schools should by no means result in a reduction or weakening of education in the humanities, which is of great importance for the formation of the pupils' communist world outlook.

It is necessary to do away with the underestimation of physical training and aesthetic education for school children. The various forms of independent youth activity in the technical field, in the arts, natural sciences, physical culture, sport and tourism, should be developed still more widely.

The reorganization of school education will call for a change, not only in the content, but also in the methods of teaching, with a view to the maximum development of the independence and initiative of the pupils. Visual

methods of instruction should be applied more extensively; the cinema, television, etc., should be widely used; abstract teaching of the fundamentals of science and production must be done away with. It is particularly important to promote on a wide scale in the schools technical inventions and work by the pupils to make new instruments, models and technical devices; experimental agricultural work should also be encouraged.

19. Instruction in the native language has been effected in Soviet schools. This is one of the important gains of the Leninist national policy. At the same time, the Russian language, which is a mighty medium for intercourse between nations, for strengthening the friendship between the peoples of the U.S.S.R. and for giving them access to the wealth of Russian and world culture, is being seriously studied in the schools of the Union and autonomous republics.

One cannot, however, ignore the fact that children are greatly overloaded in studying languages at the schools of the Union and autonomous republics. Indeed, at the national schools children study three languages—their native tongue, Russian and one foreign language.

Consideration should be given to the question of allowing parents to have the right to decide to which school (as regards the language in which instruction is given) they will send their children. If a child attends a school in which instruction is given in the language of one of the Union or autonomous republics, he may study Russian as an optional subject. And, conversely, if a child attends a Russian school he may study the language of one of the Union or autonomous republics as an optional subject. It goes without saying that this can only be done when there is the necessary number of children for making up classes in which instruction is given in this or that language.

Giving parents the right to decide which language their child will study compulsorily is the most democratic way of approaching the question; it will eliminate any bureaucratic approach to

this important matter and will make it possible to eliminate the excessive overburdening of school children in studying languages. Permission should be given not to include a foreign language among the compulsory subjects at those schools which do not have the proper conditions for this.

20. A big improvement is needed in the way in which the upbringing of children in the schools is organized. The upbringing must inculcate in the school children a love of knowledge and of work, and respect for people who work; it must shape the communist world outlook of the pupils and must rear them in the spirit of communist morality and of boundless loyalty to the country and the people, and in the spirit of proletarian internationalism.

It is necessary to intensify the work of the teachers, parents and public organizations in cultivating in the pupils habits of good behaviour at school, at home, in the street and in other public places, and with this in view educational propaganda among the broad sections of the population should be considerably improved, and the responsibility of parents and all adults to society for the upbringing of children should be heightened. In this matter the schools and the families must be given every assistance by the party, trade union, Young Communist League and other public organizations. The Soviet schools are called upon to promote actively a higher cultural standard for the entire people.

The public education and public health authorities must strictly supervise the correct sequence of the pupils' work and recreation, must not allow them to be overburdened with studies, social activities and work training, and must take the necessary measures for the further improvement of the health of school children.

21. The reorganization of the system of public education poses in a new way the question of the work of the Young Pioneer and Young Communist League organizations in the schools. The eight-year schools will be attended by children of Young Pioneer age. This will enhance the role of the Young Pioneer organiza-

tions in these schools. In the schools for the second stage there may be either a Y.C.L. organisation of the school itself, or a joint Y.C.L. organisation of the school and the corresponding production establishment. All this will call for substantial changes in the work of the Young Pioneer and Y.C.L. organisations of the schools and in the guidance given them by Y.C.L. and party bodies.

22. An end must be put to the big shortcomings in implementing universal compulsory education of children. It is desirable to establish by law in all the Union republics compulsory eight-year education, providing for the strict responsibility of the parents, or persons taking their place, for the education of the children. The local government bodies must be made responsible for ensuring that all children and young people from the age of seven to 16 attend the eight-year schools. The Central Statistical Board of the U.S.S.R. and its local bodies are in duty bound to keep a better record of children and young people of school age.

With a view to implementing compulsory eight-year education it is necessary to ensure the building of a sufficient number of schools and accommodation for boarders at schools, both with budget funds and with funds from the collective farms and co-operative organisations; to bring about a considerable increase in the number of "after-school-hours groups" in the schools for children whose parents are working, to arrange for hot meals for the pupils at school, and to establish a general education fund for material assistance to children in need (free meals and free footwear, clothing, textbooks, etc.), both from budget resources and from the resources of the collective farms, co-operative organisations and the trade unions.

23. The reorganization of upbringing and education in the Soviet schools makes new and greater demands of the teachers, the foremen, and instructors in vocational subjects.

In Soviet times the number of teachers in the country has increased from 280,000

in 1914 to nearly two million at the present time. This is an immense cultural force, which Lenin spoke of with respect as the army of socialist education. Many teachers who have a good mastery of educational science are working in the schools of the U.S.S.R. At the same time the education and upbringing of children is at times entrusted to persons who are not sufficiently trained for this or who, owing to the way they do their work and their moral characteristics, are unsuited to the requirements of teaching. There are not enough qualified instructors in polytechnical subjects (machine operation, the fundamentals of agriculture, practical instruction at workshops).

The teachers' qualifications are being improved in a one-sided way, primarily with regard to methods of teaching. Teachers are not sufficiently acquainted with the latest achievements of science, culture and technology. There is an excessive regimentation of the work of teachers and teaching staffs as regards the choice of forms and methods of education and upbringing. In a number of places insufficient concern is shown for the material standards of teachers. Measures should be taken to improve the working and living conditions of teachers and to raise their ideological and theoretical level and professional qualifications.

With a view to improving the qualitative composition of teaching staffs and instituting a proper procedure in the appointment and transfer of teaching staff, teachers who do not have the necessary education should pass qualification tests.

24. The science of education has a great part to play in reorganising the schools. Yet up to the present it has failed to tackle many fundamental problems of upbringing and education that are posed by life itself. It is the duty of the science of education to take a leading part in the reorganisation of the public education system. Elaboration of the scientific fundamentals of the content of school education (curriculums, syllabuses, textbooks), and improvement in the methods of education and communist

upbringing of the young people must become an important feature of the activity of pedagogical scientific institutions.

With a view to raising the level of teaching, it is necessary to develop educational research in the Union republics on a still wider scale, to strengthen the bonds between teachers' training institutes and to increase the mutual exchange of the results of their research. The Academy of Educational Sciences of the R.S.F.S.R. must pay more attention to working out the theory of Soviet educational science, to questions of polytechnical and vocational training in the schools, and to making valuable experience generally known.

25. The reorganisation of the system of public education must be carried through in a planned and organised manner, taking every account of distinctive local features and preventing by every means any worsening of the school service for the population. Attention should be paid to the need for further increasing the number of girls of the indigenous nationalities in the upper forms of the schools in the Union and autonomous republics of the East.

A plan for changing over to the new system of school education should be drawn up in each Union republic, applicable to the specific economic and cultural development of the republic. The change-over of the schools from seven-year to eight-year compulsory education and the organisation of the various second-stage schools should begin as from the school year of 1959-60 and be completed within four or five years. Pupils now in the 8th, 9th and 10th forms shall be allowed to complete their secondary school studies under the existing curriculums and syllabuses, but their work training should be improved.

The plans for reorganising the secondary schools must make provision for supplying the higher educational establishments with a sufficient number of pupils leaving secondary schools, since the national economy cannot have any interruption in the reinforcements of

young specialists with the highest qualifications. With this in view, each Union republic, when necessary, should retain for the transitional period (about four to five years) a certain number of the present secondary schools.

The reorganisation of the schools will require extensive work by the central committees of the Communist Parties, the Councils of Ministers and the Ministries of Education of the Union republics, and by the local party and government bodies, in order to improve the material facilities of the schools, to abolish the practice of having more than one shift in schools, to organise production training, to place young people leaving school in jobs without delay and to draw up syllabuses for textbooks, and prepare methodological aids.

VOCATIONAL EDUCATION

26. In connection with the reorganisation of general education, vocational training for young people assumes particularly great importance. Its task is to train in a planned and organised way -- for all branches of the national economy -- cultured, technically-skilled and qualified industrial workers and workers in agriculture.

Inadequate vocational training of a section of the workers is already holding up the growth of production in some cases. Further technical progress will demand still higher qualifications of the entire basic mass of the workers.

Vocational training should develop in close contact with the new plans that have been drawn up by the Communist Party to promote the advance of the national economy of the U.S.S.R.

27. The present Labour Reserves factory, trade, railway, mining and building schools and the vocational and factory schools of the economic councils and departments are lagging behind the increased requirements of industrial and agricultural production. They should be reorganised into day and evening specialised urban vocational schools, with a course of training lasting from one to

Each Union republic should be given the right to decide independently, taking into consideration the local conditions, questions concerning the time classes begin and end, holidays, and the organisation of the pupils' work in industrial and agricultural production.

The further advancement of the education of the working people of all the nationalities of the Soviet Union is regarded by the Communist Party as an important task. The party and the state should take the maximum care to ensure that all men and women workers and collective farmers have a secondary education, regarding this as a prerequisite for the continuous rise of the productivity of labour, and, consequently, as a major prerequisite for successfully building communism.

three years, and agricultural vocational schools with a course lasting from one to two years. The length of the course in these schools is to be fixed in accordance with the complexity of the trade they teach.

The urban vocational schools are to specialise in particular branches of production and are to train qualified workers for industrial, building, transport and communications enterprises, for public utilities, and for trading, cultural and public service establishments.

The rural vocational schools should train qualified agricultural mechanics and builders, and other responsible workers necessary for the farms.

Special attention should be paid to drawing girls into the vocational schools, and not only for public services, retail trade and other specialties, but also for occupations in industrial production (instrument-making, radio electronics, electrical engineering, textiles, clothing and knitwear, etc.).

On the basis of a knowledge of the fundamentals of science, the polytechnical training and work skills acquired by the pupils at the eight-year schools, the vocational schools should give their

students additional knowledge in general educational subjects.

The number of vocational schools should increase in accordance with the need of the national economy for these schools. Some of the existing Labour Reserves schools should be retained for a period of from three to five years, so that the young people who will complete their studies at 10-year general educational schools during these years may have the opportunity to enter technical schools; and young people who, for some reason, do not complete their studies at the schools, will be able to enter trade, building, railway and mining schools, factory trade schools and agricultural mechanisation schools.

28. The vocational schools should have the instructional workshops necessary for mastering the fundamentals of vocational skills, and laboratories fitted out with the appropriate production training equipment and staffed by qualified production training foremen and engineering instructors entirely engaged in the teaching and training of the pupils. The educational process at these schools is to be based on the active and systematic participation of young people in productive labour and is to be subordinated to the task of training workers of particular trades. The organic linking of production training with broad technical education and the combination of training in workshops and at enterprises will make it possible in these schools to train technically-educated workers with a wide range of knowledge and high qualifications.

The vocational schools are to carry out their work of education and training in close contact with enterprises, construction projects, state farms and collective farms, which are in duty bound to provide work places for the production practice of the pupils and to take care to provide conditions enabling the young people to study successfully and master new techniques, advanced technology and highly productive methods of work. The economic councils must give every

assistance to improve the vocational training of the youth.

An all-important task of the vocational schools is the communist education of the pupils, developing them ideologically, and inculcating in them a communist attitude towards work. The Y.C.L. is to play a big part in the communist education of the pupils of vocational schools.

29. In order that the vocational schools may gradually begin partially to pay their way, measures should be worked out and consistently implemented to extend and increase the incomes which the schools derive from their production activity.

In view of the improvement in the material security of the working people, it is desirable, in order to increase the pupils' incentives to obtain a better mastery of their trade, to change the existing conditions concerning material provision for the pupils, by introducing apprenticeship wages instead of free clothing and meals.

Full state maintenance should be retained for pupils who are orphans and pupils who come from children's homes or large families.

The collective farms should be recommended to consider the question of allocating appropriate funds for the training of young people from collective farms at vocational schools.

30. The reorganisation of the system of vocational education presents new and higher demands with regard to the level of technical, ideological, political and teachers' training for the foremen responsible for production training and teachers in the vocational schools. The development of the network of these schools will call for more foremen and teachers. It is therefore necessary to pay more attention to training them at specialised secondary schools and higher educational establishments.

The quality of textbooks and visual aids should be improved and more should be produced; the production of technical education films and popular science films should be extended, and wide use should be made of radio and

television in vocational training

31. The U.S.S.R. State Planning Committee, the U.S.S.R. Council of Ministers' Central Board of Labour Reserves, the Councils of Ministers of the Union republics and the Ministries of Education should draw up long-term plans for the vocational training and employment of young people leaving the eight-year general educational schools, the secondary schools giving training in production and the vocational schools; they should make provision for reserved places to be established at enterprises so that the young people can be given jobs, and they should also provide for the

strict observance of labour protection and safety regulations.

32. Besides the development of vocational schools, it is necessary to improve the training of new cadres of workers, either individually or in teams, and through the system of short courses at enterprises. Here production training should be carried out on the basis of plans and programmes uniform for each trade and concretely developed on the spot in relation to the specific features of the particular enterprise. When necessary, theoretical training should be given at the nearest vocational schools.

SPECIALISED SECONDARY EDUCATION

33. Persons with a specialised secondary education have an important place in industrial and agricultural production and at cultural, educational and public health institutions. Technicians play a decisive part as organisers of production. It is they—the technicians—who directly organise production, and special attention should therefore be paid to their training.

The interests of modern production, which is based on the latest achievements of science and technology, require of those trained at specialised secondary schools a good knowledge of practical work as well as a high level of theoretical training. Yet the quality of training at these schools still fails to meet the requirements of life. The students of specialised secondary schools and other specialised schools do not play a sufficient part in productive labour and do not acquire adequate production skill for practical work. The system of specialised secondary education must be improved.

34. The system of specialised secondary education should be based both on the eight-year polytechnical schools and on the complete secondary schools

The training of specialists at specialised secondary schools should be more closely linked with socially useful

labour. Depending on the branch of the national economy for which specialists are being trained and on the working conditions at the enterprises, construction projects and other organisations, the length of the particular periods of full-time and spare-time training may vary. Study at specialised secondary schools must give the pupils, in addition to a general education, the necessary knowledge in their speciality, working skills, and a definite trade with an appropriate qualification rating. The quality of instruction at specialised secondary schools should be improved, as should the composition of their teaching staffs, and the teachers' qualifications should be systematically raised.

35. The specialised secondary schools should be brought closer to production and should be developed, taking into consideration the requirements of the economic areas as regards personnel, and giving preference to evening and correspondence education. The economic councils, Ministries and departments should co-operate more widely in training specialists with a secondary education, and the Union republics should make a more thorough study of the need for such personnel and should plan their training better.

It is recommended that shops be organised at specialised secondary schools for the manufacture of industrial

products by using the labour of the pupils.

Agricultural specialised secondary schools should be organised at big farms, and all the main work must be done by the pupils themselves.

In admitting students, evening and

HIGHER EDUCATIONAL ESTABLISHMENTS

36. The 20th Congress of the Communist Party of the Soviet Union has set the system of higher education, as its main task, the further improvement of the quality of the training provided for specialists on the basis of the close linking of instruction with practical work, with production. The new tasks of building communism demand that the existing serious shortcomings in the work of higher educational establishments be eliminated. Today many young people graduating from colleges have a poor knowledge of practical work and are not sufficiently trained to decide questions of modern production independently. Quite a lot of time elapses before such a specialist finds his place in the work team. The higher educational establishments must be brought closer to life, to production, and must have real links with it. At the same time it is also necessary to raise the theoretical level of the training provided for specialists, in keeping with the latest achievements of science.

In the present conditions of building communism the higher educational establishments are to train men and women with an all-round education, who have a thorough knowledge of their own particular field of science and technology and are active and conscious builders of communism. Special attention should be paid to a further improvement in the quality of the training given to specialists for industry and agriculture.

The reorganisation of the system of higher education, the aim of which is to ensure better practical and theoretical training for specialists, should help to bring about a considerable improvement in the study of the social sciences and

correspondence schools should give preference to persons working in trades allied to specialities they have chosen. It is advisable to organise correspondence education at the main, large, specialised secondary schools which have qualified teaching staffs and the necessary instructional and material facilities.

should further the communist education of young people and the active participation of all teachers in the training of students.

Taking into consideration the fact that about half of all the country's scientific personnel are concentrated at higher educational establishments, it is necessary to bring about a substantial improvement in the part played by those establishments in scientific research and to get all teachers to take an active part in this work.

Higher educational institutions should primarily admit young people who have a certain record of practical work. Better conditions should be created for young workers and collective farmers to prepare for entering higher educational establishments.

The concrete forms by which instruction at higher educational establishments is combined with practice, with work, should be determined in accordance with the specialities of the particular establishment, the composition of its students, and certain, specific national and local features.

37. In developing our system of higher education it is necessary to proceed, in the first place, along the lines of evening and correspondence education. The system of evening and correspondence higher education should be extended in every way and the quality of the instruction given should be raised to a new level. The network of correspondence and evening colleges must be improved and reinforced, and it should be organised in such a way that evening and correspondence education, too, is based on the main large colleges having

qualified professors and instructors and adequate material and technical facilities.

It is desirable to transfer the instruction and consultation centres and branches of higher educational establishments to large industrial and agricultural enterprises, which will enable the economic, party, trade union and Y.C.L. organisations to supervise and help the students in their studies. Evening and correspondence colleges, departments and divisions, and instruction and consultation centres should be staffed by very highly qualified professors and instructors, in numbers ensuring that studies proceed in a normal way in this system.

With the further advance of science and technology, there arises the need for college-trained specialists to acquire new knowledge. In this connection the higher educational establishments must ensure that specialists employed in various fields of the national economy, culture and education improve their qualifications in their spare time.

It is necessary to improve the supply of textbooks, teaching aids, printed lectures and other literature for correspondence students, by providing the necessary printing and publishing facilities for this purpose. The book-selling organisations must establish a procedure by which a student can always acquire the literature he needs for his studies. Examinations and tests of spare-time students must be held at various times throughout the year.

The collective farms should be recommended to extend to those of their members who are correspondence students successfully pursuing their studies, the privileges enjoyed by correspondence students working at industrial enterprises.

The college correspondence system must be developed in such a way that people engaged in useful work in society should be able in their spare time, if they so desire, to receive a higher education or to improve their qualifications and study art, painting, music, the humanities, and so on.

38. In training engineers, there can

be various forms by which study is combined with work in production. At most technical colleges it is more advisable to combine study with work in production under the system of evening or correspondence education in the first two years.

In a number of specialities, where the students first study a cycle of complex theoretical subjects and also do extensive laboratory work, it is more expedient that they should study full time for the first two or three years. After that, a year's work practice should be provided for them in staff jobs directly in production, in laboratories, or in designing bureaus.

In improving the system of higher education, great attention should be paid to the training of engineers for the new branches of technology and for the further development of research and designing work. With the rapid development of science and technology, an acute need is arising for specialists of a new type who combine engineering knowledge with a profound theoretical training.

The next few years are to see the development on a wide scale of the training of engineers in the peaceful uses of atomic energy, in automation and telemechanics, electronics, electrical engineering and instrument making, radio electronics and communications, and chemical technology. The higher educational establishments are to train engineers capable, not only of fully applying modern techniques, but also of creating the techniques of the future.

In addition to a high standard of technical training, our engineers must have a good knowledge of economics and of the organisation of production.

The production work of the students must be organised in such a way that it will help them to obtain a better mastery of their future profession. A procedure should be established at the enterprises which will enable the students to make a consistent study of the technological process of production. During their study in their spare time the students will master

subjects which they can tackle themselves.

When persons having a sufficient work record in their chosen speciality are admitted to higher educational establishments, it is possible to arrange for full-time study for them. At higher educational establishments training engineers for branches of production that are of a seasonal character, instruction must be so organised that studies at higher educational establishments alternate with work in production, on a seasonal basis.

Factory colleges at large enterprises are a good form of combining study with productive work. In particular, factory colleges can be organised on the basis of existing factory branches of the main large colleges. It is also possible to organise at higher educational establishments industrial enterprises and shops turning out goods, using the labour power of the students.

39. At agricultural colleges study and productive labour should be combined, taking into account the seasonal nature of production. The studies should be conducted at higher educational establishments organised on the basis of big state farms possessing extensive model instructional husbandries, good laboratories, and all the prerequisites for practical work. The students themselves must look after the animals, repair the machines, operate them, and sow, cultivate and harvest the crops. All agricultural specialists must receive a good training in the economics and organisation of socialist agricultural production. There must be a certain amount of specialisation in the training of agricultural specialists in accordance with the various zones of the country.

The agricultural colleges must become scientific centres and must help the collective and state farms to improve yields per hectare, the productivity of livestock, and the mechanisation and organisation of agricultural production, and to organise experimental work. The amalgamation of research institutes and experimental stations with agricultural colleges should be carried out on a wide scale. The colleges must carry out extensive measures

in order to improve the qualifications of agricultural specialists through refresher departments and other forms in which this can be done.

40. The interests of Soviet science, technology and culture require the further development of university education. The universities train specialists for scientific research institutions and teachers for the secondary schools.

In training mathematicians, physicists, biologists, philologists, specialists in mechanics, chemistry and other fields of science at universities, it is necessary to enhance the practical training of the students by longer periods of work in factory laboratories, designing bureaus, experimental agricultural stations or other scientific research establishments.

University students who are going to work in the schools should be given better methodological training and practical teaching work, for which the services of the best secondary school teachers should be enlisted.

In the next few years it is necessary at the universities to increase considerably the training of mathematicians, especially in the field of computing mathematics, biologists, and, primarily, biophysicists, biochemists, physiologists and geneticists, physicists, particularly in nuclear physics and radio-physics, and chemists specialising in the field of chemical catalysis and high polymer substances. Computing laboratories equipped with electronic machines should be set up at the universities; university nuclear laboratories should be supplied with modern accelerators, radio-chemical and radio-biological laboratories should be established, etc.

In the process of improving university education increased attention must be paid in every way to the humanities, the importance of which is growing constantly.

In training economists, jurists, historians, philosophers and certain other specialists in the humanities, a system of instruction should be introduced under which students who have no work record must in the first year or two study in their

spare time, while working in the national economy.

41. The reorganisation of the system of secondary education calls for a fundamental improvement in the training of teachers at teachers' training institutes and universities. These higher educational establishments must train teachers for the secondary schools who have a profound knowledge of their subject, possess adequate teaching experience, have a good knowledge of life, and can bring up the pupils in the spirit of boundless loyalty to the cause of communism. Teachers for primary schools should be trained at special departments in teachers' training institutes with a view to having all schools completely staffed with college-trained teachers in the future.

It is necessary to organise the training of teachers in special subjects (agronomy, animal husbandry, technology, etc.), both at teachers' training institutes and at specialised higher educational establishments, depending on the specific conditions. In the period from 1959 to 1965 a certain number of qualified engineers and agronomists should be sent to teach in the general schools, vocational schools and specialised secondary schools, providing proper conditions for their training for teaching. The present system of instruction at teaching institutes should be supplemented by more extensive production work and practical work in teaching.

At teachers' training institutes it is necessary to raise the scientific and theoretical level of teaching, extensively develop scientific research, set up scientific laboratories and increase the institutes' ties with the schools and with production and scientific organisations.

42. Serious attention should be paid to raising the quality of the training for doctors. Persons who have chosen this profession have to meet a number of big demands of a special character. Even before entering a medical college every young person must show an interest in the medical profession and must have some practical experience of work at medical establishments. Therefore

medical institutes should, in the main, select young people who have done practical work as junior service personnel at medical or prophylactic institutions.

The students' training must be accompanied by continued practical work at medical and prophylactic or health and hygiene institutions. For persons having a secondary medical education and a two-year record of work in their speciality, instruction in the first two years may be organised in their spare time.

In order to raise the quality of the training for doctors, it is necessary to improve the organisation of research work at medical colleges in the main fields of medical science.

43. The reorganisation of the system of public education will make it possible to pursue the only correct method of admitting students to colleges on the principle of selecting the most industrious, capable and best trained people. The higher educational institutions should admit young people on a competitive basis, giving preference to those who have a record of practical work. In the selection on a competitive basis it is necessary to consider not only the total marks received in the examinations, but, first and foremost, the ratings in subjects related to the applicant's future speciality and the recommendations of public organisations, so as to ensure that the best people are selected—people who will be able in a short time to apply effectively in production the knowledge they will have received. In order to achieve greater objectivity in the selection of young people for college entry, it is advisable in some cases to hold written examinations, with the candidate using a pseudonym.

The heads of higher educational institutions, and the party, trade union and Y.C.L. organisations must carry on active work at factories, collective farms and state farms to ensure a higher intake of workers and collective farmers at the colleges. In admitting students to higher educational institutions it is necessary to consider their inclination and love for their chosen speciality, as well as the

specific features of male and female labour.

44. A decisive prerequisite for improving both the practical and theoretical training of young specialists is to improve the composition of science teachers at higher educational establishments. Conditions should be provided for training highly-qualified scientific workers and teachers, able to ensure the further development of science, technology and culture, from among capable young people who are college trained and have practical experience of work.

The most highly qualified engineers and technicians of enterprises, construction projects, designing bureaus and research institutes, agronomists and doctors, capable of teaching by using advanced methods of production and the latest achievements of science and technology, should be widely enlisted for teaching at higher educational establishments. Conditions should be worked out, enabling them to combine teaching with their basic work in production, and the terms of their remuneration at the colleges should also be determined.

It is the duty of every teacher of a higher educational institution constantly to improve his scientific qualifications, to take an active part in research work, and to give scientific assistance to production.

It is considered expedient to establish a system under which teachers of higher educational establishments in a number of fields are sent to do practical work in appropriate branches of the national economy for a certain period, depending on the nature of their scientific and teaching work.

The present system by which scientific and teaching personnel qualify should be improved, ensuring that higher demands are made with regard to scientific works and that scientific degrees are conferred only on those who by their creative work make a definite contribution to science and practice.

Professors and lecturers at higher educational establishments must in the main be elected under the competitive system, which should be substantially

improved; the people who are most capable scientifically and from the point of view of teaching must be chosen for the colleges.

45. The role of the higher educational institutions in the development of science, technology and culture is growing constantly. Colleges should carry on research at a high theoretical level and of major importance for the development of the national economy, science and culture. The professors and lecturers must be more closely associated with production, must take part in working out major problems of technological progress, must more actively apply the latest achievements of science and technology in production, must systematically draw general conclusions from the advanced experience of enterprises and popularise those conclusions, and must carry out more profound research in the social sciences.

The fact that the guidance of industry and construction has been brought nearer to the enterprises helps the colleges to tackle the most important research problems. The economic councils and the agricultural management bodies must assist the colleges in applying the results of scientific investigations and in organising production experiments.

It is considered advisable to merge some research institutes with corresponding higher educational establishments. Scientific work should be co-ordinated between higher educational establishments, the Academy of Sciences of the U.S.S.R. and the Academies of Sciences of the Union republics, and the industrial academies, research institutes and large factory laboratories.

46. The educational importance of the higher educational institutions is great. The colleges must turn out people who have mastered their speciality well, who are active and passionate champions of Lenin's ideas and the policy of the Communist Party, who are bold and enthusiastic, are profoundly convinced of the triumph of our cause.

In fostering these qualities, a big part is played by studying the social sciences.

Knowledge of the fundamentals of Marxism-Leninism is necessary for specialists in all fields. One must study Lenin and be able to apply his tremendous theoretical heritage in life, to build up life along communist lines. Marxism-Leninism must be taught in a creative, militant way. Our youth must be brought up in the spirit of irreconcilability to bourgeois ideology and any manifestations of revisionism. Instruction in the social sciences must be conducted so that it is inseparably linked with the study of the natural sciences, and it must help to develop in the students a scientific method of cognition. The high requirements with regard to teaching Marxist-Leninist theory in the colleges make it the duty of every teacher constantly and persistently to deepen his knowledge and closely link his work with practice, with current tasks.

It is the job of all the professors and lecturers and of party, trade union and Y.C.L. organisations to attend to the upbringing of the young people at higher educational institutions. It is their duty to inculcate in the students a Marxist-Leninist world outlook, a love for work, communist morality, and the habit of social activity.

The colleges must imbue the students with a responsible attitude to their studies, with a creative approach to mastering the sciences, with independence in their work. They must eliminate the overloading of students with compulsory studies and must draw the senior students into scientific research work.

47. Extensive work should be carried out to bring order into the system of higher educational institutions in the country, with a view to bringing the colleges closer to production. The number of colleges should be increased in the new industrial centres, especially in Siberia, the Far East and the Central Asian republics. The unjustified concentration of higher educational establishments in Moscow, Leningrad, Kiev and some other cities must be eliminated.

48. The reorganisation of the higher education system along the lines of com-

binning study with work in production must be planned and organised so as to increase year by year the output of specialists needed for the national economy, science and culture. It is considered desirable to carry out the reorganisation of the work of a substantial section of the higher educational institutions gradually, over a period of three to five years, beginning with 1959. The heads of economic councils, enterprises, and scientific research and other organisations must place at the disposal of the colleges paid staff jobs as workers and technicians which will be filled by students, must organise production training for the students, and must provide them with living accommodation, working clothes, etc.

All the measures for reorganising the system of higher education are designed to help the country's colleges to carry out still better the important state tasks confronting them.

The reorganisation of the secondary and higher educational establishments affects the interests of millions of men and women, of the entire Soviet people. A correct solution of this problem will be of immense significance for the further material and spiritual development of Soviet society, especially in the light of the great plans that will be discussed and adopted by the 21st Congress of the C.P.S.U. Bringing the school closer to life will create the conditions that are really necessary for the better education of the rising generation who will live and work under communism.

There is not a single family in our country which is not keenly interested in the question of reorganising the schools. Therefore the central committee of the C.P.S.U. and the U.S.S.R. Council of Ministers consider it necessary to put the present thesis before the whole country for discussion. This will make it possible, when finally determining the concrete ways of reorganising the system of public education, to make fuller use of the practical experience of the foremost schools and colleges which have already achieved certain successes in the

labour upbringing of the young people, and of the suggestions of broad sections of the Soviet public. It goes without saying that in doing this, the specific national features of each Union republic must be taken into account.

The proposed reorganisation will enhance the role of the schools in educating and bringing up the young people, will substantially raise the general educational level and work qualifications

of the young people, will better ensure the training of highly qualified personnel for all branches of the national economy, science and culture, and will to a still greater extent facilitate the growth of the might of the Soviet Union, which is advancing with a firm step along the road of building communism.

(The above Theses were published in the Soviet Union on November 16, 1958.)

The LAND of SOVIETS

A Soviet Family Budget

STAT

N. TATARSKAYA, A. GURYANOV

**A SOVIET FAMILY
BUDGET**



FOREIGN LANGUAGES PUBLISHING HOUSE
Moscow 1957

И ТАТАРСКАЯ, А. ГУРЬЯНОВ
БЮДЖЕТ РАБОЧЕЙ СЕМЬИ

TRANSLATED FROM THE RUSSIAN
BY GEORGE H HANNA

Printed in the Union of Soviet Socialist Republics

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A LIFE OF HONEST TOIL

Father and daughter always set off to work together. In this respect, Anastasia Grigoryevna, usually a good-tempered, easily persuaded woman, was implacable.

"Who ever heard of a girl going out alone at night. Do what you like about it, Dad, either you change with somebody or talk to the people in Lusya's shop, only see that you both work in the same shift."

After work Semyon Alexeyevich would always wait for his daughter at the gates. They would exchange a few words about their job and then walk home in silence. Lusya, a tall girl with high cheekbones, as like her mother as two peas in a pod, would walk on ahead, her father keeping a little behind her.

Semyon Alexeyevich was a quick and efficient worker but was lost for words, was even bashful, when amongst his fellow-workers. At home, too, he was inclined to be taciturn, unlike his talkative wife. The children respected their father who had made a name for himself as a first-rate tradesman and they loved him for his kindness and just severity. Now that Lusya, the eldest, was independent, she showed, as is often the case with the younger generation, an attitude of solicitude and patronage towards her father.

As they walked home through the empty streets of a town, long wrapt in slumber, the girl was worried by her own thoughts.

"Dad is beginning to weaken. He goes to work smartly enough, but on the way home...." She slackened her pace. "And will he ever admit he's tired!?"

During that summer Lusya had often noticed that her father's face was drawn with pain and by tacit consent they stopped for a rest.

"You ought to go to the doctor, Dad. What a man you are, to be sure! Why, I can see that you're not well."

Semyon Alexeyevich would only wave her aside.

"There's nothing wrong with me, I tell you, just something gets hold of my leg and arm so that it hurts to move them. It's my age, girlie...."

Their conversation usually ended on that note.

"Yes, I can see myself that Dad's tired out; he's not at all well," Anastasia Grigoryevna, his wife, would say in his absence. "What can we do? How can we make ends meet if he leaves his job? Nina has another three years before she finishes college. Alya's thinking about college, too, to say nothing of the youngsters. It'll be a long time before they bring anything in."

Still they tried to fathom it out.

Anastasia Grigoryevna earned 360 rubles a month as cloak-room attendant in the offices of the Automobile Plant. Lusya, forewoman of one of the sections of the press shop, made a thousand rubles a month on the average. If Semyon Alexeyevich went on pension that would bring in another 210 rubles a month, about fifteen hundred altogether. But how could a family of seven live on that money?... And then there was the question of whether father would agree to leave the plant.

The Automobile Plant in the town of Gorky had long been a second home to Semyon Alexeyevich. Not for nothing would Anastasia Grigoryevna say to him angrily: "Where are you off to so early in the morning? It's a good two hours before your shift begins, you'd better sit quietly at home and rest."

How could he sit still? That restlessness had come to him many years before when Semyon Andrianov had been demobilized from the Red Army and had entered the plant's training shops to learn a trade he had never even heard of before—furnace hand in the heat-treatment shop. At first it had seemed he would never get used to working in front of the blazing furnace amid smoke and noise. He soon

got used to it, however. In three years he was made under-foreman and a few years later became shop foreman, one of the officers of the plant's army. Years of practical experience and the love he felt for his work and his shop made up for his lack of education.

When Semyon Alexeyevich came to the plant he was a carefree young fellow with a shock of black curls. At first he earned from 80 to 100 rubles a month. Today his hair is grey, he has three grown-up daughters, a son, his favourite, in the sixth form at school and the only man in the family besides his father—and we must not forget the youngest, six-year-old Natasha, still too young for school.

Thoughts, memories flash across his mind one after the other. Was life really over for him, was it time to make way for the younger generation of stronger and better educated young men?

There was no denying it, when his old friend Ivan Ivanovich Raikov, secretary of the Communist Party organization of their shop, first broached the question of pension, it cut him to the quick. It was on the day the new decree was published in the papers.

"I've been wanting to talk to you about it for a long time, only I knew you wouldn't listen," he said. "I know you've got a big family, five children. It would have been hard on them if they had lost the biggest income in the family. But now things are different. It's time you took a rest, old chap. If you get better and want to come back there'll always be a place for you at the plant."

The shop gave its veterans of labour a real festive farewell. Many were the words of gratitude said to these old pioneers of the Soviet automobile industry and each of them was handed a gift from the shop's workers. The bitterness of parting was tempered by great human solicitude for a peaceful and comfortable old age....

* * *

We got acquainted with Semyon Alexeyevich Andrianov's family at the beginning of 1957. The preceding year had brought many changes in the budget of every work-

ing-class family and there had been changes in the Andrianovs' too.

We were sitting in their large and comfortable apartment. It was obvious that there was no lack of home-loving feminine hands in the house. Table-cloths, runners, cushion-covers, all beautifully embroidered, lent a special sort of cosiness to the room.

A year before the couple had celebrated their silver wedding—twenty-five years they had lived together. As they glanced back it seemed but yesterday that bright-eyed Anastasia, full of laughter, nimble and ever ready to do things, had captured the heart of Semyon Andrianov. When he came back from the army his hands itched for the soil, he had been pining for the farm for three years but she would have none of it.

"If you go to work in the town I'll marry you. If not—you can look for another."

And Semyon took heed—he knew that nowhere in the world would he find anybody better than his Anastasia. How could he let such a girl slip through his fingers? Today, a quarter of a century later, he admits:

"She's the mainstay of the whole family—I'm nothing!"

We had a real heart-to-heart talk with them. Anastasia Grigoryevna did most of the talking. Her husband glanced at her with a somewhat condescending smile on his lips.

"I don't quite know how to explain it, but somehow things have been much easier with us this last year. You can imagine it—we were worried about Dad's health but now he's on pension. And he's getting better, he goes to the clinic for treatments."

Semyon Alexoyevich held out to us a little grey booklet; not much to look at but it summed up his 25 years of honest labour. According to the new old-age pensions law, the worker Andrianov received a pension of 55 per cent of his average monthly earnings. To this was added 10 per cent for unbroken service at one enterprise and 15 per cent for his dependents. The total came to 1,200 rubles a month.

"Of course, we've never tried to work out our income," continued Anastasia Grigoryevna, "but you can tot it up



The family gathers for supper

if you're interested. Our eldest girl, Lusya, earns about a thousand rubles a month. Our second girl, Nina, is at college and since January last year she has been getting an augmented stipend for good progress—320 rubles a month. Even Alya makes her contribution, it's not a very big one, but it helps."

Alya was sitting there with us, the very image of her father, with the same big, thoughtful eyes. She smiled shyly.

"You can leave me out, mother."

In the spring of last year Alya had finished secondary school. Her ambition had been to enter the Department of Biology of Gorky University but she failed in the competitive examination. She got poor marks in her favourite subject, chemistry, and oceans of tears were shed. Her elder sisters were as much upset as Alya herself.

"What is the girl to do now? She's only just turned seventeen, she's too young to work. Let her stay home for a year and then try the examination again," was the decision of the feminine half of the family.

But on this occasion her father displayed absolute firmness.

"She must learn a trade. If chemistry and biology are her real vocation she won't lose her taste for them."

And so Alya is attending the Automobile Plant's Technical School and studying electricity. She does well at her studies and brings a stipend of 235 rubles a month home to her mother. *

Together we totted up the family's income. In the course of a year they had earned, together, 38,180 rubles. Anastasia Grigoryevna clapped her hands.

"Now just fancy how much money has passed through my hands."

But this was not all. During the year the Andrianov family had income from other sources: the girls earned a few hundred rubles unloading cabbage for the factory dining-room and both father and mother had earned bonuses. This added another 2,800 rubles.

"Do you have any other sort of income?" we asked, interested.

He told us that during the war the plant had given the Andrianovs an allotment of land. It was not very big but they had kept it and still planted potatoes on it. They gathered between eleven and thirteen sacks of potatoes every year which was enough for the family table and for next year's seed. The market price of potatoes that year was one ruble a kilogram,* eleven sacks at 50 kilograms each meant 550 rubles. This sum we also added to the family income.

Then we summed up the situation. In 1956 the Andrianov family had a total income of 41,530 rubles. Semyon Alexeyovich had earned 17,500 rubles of this sum—his wages for nine months, including progressive pay for work above quota, and his pension for the other three months. Anastasia Grigoryevna had contributed 4,320 rubles, Lusya 12,000, Nina 3,420 and Alya 940 rubles; bonuses, income from the allotment and for unloading cabbage brought a further 3,350 rubles.

Why, then, did Anastasia Grigoryevna say with such confidence:

* 1 kg.—2.2 lbs.



Alya Andrianova is studying for her exams

"This year we have begun to live much better."

To find the answer to this we must return to 1955. That year Semyon Alexeyevich, Anastasia Grigoryevna and Lusya earned the same amounts. Nina was then in her second year at college. She had always been a joy to her parents, her school report cards had rarely had a mark lower than "good." When she entered college there was even more reason for keeping up her record. If she were marked "fair" in any subject at the end-of-term examinations it would mean that she would lose her scholarship stipend for the next term and Nina knew well enough that although the sum was not a large one, it meant quite a lot to the family.

Whether Nina relied too much on her knowledge or whether, as sometimes happens, she lost her head when she was answering the professor, we do not know, the fatal word "fair" appeared in her record book.

It was very hard for her to go home and say, "Mum, you mustn't count on my stipend any more!" Nevertheless she had to say it.

At the college they knew that Nina Andrianova was one of a big family and that every ruble counted with them, but still the authorities could not make any exceptions to the rule.

In 1955 Alya was in the last form at school and so she did not bring any money into the house. Other extras were also less, they amounted to only 1,550 rubles.

The Andrianov budget for 1956 was 3,580 rubles more than in 1955. Was this, however, the only reason for the Andrianovs' finding life easier in 1956 than in the previous year?

HOW ANASTASIA GRIGORYEVNA BECAME A GOOD HOUSEKEEPER

"You'll excuse my plain speaking," said Anastasia Grigoryevna, "but there's something I want to tell you. It happened the summer before last. I don't remember how we came to talk about it: maybe one of the girls wanted to go to an evening party; all her friends had new frocks while she had only one best frock for all occasions, or, perhaps, it was something else—only I remember that the girls said that we don't know how to live: 'Look,' they said, 'other people get something new every month and all our money goes on food and nothing else.' I was so upset that I even cried. It was true, we seemed to have plenty of money but we could never buy more than necessities. In 1956, however, the girls have had nine new dresses made. Everybody got a new coat except Nina and Dad. And besides that we got 24 pairs of boots and shoes (including a pair of sandals for Natasha that cost 17 rubles and a pair of fur-lined winter boots for Lusya that cost 340 rubles). We made presents of watches to the two elder girls—Zvezda for Lusya and a Zarya for Nina."

"To tell you the truth," Anastasia Grigoryevna continued thoughtfully, "I don't know how we managed to get so rich in one year."

Perhaps the daughters' recriminations had made her economize on food to save money for clothes? Anastasia Grigoryevna very energetically rejected that idea.

"Oh, no," she said, and the children lent their support, "we have been eating better, we've had more variety."

Then what was the reason?

It may be readily understood that better living in the family was not only due to the difference in income. Where, then, did they manage to save money enough for clothes and footwear and for better food? In 1955 part of the family's food had to be bought at higher prices on the collective-farm markets as there was a shortage in the government food shops. In 1956 Anastasia Grigoryevna was able to buy meat in a shop at 12 or 14 rubles a kilogram whereas in the previous year she had had to pay 20 to 24 rubles a kilogram on the market. Butter cost 14 rubles a kilogram more on the market than in the government shops, milk, which cost 2 rubles 90 kopeks a litre* (government price) in winter cost from four and a half to five rubles on the market. In the summer of 1956 milk cost a ruble and a half a litre on the market.

According to our calculations the family lost about 3,500 rubles a year by buying food on the market at higher prices.

Today Anastasia Grigoryevna spends 1,645 rubles a month on food.

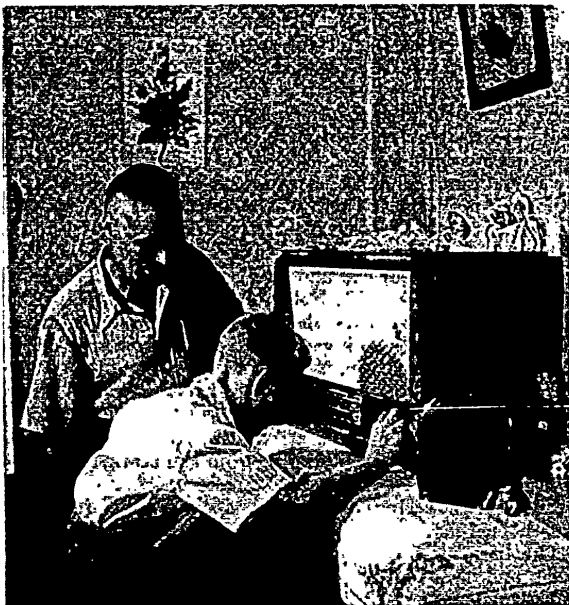
The family's monthly consumption is: bread—120 kg., meat and fish—38 kg., cereals, macaroni, etc.—18 kg., fats—about 10 kg. (of them vegetable oil—3 kg.), milk—90 litres, potatoes and other vegetables—100 kg., sugar—18 kg., etc. This includes food eaten in canteens and dining-rooms where they lunch.

From this it follows that in 1956 the Andrianov family spent 19,740 rubles on food for the whole year. As we have already seen, the amount spent in 1955 was greater by 3,500 rubles, that is, 23,200 rubles.

Expenditure on food in 1955 amounted to 61 per cent of their total income of 37,950 rubles. In 1956 the Andrianovs spent 47.5 per cent of a total income of 41,530 rubles on food, quite a big difference—13.6 per cent.

There was another important change in the family bud-

* 1 litre—about 2 pints.



Another dream comes true—they've bought
a new radio set

et which must be taken into consideration: the family had to pay 450 rubles college fees for Nina and school fees for Alya in the 1955-56 school year. The sum is not a big one but it was just enough for Anastasia Grigoryevna to buy a pair of fur-lined winter boots for her eldest daughter and a pair of felt boots with rubber overshoes and material for a summer dress for the youngest.

Thus we see that the new decree abolishing school and college fees also affected the Andrianovs' budget.

Now, by a joint effort, we have discovered why the



Natasha Andrianova (right) shows her friends
the family album

"poor housekeeper" Anastasia Grigoryevna turned into a "good and efficient housekeeper" in 1956 and her son and daughters got new clothes.

The family was now able to spend 52.5 per cent of their income, or 21,790 rubles, for other things than food. Part of the money went for rent and municipal services (heating, lighting, water), transport, taxes, amusements, books, etc. Almost 12,000 rubles was left for clothing and footwear and other needs.

"We never seem to have enough shoes," complained Anastasia Grigoryevna. "Not a month passes but I must

take them to be repaired. It isn't that they don't take care of them, either. I suppose the quality isn't too good. Especially the children's shoes. They ought to have steel tips on the toes and heels."

Anastasia Grigoryevna also complained of the quality of socks and stockings manufactured in Gorky, and of the poor dyes used for cheap summer materials.

We could not but agree with her. A thrifty housewife reckons on every article lasting a definite time and on account of the poor quality of some locally made goods she had been forced to spend extra money....

INVISIBLE INCOME

On one of the days when we visited the Andrianovs it happened that the grown-ups were all out. Lusya and Anastasia Grigoryevna were at work, Semyon Alexeyevich had gone shopping while Alya and Nina were, as usual, at their respective studies. The door was opened by Natasha.

"Daddy said please wait for him. Take off your coats and come in. I'll be mother."

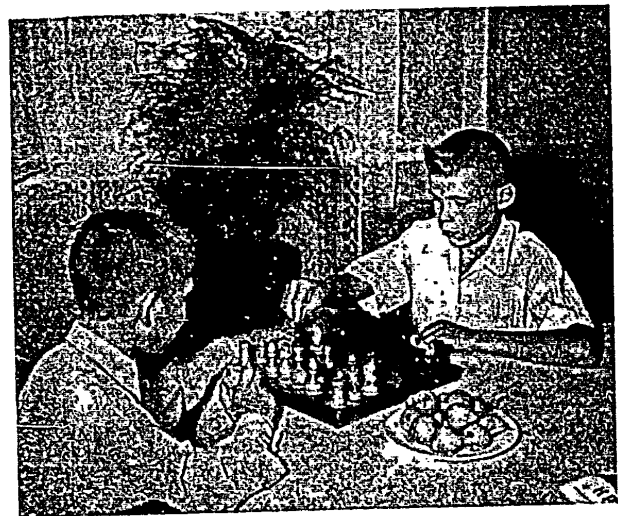
It was obvious that little Natasha was fond of playing hostess.

"Volodya," she called out to her brother. "We've got guests."

Volodya was busy, he was tidying up the apartment. He made the beds with amazing care, several times standing back to make sure the bedspreads were on straight and that the lace covers on the pillows were in their proper places. The boy was a bit ashamed of being caught at this "unmasculine" job but kept on with it all the same.

"See what a helper he's getting to be." Natasha praised her brother patronizingly, apparently repeating her mother's words. "He always tidies up when Mummy isn't at home. (Anastasia Grigoryevna worked every other day.) And the girls wax the floors and help Mummy wash clothes, and they can cook, too."

Our little hostess showed us her toys and books, boasted



Volodya (right) is a good chess-player. Who'll win this time: he or his friend Gena Meshkov?

of Volodya's new skis and then, not knowing what to do to amuse us, got out the fat family album.

She had a string of commentaries for every photograph, some of which were corrected by her brother.

"This is our Lusya in Leningrad. And that's Nina on a ship when she went somewhere."

"That was when she had a holiday at a floating sanatorium," Volodya put in.

"This is Alya at a Young Pioneer camp. Look how she squeezed into the corner and shut her eyes as though she were afraid of being photographed. And that's Volodya in a Young Pioneer camp, too."

Volodya could not keep quiet any longer. "That was two years ago," he said. "I went to the Automobile Plant's

camp four years running but last year I spent my holidays at my aunt's in the country. I liked it there, I could swim and ride horses as much as I wanted. My uncle, Dad's brother, he's stableman at a kolkhoz. It was wonderful there, you know," and, recalling a pleasant summer with obvious relish, added, "we've got ever so many relatives there. They visit us in winter and we go to them in summer. Twice Mum went from the plant for the harvesting and Dad has only just come back from there—he stayed with his brothers for a fortnight. Mum says he still has a farmer's soul. He loves reading Nekrasov, about the country. And he doesn't take offence...."

Semyon Alexeyevich, returning from his shopping expedition, unknowingly interrupted an interesting talk.

"So you see, I've turned into a housewife, go round the shops and to the market. I try to help my wife. She's been working for us all her life. Every year I had a holiday, sometimes I went to Zelyony Gorod, sometimes to Krasniyo Baki, but in all her life she went once to her sister in Leningrad. She always said that her work was easier and it would be better if she stayed home during her holidays and stitched something for the kids. A few years ago we bought a sewing-machine. She's awfully fond of that work, if she had her way she would be sewing all day long."

Anastasia Grigoryevna herself had once told us that she liked sewing and showed us some of the things she had made.

"You can add that to our income," she said jokingly. "it's all extra money that stays in the house."

Irrepressible Natasha, the know-all, could not resist the temptation to boast.

"Mummy made this dress for me herself. At first Nina wore it and now I've got it. And she made a new dress for herself and a shirt for Daddy and a smock for Alya—she goes to the school workshops and without a smock would make her dress dirty."

"You're the only one that doesn't help," said Semyon Alexeyevich, fondly patting his daughter's fat rosy cheek.

"Why should I? When I grow up I'm going to be a doctor. Mummy wanted Lusya and Nina to train for doctors but it didn't work out. Now I'm her only hope."



Anastasia Grigoryevna is a Jack-of-all-trades. Just a few more stitches and the dress will be ready

Mother's "hobo" ran away to play, Volodya went to school and we returned to the subject we had been discussing with Volodya when Semyon Alexeyevich's arrival interrupted us—the Andrianovs' native village, Prokoshovo.

Anastasia Grigoryevna's parents and Semyon Alexeyevich's brothers and sisters were still living there. Each of the latter now had his own family and his own home. They worked in the Udarnik Collective Farm. Their income for workdays on the farm had formerly been barely enough to manage on, there was never anything left over.

"From time to time we had to help our relatives," said Semyon Alexeyevich. "If Anastasia managed to save anything we sent it off to the village."

"This year things have been much better," he continued. "I was there a short while ago and saw it for myself. Even though last summer wasn't a good one, wind and rain all the time, they got a good harvest, especially vegetables. They've built new cowsheds, pigsties and sheep-pens and they have enough fodder for the winter. My niece Olga, my sister's daughter, works in the piggery. She told me herself that she earns an average of 1,200 rubles a month with bonuses."

We were unable to visit the Udarnik Collective Farm but we telephoned to Pavel Stepanovich Tsaryov, Secretary of the District Committee of the Communist Party, and this is what he told us:

"For a number of years the Udarnik Farm had been one of the most backward. It was only in 1954, when the collective farmers elected Nikolai Grigoryevich Nosov, a farmer from their own village, chairman of the farm, that matters began to improve. The greatest progress was made in dairy farming: the cattle were better housed (the new buildings that Semyon Alexeyevich had told us about) and better looked after so that the milk yield was much higher than before. In 1956 each cow gave 466 litres more than the year before and the farmers expect to maintain this level through the present winter and by the summer of 1957 raise the average milk yield per head to 3,000 litres. This is the figure recorded in their socialist emulation contract.... The farm's milkmaids last year received from 1,000 to 1,500 kilograms of milk extra pay and each of them was given a calf. In terms of money a milkmaid earns between 800 and 900 rubles a month." Semyon Alexeyevich was elated at the progress made by his native village, a sentiment with which we were in complete agreement.

"Life is improving month by month, both in the towns and in the countryside," he said. "It's a pity years fly so quickly. Now's the time to keep on living...."

Alya returned from her technical school: in the workshops where she was gaining practical experience those under 18 worked only 6 hours a day so that 17-year-old Alya came home early. Alya had her dinner and sat down to her books while we continued our talk with her parents.



Semyon Alexeyevich attends the district clinic regularly

When the little girl had shown us the family album we had unconsciously touched on those invisible sources of income that every working-class family has but which we do not notice since we have got so used to them.

In the Andrianovs' album we had seen dozens of snaps of the members of the family taken during holidays. Workers during their annual paid holidays and school children and students during the summer vacation are given opportunities to visit sanatoriums, holiday homes and camps, the state bearing half the cost.

This, however, is not all.

During the past few months Semyon Alexeyevich had been attending the local clinic and had been receiving a course of treatment. It seemed quite natural to him that he did not have to pay for it. It also happened that other

members of the family received free medical attention on a number of occasions throughout the year.

The winter before little Natasha had been taken ill. When her mother measured her temperature she found it was just over 102°F. They sent for the doctor, Nina Alexandrovna Petrova, who knew the family well as she had treated all the children, one after the other, until they reached adolescence. Nina Alexandrovna was an excellent children's specialist, a doctor of great experience, known to all the workers at the Automobile Plant; during the winter she treated the children at the clinic or visited them at home and in summer made the rounds of the Young Pioneer camps and kindergartens.

Natasha was very fond of the kindly lady in the white smock who always carried a lot of pretty tubes and things in her bag. Natasha had measles in a rather bad form and for a fortnight Nina Alexandrovna visited her little patient every other day until all danger of complications was past. It must be admitted that Natasha's memories of another lady in a white smock were not so pleasant—she came several times, on Nina Alexandrovna's instructions, it seemed, and gave Natasha injections. But even that was more frightening than painful.

Natasha's illness did not mean any great additional expense to the family with the exception of extra dainties for the sick child; the visits of the doctor and nurse did not cost them anything.

Three of the Andrianov children were attending schools of various types—one an institute of higher learning, the second was getting secondary professional education and the boy was attending an ordinary secondary school. This was also taken as a matter of course. Nobody was surprised that even little six-year-old Natasha was already dreaming of becoming a doctor. Of course, little girl, your dreams will come true if you don't change your mind as the years go by, just as the dreams of your elder sisters are coming true. Lusyá has become a technologist, in another two years Nina will be granted her diploma as a textile engineer; when Alya graduates her technical school she will be able to take her entrance examinations to the

Faculty of Biology at Gorky University, and, as she will be working, will not have to take the competitive examination but will be enrolled as a student if she gets "pass" marks.

We included the scholarship stipends of the two daughters in the Andrianov family budget but did not say how much their tuition actually costs the state.

When we applied to the Gorky Statistical Board for information they gave us the following interesting figures.

The state expends about 3,100 rubles a year on a family of seven people to ensure them, through the trade unions, an annual rest in sanatoriums, holiday homes and camps.

In the city of Gorky an annual average of 198 rubles per head of the population is spent on medical services—the Andrianov family, therefore, accounts for 1,386 rubles.

Lastly, the tuition of the three Andrianov children costs the state an annual 16,030 rubles: Nina's higher education costs 9,000 rubles, Alya's technical education—6,148 rubles and Volodya's secondary education—882 rubles a year. In this sum we have included the stipends paid to the two girls by the state.

Now let us tot up these "invisible sources of income." 3,100 rubles for holiday rest, 1,386 rubles for medical services and 11,670 rubles for tuition. Thus the Andrianov family has a further 16,156 rubles on the income side of the budget, that is, more than a third of the family's total income.

Such are the services, now so usual that they are not noticed, that Soviet power has been affording the people for many years.

OUR GREAT ADVANTAGE

Soviet people, who have in the past experienced tremendous difficulties and privations, feel that they are the masters of their fate, and they know the joys of creating that which is wonderful and new. They give all their abili-

ty, knowledge and experience to the country that so generously rewards them by its solicitude for man, by raising living standards, making work less laborious and making life more carefree.

When we speak of the greater well-being of the people we sometimes forget one important item—the constant improvement in labour conditions and the organization of production. This is worthy of more thought. Can a man be satisfied with life if he comes home from work tired and exhausted to the very limit so that he has only one thing in mind—physical repose? Of course he cannot! Neither a comfortable home nor a substantial income can ever be a sufficient reward. In our country, therefore, in addition to the efforts being made to ensure a comfortable home life for the workers, there is also a constant improvement in their labour conditions, a lightening of their toil. This is one of the greatest advantages of our social system.

During one of our talks with Semyon Alexeyovich we became particularly aware of what Soviet people think of this. Usually he is taciturn and reticent but when we asked him to show us over the plant, especially the shop in which he had worked for 25 years, he was a changed man.

Heat-Treatment Shop No. 1 was such a huge building that the eye could not take it in all at once. No less than an hour was required to go round the shop, from section to section. At the plant the shop was known as the "mirror of the work of the forge." As an old worker Semyon Alexeyevich felt himself the master here. He knew by heart all the items treated in the shop—and they were not few, over 800 altogether. He knew where to send every item, which items had priority and which could be dealt with later. He knew the character and habits of every furnace and every press. All of them had been installed in his presence, all of them had been improved and modernized, as they grew old they had been replaced by new ones. And how many of those who were now regular skilled workers at the plant had been trained by Semyon Alexeyevich! His old friends who had worked side by side with him were still there—foremen Derevyankin and Laptev, senior foreman Sukhanov.



Andrianov is an avid soccer fan. Today the teams of Syria and Rumania are playing

Every year brings many changes to the shop. In 1956 the output plan was 15 per cent higher than the previous years. And how many new features had been introduced! The removal of the dross, once a slow, laborious and dangerous job (dangerous because the dross was removed by dipping the treated metal in sulphuric acid baths), is now done in the chambers of automatic sand-blast machines. Until quite recently considerable time and effort was expended on carrying items to be tempered on hot trays to the various furnaces. This process has now been mechanized. New types of furnaces are still being installed;—when Semyon Alexeyevich first started work there were only three furnaces—today there are more than thirty.

We left the shop when the shifts were changing and as we passed the press shop we suggested waiting for Lusya. "Oh, I forgot to tell you," said Semyon Alexeyevich, "she isn't working there any more." And he smiled his gentle, modest smile. "She's been wanting to continue her studies for a long time and thought of entering the evening institute. We held a family council and then I went to the Communist Party Committee for advice. We decided that while she is attending the institute she can work as a technician in the plant's Co-ordination Bureau. They work in one shift and it will be easier for her to attend the institute. Today they finish at three so there will be an hour to wait."

"How will that affect the family budget? Will there be any changes on account of Lusya's new job?" was the far from modest question we could not help asking.

"Yes, she'll get a hundred and fifty rubles less. But that doesn't matter, we won't starve...."

On Saturdays (somebody at the plant very aptly called it "little Sunday") many of the working people walked home so that the buses and trolley-buses, usually packed tight during "peak" hours, were half empty.

Next day, Sunday, we again visited the Andrianovs but Semyon Alexeyevich was not at home. He had always been a strong supporter of the plant's football and hockey teams and had gone to the football ground with his son.



They know just where to put the new wardrobe in the bedroom

The older girls were also out: Lusya had gone to buy a new alarm-clock (the old one had refused to work any longer) and Alya and Nina had gone to the pictures. Little Nastasha was there with her mother.

"We're baking cakes," she informed us immediately. "Today Uncle Pavel and Aunt Nastya Morozkin are coming."

"They're old friends of ours, we were neighbours in our old house," Anastasia Grigoryevna explained. "It isn't more than two years since we moved here. That's why we

haven't yet got all the furniture we would like, you see we didn't want to bring old things into such a lovely flat."

It really was a lovely flat and looked very comfortable even if there was not quite enough furniture. The builders had paid great attention to interior decoration, the soft colours of the walls, the snow-white doors and windows and the parquet floor were all in good taste.

"Please don't be offended at not finding Semyon at home," said Anastasia Grigoryevna as we were leaving. "He'd much rather miss his dinner than a football match. And the girls never miss a picture show on Sundays. It's better for me, too. When they get together in the evening they tell me all the news so that I keep up with the times...."

COMPARISONS

Even today one can still hear old people, those who have seen a lot in their time, making such remarks as:

"There was a time when bread cost two or three kopeks a pound."

We browsed for a long time in the records of the Nizhny-Novgorod Gubernia Council, turned up the reports of the rural councils and found lists of food-stuff prices. At first glance the prices of food-stuffs were astoundingly low: expressed in kilograms fresh butter cost a ruble forty kopeks, potatoes two kopeks, meat thirty-three kopeks, and so on.

This led us to wondering how a working-class family, like the Andrianovs, lived before the Revolution, in 1913, one of the cheapest and most favourable years, for example.

We discovered that the food on which Anastasia Grigoryevna spent 1,645 rubles a month would have cost her 76 rubles 25 kopeks in 1913.

But did a working-class family of seven have that amount to spend?

By rummaging through the reports of factory inspectors, the reports of the Municipal Council, workers' pay-books and the ledgers of the Nizhny-Novgorod employers we discovered that a qualified worker in the engineer-

ing industry earned an average of 25 rubles 65 kopeks a month in 1913. Young people with some professional skill earned 10 rubles 50 kopeks, a furnace hand—16 rubles, door porter—8 rubles and so on.

Let us assume that the chief bread-winner of a family like the Andrianovs had the highest skill and earned the maximum 30 to 35 rubles a month. His wife, who works in the cloak-room, would have earned 8 rubles; the elder daughter, at the highest wages paid to women, would have got 12 rubles and the younger one 10 rubles. Even at that the income of a family with four people working would not have exceeded 60 rubles a month. The Andrianov family expend 50-60 per cent of their income on food. Consequently such a family would have spent no more than 30 to 35 rubles a month in 1913. Clearly this would not have been enough to buy more than half the food they buy today.

The books of factory provision stores show that workers ate mostly black bread; rice and buckwheat were bought only for the chief holidays, otherwise they ate lentils and, occasionally, millet. Animal fats were used very sparingly, hemp and linseed oil being, as a rule, used for cooking. In working-class families only the children could get milk.

For all other expenses (excluding food) some 20-25 rubles were left from the monthly income. This money was spent on rent, rates, fuel, clothing and footwear. According to the same data the cost of rent and fuel averaged 14-16 rubles a month and rates came to 2 rubles 40 kopeks.

Now let us see what the family could have obtained in 1913 for the few rubles left over. Top-boots cost 8 rubles a pair, shoes from 4 to 9 rubles, factory-made cloth trousers 6 rubles, homespun trousers 2 rubles, a winter overcoat 20 rubles, a mackintosh 35 rubles.

This list of prices could be continued indefinitely. But those quoted are sufficient to show that a working-class family could not acquire top-boots, nor cloth trousers, to say nothing of a mackintosh, even if there were four well-paid workers in the family. And this does not take into consideration any unexpected expenses that may occur during the year, such as a wedding, sickness or a long journey.

List of Food Products Used by a Working-Class Family of Seven People with 1956 and 1913 Prices*

Item	Quantity	1956		1913	
		Price	Total	Price	Total
1. Bread, black	50 kg.	R. K. 1.24	R. K. 62.00	R. K. 0.06	R. K. 3.00
2. " white	70 kg.	1.90	133.00	0.13	9.10
3. Meat	30 kg.	12.00	360.00	0.40	12.00
4. Cereals (rice; buck-wheat, millet)	12 kg.	5.30	63.60	0.12	1.44
5. Macaroni, etc.	6 kg.	4.00	24.00	0.20	1.20
6. Butter	10 kg.	27.00	270.00	1.40	14.00
7. Vegetable oil	3 l.	16.00	48.00	0.40	1.20
8. Milk	90 l.	1.80	162.00	0.11	9.90
9. Cream and curds	3 kg.	12.00	36.00	0.30	0.90
10. Eggs	30	8.00	24.00	0.02½	0.75
11. Fresh fish	8 kg.	8.00	64.00	0.40	3.20
12. Potatoes	70 kg.	1.00	70.00	0.02½	1.75
13. Other vegetables	30 kg.	1.00	30.00	0.08	2.40
14. Sugar	18 kg.	10.70	192.60	0.30	5.40
15. Tea	0.2 kg.	68.00	13.60	3.80	0.76
16. Spices	—	—	10.00	—	1.00
17. Fruit, cakes and sweets	—	—	82.20	—	8.25
Total		—	1,645 rubles	—	76.25 rubles

The language of figures is dry but it is more eloquent than words. Amongst the old records still preserved in Gorky there are some that give a truly horrible picture of old Nizhny-Novgorod. Here are some of them. In 1913 out of every thousand inhabitants 40 died; only two of every

* The average prices of the more popular varieties in government shops and the open market in 1956.

ten children born lived to the age of three years; naturally it was the strongest and most healthy that survived, but could they keep healthy for long?

Here are some figures taken from the report of an army official in the Nizhny-Novgorod Gubernia whose duty it was to attest recruits called up for service in the army. Out of the 20,000 youths called up for service in 1913 only 4,500 were found physically fit. What was it but undernourishment, poor living conditions and exhausting work for 14-16 hours a day that made these youngsters prematurely old and decrepit?

When we spoke of the Andrianov family we did not introduce the figures of state expenditure on medical services casually. The people of Gorky have a large number of hospitals, outpatient clinics and medical centres at their disposal. They are manned by a whole army of qualified medical workers—3,000 doctors and 6,000 nurses and doctors' assistants. And it is only a matter of forty years since the time when it would have been difficult to find 20 doctors in Nizhny-Novgorod.

The following fact tells what doctors' fees meant to working-class families. In 1913 some 260 women left a private maternity home before giving birth. We tried to find out the reason for this. We were told that the daily cost of maintenance in the home was so high that women who had come there a few days before time were forced to leave. And here is another fact: more than half the children born that year came into the world either in factory workshops during working hours, in the street or in the gloomy, damp rooms of the workers' barracks.

The most terrible thing of all, however, was old age, because, as a rule, in old age people of small means were faced with almshouses or "widows' houses." These were government institutions and the sum of 77 rubles per head per annum was granted for the maintenance of the aged.

In Gorky today 76,641 people receive old-age pensions; according to city statistics the average pension amounts to 482 rubles a month.

Our Soviet vocabulary no longer contains the expression "a rainy day," a day when illness, old age or some other

cause prevents a person from earning his living. Soviet workers are not threatened with unemployment and do not fear old age. Nobody may call an old man or woman an "extra mouth," the bitterest experience for one who has spent his whole life at work.

It is difficult for the young people in the Soviet Union today to estimate the value of all these good things for which their fathers and grandfathers spilled their blood forty years ago. How could young Volodya know that his father had throughout his childhood had just as many pairs of shoes as he had worn in one year? How should Lusya know that her mother put on her first silk dress when more than one wrinkle marred her face?...

FOR ALL SOVIET FAMILIES

Wherever a man may be in the Soviet Union, be it a big city, a provincial town or a remote village, everywhere he feels that great changes for the better are taking place. Although we still have our shortcomings everybody can say proudly that life is becoming easier and better.

We did not set out to tell our readers what the ordinary man has gained by Soviet power or how life in all its aspects has changed during the past forty years. The authors had a much more modest aim in view: to show what one single year—the first year of the Sixth Five-Year Plan—has brought the Andrianov family.

The head of the family, Semyon Alexeyevich Andrianov, retired on a pension at the age of fifty; he was able to do this because the new pensions law, passed in 1956, gave him, for 25 years uninterrupted work at the Automobile Plant in Gorky, a pension that is almost as much as his average earnings.

As we have seen, two daughters add to the family income—Nina, who studies at a college, and Alya, who attends a technical school. By a government decision they are paid a scholarship stipend all the year round irrespective of progress made in each term (in 1955 the stipend depended on progress made). Like all other school pupils and



The mail-carrier comes on the same day of every month with Andrianov's pension

college students, beginning with the 1956-57 school year they do not pay tuition fees.

One of the main reasons for the well-being of the family, however, is a law of Soviet reality that has never been written down or published: year by year the quantity of food products and manufactured goods is increasing, quality is improving and prices are falling.

In telling the story of the Andrianov family we only touched on those Communist Party and Soviet Government measures that directly affect that family. And how many changes came last year (1956) that did not affect them but made the lives of millions of other people much easier!

Let us recall a few of them.

A lad of 16 has just finished training at a vocational school; he has learned a trade and has begun work at a

factory. The young fellow, however, still has a lot to learn, he has still to become an educated and cultured man as well as a skilled worker. He needs more time for rest and for interesting recreation. In view of this the government has instituted a six-hour working day for all young workers under the age of eighteen but they are paid as much as an adult worker who works for eight hours a day. Incidentally, Alya Andrianova, who is not yet eighteen, is now getting practical training at the Automobile Plant's workshops and works not 8 hours but 6 hours a day.

We still remember the gratitude of Soviet women when the law was passed increasing leave of absence from work for expectant mothers from 77 calendar days to 112 days. A working woman may now devote herself wholly to her baby for the first two months after confinement. If the confinement was a difficult one, with complications, she is given a further two weeks for convalescence, altogether 70 days after confinement in addition to 56 days before confinement, and all on full pay.

Under the new law this additional leave of absence costs the state a further 800 to 900 million rubles for every million expectant mothers, and a similar sum must be spent as wages for those who take their places while they are absent from work. Mothers of nursing infants may, furthermore, obtain a further three months leave of absence without pay. If the mother wishes to remain at home to look after her baby she may do so up to one year, her job will be kept for her and her years of service at the factory or office will be considered unbroken. This is important since the years she has worked prior to motherhood count towards the 25 years unbroken service necessary for a full pension.

A great deal is also being done to ensure that young mothers have their proper rest. By the end of this year 18 new sanatoriums and holiday homes for expectant mothers and mothers with nursing infants will be functioning. Those who come within the low income bracket will be maintained at these institutions free of charge, the factory or office where the woman is working paying for her



Three years ago the Andrianovs had their house-warming party here

out of the funds allotted for the improvement of living conditions

At many of the bigger factories there are nursing rooms and personal hygiene rooms for women workers.

And now a few words about workers' holidays. From 1st November, 1956, the food rations supplied to the more than 3,000 sanatoriums and holiday homes in the U.S.S.R. were increased. In 1956 trade-union organizations sent over 3,200,000 people to sanatoriums, holiday homes, and on organized tours; 20 per cent of the sanatorium passes and 10 per cent of those to holiday homes were issued for a nominal charge which in no case exceeded 30 per cent of its cost.

In one little booklet it is difficult to cover all the changes that took place last year. We must, however, say a few words about the "long-day groups" that have been organized in a number of schools in this school year. Children in these groups are those whose parents are both at work;

they are under the guidance of experienced pedagogues and the strict regime essential to their health and normal development is maintained. They are given hot meals, have playtime and engage in sport.

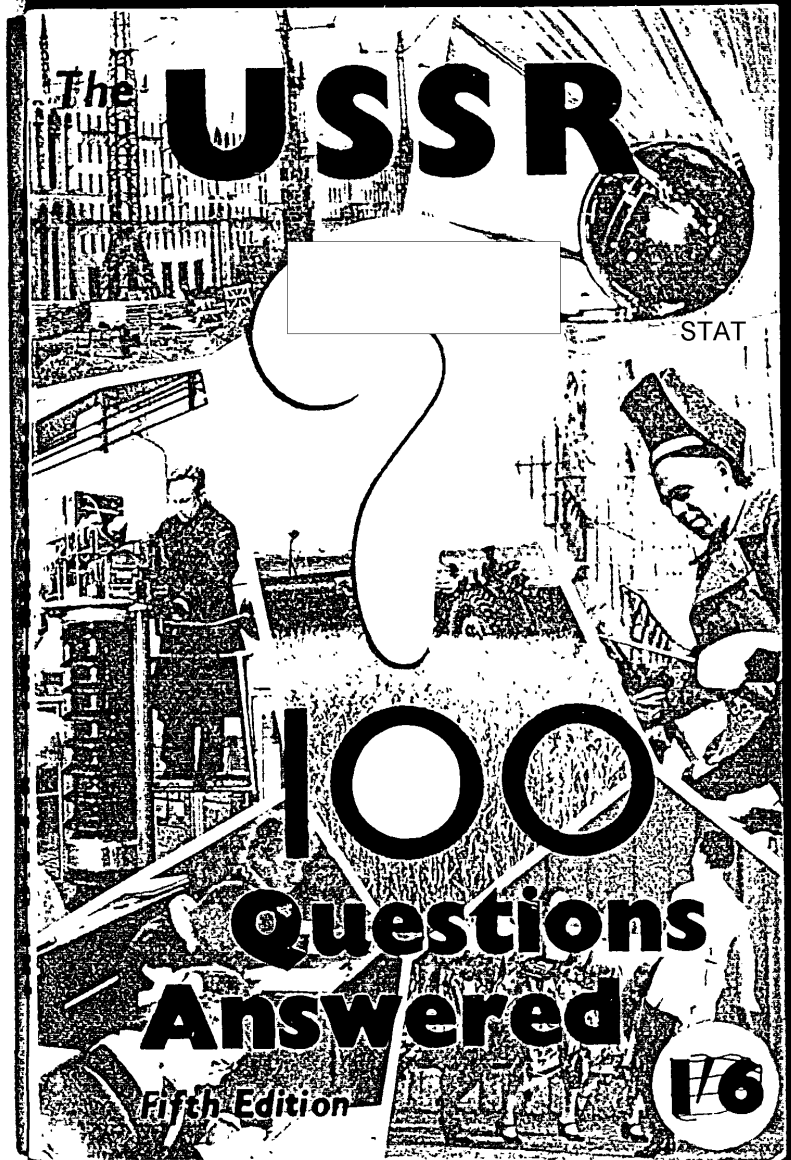
The opening of the first boarding schools was a big event in the lives of many Soviet children. At present there are 300 such schools in which several thousand children are being maintained and educated at the cost of the state. This, of course, is invaluable help to the family.

Amongst other 1956 measures improving the living conditions of Soviet people are: the reduction in the price of theatre tickets, a higher minimum taxable income, the new Rules of the Agricultural Artel, increased control of the fulfilment of collective agreements at the factories and assistance for city workers who have laid out their own orchards in the suburbs of big cities.

Many thousands of Soviet people moved to new homes in 1956. In Moscow alone 1,373,000 square metres (about 14 million square feet) of new apartments went into exploitation. Thousands of families moved to new apartments in Gorky, Stalingrad, Kharkov, Omsk, Irkutsk, Kiev, Kremenchug, Vladimir, and hundreds of other Soviet cities. In that same year many new well-planned townships and factory housing estates appeared on the map.

The December Plenary Session of the Central Committee of the Communist Party of the Soviet Union found it necessary to allocate additional funds for housing construction. A provisional estimate shows that in 1957 32,800,000 square metres (about 340,000,000 square feet) of dwelling-house accommodation will be built which is 30 per cent more than in 1956.

For all Soviet people 1956 was a year of great improvements, a year of outstanding solicitude for the well-being of the working man, a year of great progress in all fields



THE U.S.S.R

—*A Hundred
Questions
Answered*

FIFTH REVISED EDITION

Soviet Booklet No. 40.

London, November, 1958

FOREWORD

THE many delegations, business representatives and tourists from foreign countries who have visited the Soviet Union have repeatedly expressed a desire for the publication of a booklet which will tell readers in their countries about life in the Soviet Union.

It was these people's view that such a booklet should explain the structure of the Soviet State, its economy and culture, its home and foreign policy. Indeed, the form of the publication was suggested: a concise work in the shape of brief answers to questions.

In response to that wish this booklet on the Soviet Union has been prepared in the form of answers to a hundred questions, those most frequently asked by visitors from abroad.

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I. STATE AND SOCIAL SYSTEM

What is the U.S.S.R.?

1

THE Union of Soviet Socialist Republics (U.S.S.R.) is a federal socialist state of workers and peasants.

The U.S.S.R. is made up of fifteen Union Soviet Socialist Republics, which have joined together on the basis of voluntary union and equality: the Russian Soviet Federative Socialist Republic (R.S.F.S.R. or Russian Federation), the Ukrainian, Byelorussian, Uzbek, Kazakh, Georgian, Azerbaijan, Lithuanian, Moldavian, Latvian, Kirghiz, Tajik, Armenian, Turkmen and Estonian Soviet Socialist Republics.

All these Republics have arisen on the territory of the former Russian Empire as a result of the victory of the Socialist Revolution in October 1917 (with the exception of Latvia, Lithuania and Estonia which voluntarily joined the Soviet Union in 1940). This great Revolution abolished capitalist and landlord rule in Russia and, for the first time in history, transferred power into the hands of the working people.

The U.S.S.R. is a great world power, possessing a mighty industry and a highly developed agriculture. Its territory occupies the eastern part of Europe and the northern and central parts of Asia, making up about a sixth of the inhabited land surface of the earth, or more than 22 million square kilometres (8,500,000 square miles). The area of the U.S.S.R. is three times the area of the U.S.A. (excluding Alaska) and four times that of the countries of Western Europe put together. The population of the U.S.S.R. in 1956 was 200,200,000.

The Soviet Union is a country of beautiful and varied natural scenery, rich in minerals, ores of all kinds, coal, peat and oil, with fertile soil and great water power resources. The seas, lakes and rivers teem with fish. The forests are full of valuable kinds of trees and fur-bearing animals.

Soviet power has put an end to the economic and technical backwardness which was inherited from tsarist Russia. Industrialisation of the country and collectivisation of its agriculture, carried out under the leadership of the Communist Party, have resulted in the Soviet Union becoming a country with an advanced industry and collective farm system, an economically independent country.

The Soviet Union is a land of socialism. In it there is no private ownership of the instruments and means of production. The factories and mills operate without capitalists, and the men and women who cultivate the fields have no landlords.

The basis of Soviet economy, the foundation upon which the entire life of the country is built, is the socialist system of economy, and public, socialist, ownership of the instruments and means of production. The national economy is developing according to a unified state plan. There are no economic crises, unemployment or impoverishment of the people.

In Soviet society there is no exploitation of man by man and no national oppression. Here, for the first time in history, the moral and political unity of all members of society has been realised.

The working people themselves—the workers, peasants and intellectuals—govern their country and administer the entire national economy.

Distribution of what is produced (i.e. the material wealth) in the U.S.S.R. is carried out in accordance with the principle: *From each according to his ability, to each according to his work.*

This means that every working man and woman receives material wealth according to the quantity and quality of the work performed. This is socialism, or the first (lower) phase of communist society.

Today the Soviet Union is passing through the period of gradual transition from socialism to communism. The Soviet people's goal is the building of communist society.

2 |

Who governs the Soviet Union?

ALL power in the U.S.S.R. belongs to the working people of town and countryside, as represented by the Soviets of Working People's Deputies, which are the political foundation of the country.

The deputies to these Soviets are workers, peasants, or intellectuals, elected on the basis of universal, equal and direct suffrage by secret ballot.

Every deputy is accountable to his electors. With the exception of those who, after the elections, take office in the executive

branch of the Government, the overwhelming majority of the deputies continue to work at their regular jobs. It is through them that the Soviets maintain the closest contact with the electors.

The highest organ of state power in the Soviet Union is the Supreme Soviet of the U.S.S.R., which is elected by a country-wide poll for a term of four years.

In the last elections, held in March 1958, 133,796,091 voters went to the polls; they elected 1,376 deputies, 831 of whom are workers or peasants. The rest are intellectuals, such as scientists, engineers, writers, doctors or teachers, leaders of state, public or economic organisations or members of the armed forces. Three hundred and sixty-five are women. The deputies include representatives of many nationalities: thirty-eight nationalities are represented in the Soviet of the Union and fifty-eight in the Soviet of Nationalities.

The Supreme Soviet of the U.S.S.R. consists of two Chambers—the Soviet of the Union and the Soviet of Nationalities.

One deputy to the Soviet of the Union is elected from every 300,000 of the population. The Soviet of the Union represents the common interests of all Soviet citizens, irrespective of nationality.

The Soviet of Nationalities is elected by the citizens of the U.S.S.R., voting by Union Republics, Autonomous Republics, Autonomous Regions and National Areas, on the basis of twenty-five deputies from each Union Republic, eleven deputies from each Autonomous Republic, five deputies from each Autonomous Region and one deputy from each National Area. In this way the Soviet of Nationalities reflects the specific interests of all the nations, national groups and nationalities inhabiting the Soviet Union.

The Supreme Soviet embodies the supreme power possessed by the Soviet people. It acts as the representative of the entire people, the whole country—the Union of Soviet Socialist Republics.

To the Supreme Soviet belongs the legislative power of the Soviet Union. The laws it enacts have the same force within the territory of every Union Republic, and their carrying out is binding upon all state organs, public organisations, institutions and citizens of the U.S.S.R. These laws express the interests and will of the working people of the country.

The U.S.S.R. Supreme Soviet considers and approves the national economic plans and approves the State Budget of the U.S.S.R.; decides questions of war and peace; has control over the observance of the Constitution of the U.S.S.R., ensures the conformity of the Constitutions of the Union Republics with the Constitution of the U.S.S.R., and amends the Constitution of the U.S.S.R.; decides questions of admission of new Republics into the U.S.S.R.

The jurisdiction of the Supreme Soviet includes the representing of the U.S.S.R. in international relations, the conclusion, ratification and denunciation of treaties with other states; the organisation of the defence of the U.S.S.R.; the direction of all the armed forces of the U.S.S.R.; questions of foreign trade and state security.

At a joint sitting of its two Chambers, the Supreme Soviet elects its Presidium, forms the Government of the U.S.S.R., elects the U.S.S.R. Supreme Court and appoints the Procurator-General of the U.S.S.R. The Supreme Soviet exercises guidance and control over all higher state organs of the U.S.S.R.

Its two Chambers, the Soviet of the Union and Soviet of Nationalities, have equal rights. Each may initiate legislation. A law is considered adopted if passed by both Chambers by a simple majority vote.

As the highest organ of state power of the U.S.S.R., the Supreme Soviet functions both directly and through other bodies formed by, and accountable to it. The major body is its Presidium.

The Presidium of the Supreme Soviet of the U.S.S.R. is the highest standing organ of state power in the U.S.S.R. While the Supreme Soviet conducts its work at regular sessions, held twice a year, or at special sessions, its Presidium is a standing body.

The Presidium convenes the sessions of, and orders new elections to, the Supreme Soviet. It ratifies international treaties of the U.S.S.R., proclaims a state of war in the event of military attack on the U.S.S.R., and orders general or partial mobilisation. It appoints the high command of the armed forces and plenipotentiary representatives of the U.S.S.R. to foreign states. It institutes and confers titles of honour, orders and medals.

In intervals between sessions of the Supreme Soviet the Presidium issues decrees which are binding on the Union Republics. But these decrees must be based on and be within the

scope of All-Union laws. Decrees appointing or removing U.S.S.R. Ministers or relating to other questions coming within the powers of the Supreme Soviet of the U.S.S.R. are submitted to the earliest session for consideration and approval and they are considered and approved by the next session of the Supreme Soviet.

The Presidium of the Supreme Soviet of the U.S.S.R. is elected at a joint sitting of the two Chambers of the Supreme Soviet. It consists of a president, fifteen vice-presidents (one for each Union Republic), a secretary and fifteen members.

The highest organ of power in a Union Republic is the Supreme Soviet of the Republic (*see answer No. 4*). The Supreme Soviet of the Union Republic elects its Presidium—the standing organ of state power in the territory of that particular Republic.

What are the functions of the Council of Ministers of the U.S.S.R.?

3

THE Council of Ministers of the U.S.S.R. is the highest executive and administrative organ of state power in the U.S.S.R.—the Government of the U.S.S.R.

The Council of Ministers is appointed by the Supreme Soviet of the U.S.S.R. at a joint sitting of the two Chambers and consists of a chairman, first vice-chairman, vice-chairmen, Ministers, the chairman of the State Planning Committee, the chairman of the Control Commission, the chairmen of the State Committees on labour and wages, aviation techniques, defence techniques, radio electronics, shipbuilding, construction, chemical industry, foreign economic relations, the chairman of the State Security Committee, the chairman of the Board of the State Bank of the U.S.S.R., and the head of the Central Statistical Administration, all functioning under the Council.

As the Soviet Union is a voluntary federation of equal Soviet Socialist Republics, Article 70 of the U.S.S.R. Constitution provides that the chairmen of the Councils of Ministers of the Union Republics are ex-officio members of the U.S.S.R. Government. Thus, the U.S.S.R. Council of Ministers is made up of the officials enumerated and also the fifteen chairmen of the Councils of Ministers of the Union Republics.

The Council of Ministers of the U.S.S.R. acts on the basis of the U.S.S.R. Constitution. It is responsible and accountable to the U.S.S.R. Supreme Soviet in all of its activity, and in the intervals between sessions of the Supreme Soviet, to its Presidium.

The Council of Ministers issues decisions and orders on the basis of the laws in operation, and sees that they are carried into effect. It co-ordinates and directs the work of the Ministries and the State Committees, that is, the organs in charge of the various branches of state administration. It adopts the measures necessary to carry out the national economic plan and the State Budget. It is charged with maintenance of public order, protection of the interests of the state and safeguarding the rights of citizens. It exercises general guidance in the sphere of relations with foreign states.

The Governments of the Union and Autonomous Republics are formed on the same basis as the All-Union Government. The composition and powers of the Republican Councils of Ministers are defined by the Constitutions of the respective Republics.

4 | *What are the rights of the Union Republics?*

EACH of the fifteen Union Republics, which have freely joined the Soviet Union, is a sovereign Soviet Socialist State of workers and peasants, and accordingly has its own Constitution, which reflects the specific features of the particular republic—national, economic and cultural.

It also has its own State Arms, State Flag and National Anthem, its own organs of state power and state administration, and its judicial organs.

All institutions and organisations of the republic and its educational establishments conduct their work in the languages of the people of that Republic.

The Supreme Soviet of the Republic exercises supreme state power on the territory of the Republic. It enacts laws which have binding force within the Republic along with all-Union laws.

It elects the Presidium of the Supreme Soviet—the highest organ of state power in the intervals between its sessions—and it appoints the Government—the Council of Ministers—which

plans and directs the Republic's economic and cultural development and guides all executive and administrative activity there. The Supreme Soviet also elects the Republic's Supreme Court—the highest judicial organ.

The competence of the Republican authorities embraces the major questions of state activity. The Union Republic manages independently its revenues under the Republic's budget, which is approved by the Supreme Soviet of the Republic.

The bulk of industrial enterprises in the Republic are under the authority of the Republic. The rights of the Union Republics in the spheres of education, public health and cultural development are practically unrestricted.

Finally, each Union Republic has the right to enter into direct relations with foreign states, conclude agreements with them and exchange diplomats and consular representatives. The Ukrainian and Byelorussian Union Republics are foundation members of the United Nations.

All Union Republics, irrespective of the size of their population or territory or level of economic and cultural development enjoy in equal measure all the rights of independent states, including the right to secede from the Soviet Union, reserved to them by the Constitution of the U.S.S.R.

All participate on an equal basis in governing the Soviet Union as a whole. The chairmen of the Presidiums of the Supreme Soviets of the Union Republics as a rule are vice-chairmen of the Presidium of the U.S.S.R. Supreme Soviet, and the chairmen of the Council of Ministers of the Union Republics are ex officio members of the U.S.S.R. Council of Ministers.

Likewise, the chairmen of the Supreme Courts of the Union Republics are ex officio members of the U.S.S.R. Supreme Court.

The only limitation on the sovereignty of the Union Republics is the clearly defined restriction with respect to questions of state activity which they have themselves voluntarily delegated to the all-Union state organs.

However, in deciding these questions, too, the interests of every Union Republic are safeguarded by its representation in the highest organs of state of the Soviet Union and by special rights vested in them, namely, that Union Republics have the right to demand the convocation of an extraordinary session of the U.S.S.R. Supreme Soviet or the holding of an all-Union referendum on questions they deem necessary.

Actually, the Union Republics have not found it necessary even once to have recourse to this extraordinary proceeding, since in their close co-operation as socialist states with equal rights each is freely developing to the full extent of its possibilities, enjoying fraternal support from the other Union Republics.

As the Union Republics progress economically and culturally the prerogatives of the central, all-Union organs diminish and the functions of the Republican authorities become broader. In recent years especially much has been done in this respect; effective measures have been taken to do away with excessive centralisation and substantially to extend the rights of the Republics' organs with respect to economic and cultural development.

The sovereign rights of the Union Republics are safeguarded and protected by the U.S.S.R. Constitution and by the traditions and activity of the Soviet people.

5

What are Autonomous Soviet Republics, Autonomous Regions and National Areas?

THE Union Republics, besides being inhabited by the nation that has given the Republic its name, are inhabited also by other peoples. The latter, constituting a minority of the Republic's population, are distinguished by specific national features. Where these peoples form a compact mass, they may form Autonomous Soviet Republics, Autonomous Regions or National Areas, if they so desire.

The Autonomous Republic is a Soviet Socialist State of workers and peasants, forming a constituent part of a particular Union Republic, and through it, of the Soviet Union.

The Russian Soviet Federative Socialist Republic includes within its boundaries the Tatar, Bashkir, Daghestan, Buryat, Kabardine-Balkarian, Kalmyck, Checheno-Ingush, Karelian, Komi, Mari, Mordovian, North Ossetian, Udmurt, Chuvash and Yakut Autonomous Soviet Socialist Republics.

The Georgian Soviet Socialist Republic includes the Abkhazian and Adjarian Autonomous Soviet Socialist Republics.

The Azerbaijan Soviet Socialist Republic includes the Nakhichevan Autonomous Soviet Socialist Republic.

The Uzbek Soviet Socialist Republic includes the Kara-Kalpak Autonomous Soviet Socialist Republic.

What rights does an Autonomous Republic possess?

An Autonomous Republic exercises state power on the basis of autonomy on its territory. This means that the people who form the Republic enjoy the right to self-government with regard to their domestic affairs. All state organs and institutions of an Autonomous Republic use the language of that Republic's people.

Each Autonomous Republic has its own Constitution, which takes account of its specific national features and is drawn up in conformity with the Constitution of the U.S.S.R. and the Constitution of the Union Republic of which it forms a part.

The Autonomous Republic enacts its own laws, the observance of which is obligatory on its territory. All-Union laws and the laws of the Union Republic of which the Autonomous Republic is a constituent part are also effective on the territory of the Autonomous Republic.

The frontiers of the Autonomous Republics are fixed by the highest state power in the Union Republic in question.

Autonomous Republics have their own higher legislative organs (Supreme Soviets) and higher executive and administrative organs (Councils of Ministers). They are ensured equal participation in the highest organs of power of the U.S.S.R. and of the Union Republic of which they form a part. Each of them elects deputies directly to the Soviet of Nationalities of the U.S.S.R. Supreme Soviet, and takes part in the election of deputies from the Union Republic to the Soviet of Nationalities.

One of the forms of national state structure of the Soviet peoples is the Autonomous Region. It differs from the ordinary regions in national composition.

Autonomous Regions enjoy rights additional to those of the ordinary administrative regions. They decide what language is to be used in conducting the business of the state apparatus and instruction in schools, and they elect deputies directly to the Soviet of Nationalities of the U.S.S.R. Supreme Soviet.

The Soviet of Working People's Deputies of the Autonomous Region adopts Statutes of the Autonomous Region which take into account the region's specific national features. These statutes are approved by the Supreme Soviet of the Union Republic of which the region forms a part.

Nationalities which are small in number are organised in National Areas. There are ten of these in the U.S.S.R. and they are component parts of one or another region or territory of the R.S.F.S.R.—mostly in the far north.

National Areas have their own organs of power, Soviets of Working People's Deputies of the National Areas, which, like the schools, conduct their work in the languages of the local population and send their deputies directly to the Soviet of Nationalities of the U.S.S.R.

All these various forms of state structure—Union Republic, Autonomous Republic, Autonomous Region, National Area—make it possible to look after the needs and requirements of the different peoples inhabiting the vast multi-national socialist state which is the U.S.S.R. They play an important part in the economic and cultural advancement of the Soviet peoples.

6

*How has the national question been solved
in the U.S.S.R. ?*

LONG before the victory of the Great October Socialist Revolution the Communist Party of the Soviet Union had worked out its basic demands on the national question, and on the establishment of Soviet power it started out undeviatingly to put them into effect.

Underlying the demands are the Leninist principles of equality and friendship of the peoples and proletarian internationalism. Marxism-Leninism is based on the proposition that no nation can be free if it oppresses other peoples, and that is why Lenin considered it necessary "to link up the revolutionary struggle for socialism with a revolutionary programme on the national question".

In the "Declaration of Rights of the Peoples of Russia", published on November 3rd [16], 1917 are proclaimed the cardinal principles of the Soviet State's national policy: equality and sovereignty of the peoples of Russia; the right of the peoples of Russia to free self-determination, including secession and formation of independent states; abolition of all national and national-religious privileges and restrictions whatsoever; and free development of the national minorities and ethnographic groups inhabiting the territory of Russia.

Guided by these principles, the Soviet Government has solved in practice the national question in Russia, one of the most complex social questions, establishing among the numerous peoples living in the country friendly and fraternal relations such as had never existed before.

The peoples inhabiting former tsarist Russia were afforded the opportunity of making use freely and without hindrance of the right of self-determination and to set up independent states. Poland and Finland, for instance, seceded from Russia and set up bourgeois states. The other peoples voluntarily joined the workers' and peasants' state.

Peoples that had never before enjoyed statehood won it and peoples who had lost it regained it. In the "Declaration of Rights of the Toiling and Exploited People" adopted in January 1918 by the Third All-Russian Congress of Soviets we read that "the Russian Soviet Republic is constituted on the basis of a free union of free nations, as a federation of Soviet national Republics."

The Union of Soviet Socialist Republics (U.S.S.R.) was formed in December, 1922, and today it has as constituent members fifteen Union Republics enjoying equal rights, eighteen Autonomous Republics, ten Autonomous Regions and ten National Areas, all united by a common desire to build Communist society and permeated by the common proletarian ideology of friendship and fraternity of the peoples.

In tsarist Russia the non-Russian nationalities suffered brutal national oppression. They were officially called "aliens", which underscored their dependent and inferior status.

The ruling class preached the reactionary ideology of bourgeois nationalism and chauvinism, kindled national strife and tried to set the workers of one nation against those of another in order to control them more easily.

In opposition to the reactionary ideology of bourgeois nationalism and chauvinism, the country's working class preached the ideology of internationalism and friendship of the peoples.

The Communist Party has untiringly united the working people of all nationalities in the country around the Russian proletariat.

Even before the victory of the October Revolution Lenin wrote: "As against the old world, the world of national oppression, national strife or national isolation, the workers are offering

a new world of unity of the toilers of all nations, a world in which there is no place for any privilege or for the slightest oppression of man by man."

After the victory of the October Revolution it was precisely this "new world of unity of the toilers", of which Lenin dreamed, that was set up in the U.S.S.R., a model of national peace and co-operation of free peoples.

All nations and nationalities inhabiting the U.S.S.R. have, since the establishment of Soviet power, made vast progress in government, and in economic and cultural development.

Equality of the nations under the law has been reinforced by equality in fact.

With the aid of the Russian and other peoples a number of peoples of the Soviet Union have eliminated their former backwardness, making a leap from patriarchal, feudal forms of economy to socialism, skipping the capitalist stage.

Large centres of modern industry have emerged in the national republics, regions and districts, including centres of the iron and steel, engineering, electric power, chemical, light and food industries.

As a result of the victory of the collective farm system agriculture in those areas has passed from the use of the primitive farm implements to modern tractors, combines and other machines (see answer No. 36).

Many higher educational establishments have been opened in the Union Republics, also Academies of Sciences, and a native intelligentsia has developed, devoted to the cause of the people and the international unity of the peoples.

In Soviet years forty-eight nationalities and national groups have created a written language and literature for the first time in their history (see answer No. 69).

The victory of socialism in the U.S.S.R. lifted the formerly oppressed peoples to the status of truly equal peoples and transformed the old, bourgeois nations into new, socialist nations.

To illustrate, while before the Revolution in the whole of the Turkestan territory there were altogether some 50,000 industrial workers, today in Uzbekistan alone more than 300,000 persons are employed in its industrial enterprises. The Republic now has its own heavy industry, making steel, building machines and producing oil.

Before the October Revolution there were approximately 160 schools on the territory of Uzbekistan with an enrolment of 17,000 children, and one specialised secondary school, staffed by some 700 teachers in all. The native populations of Uzbekistan, Kazakhstan, Tajikistan and Turkmenistan were practically 100 per cent illiterate (literate made up altogether 0.2 per cent).

Today Uzbekistan alone has more than 5,400 schools staffed by 71,000 teachers giving instruction to 1,300,000 pupils. Before the Revolution there was not a single educational establishment in all of Turkestan; today Uzbekistan alone has thirty-one higher schools and 100 specialised secondary schools with an aggregate enrolment of more than 130,000 young boys and girls.

Equally striking changes have taken place in the other Republics of the Soviet East.

The solution of the national question in the U.S.S.R. and the achievements of the peoples of the Soviet East have substantiated a cardinal thesis of Leninism that colonial, dependent and under-developed countries can, if they cast off the yoke of imperialism, wipe out their backwardness and take up the path of building socialism.

The experience gained in building socialism in the U.S.S.R. is being widely used in the other countries of the socialist camp and elsewhere all over the world.

The solution of the national question in the U.S.S.R. and the triumph of the ideology of friendship and equality of the Soviet peoples have acquired international importance and are an inspiring example for all nations and nationalities the world over.

How are Soviets elected?

| 7

DEPUTIES to all Soviets—from the rural Soviet to the Supreme Soviet of the U.S.S.R.—are elected by the voters on the basis of universal, equal and direct suffrage by secret ballot.

Elections in the U.S.S.R. are universal. All citizens who have reached the age of eighteen take part in them, irrespective of sex, social origin, property status, past activities, race or nationality. Soviet citizens have the right to take part in all elections, whether they are "resident" or "non-resident" in the area covered, whether they profess any religion or none.

Members of the armed forces enjoy the same electoral rights as other citizens.

Persons who have been convicted by a court of law and whose sentences include deprivation of electoral rights have no right to vote or be elected during the period fixed in the court sentence.¹ Apart from this, only the insane have no right to vote or be elected.

Elections of deputies are equal, for each citizen has one vote and all citizens take part in the elections on an equal footing.

Elections are direct. Deputies to all Soviets, including the Supreme Soviet of the U.S.S.R., are elected not through delegates but by the voters themselves.

Any citizen who has reached the age of twenty-three is eligible for election as deputy to the Supreme Soviet of the U.S.S.R. Any citizen who has reached the age of twenty-one can be elected deputy to the Supreme Soviet of a Union or Autonomous Republic. Any citizen who has reached the age of eighteen can be a deputy to a local Soviet.

Elections are conducted by secret ballot. The voter himself fills in the ballot paper in a special booth, in which no one else may be present, and he drops the ballot paper into the box himself. The complete secrecy of voting guarantees the people free expression of their will.

Candidates can be nominated by public organisations or by working people at general meetings of workers at their enterprises and institutions, of peasants in their villages and collective farms, of servicemen in their units.

At the election meetings, Communists and non-Party people nominate joint candidates and then jointly campaign for them. This election bloc of Communists and non-Party people follows from the fact that in the U.S.S.R. the Communists and the non-Party people have common interests. Both have the same aim—to ensure a high living standard for all working people, to live in peace and friendship with all peoples, and to build Communism in the U.S.S.R.

The electorate takes part in the organisation of elections and the supervision of the way in which they are conducted. For this purpose electoral commissions are formed of representatives of public organisations of the working people.

¹ In the new draft Fundamentals of the Criminal Code, the power of courts to deprive citizens of electoral rights is abolished.

Soviet elections are truly elections by the people. Thus, in February 1946, out of 101,000,000 electors 99.7 per cent cast their vote in the elections to the Supreme Soviet of the U.S.S.R. In March 1950, out of 111,000,000 electors, 99.98 per cent voted. In March 1954, 120,727,826 went to the polls, also 99.98 per cent of the electors. In March 1958, 133,796,091 (or 99.97 per cent) voted.

In the U.S.S.R. the deputy is a servant of the people. Any deputy who does not justify the confidence placed in him by the electors may be recalled by them at any time.

What Jurisdiction have local Soviets?

| 8

THE local Soviets of Working People's Deputies in territories, regions, districts, cities, villages and settlements are the organs of state power in their respective territories. Under the Constitution they are elected for a term of two years by secret ballot by all men and women who have reached the age of eighteen by election day.

With respect to social composition, the local Soviets reflect the class structure of socialist society, being composed of workers, peasants and members of the intelligentsia.

A good example is offered by the composition of the Moscow City Soviet elected in March 1957. Among its 853 deputies are 377 women; 346 are factory workers, 156 are engineers, scientists or journalists, 88 are heads of industrial enterprises or institutions, 26 are teachers, 30 are doctors, 159 are officials of Party, trade unions, youth or other public organisations.

The local Soviets direct local economic and cultural affairs, safeguard public order and see that the laws are observed and the rights of citizens are protected.

All local Soviets have their own budgets. In 1957 the rights of the local Soviets were further extended in connection with the reorganisation of economic management in the country. Under the jurisdiction of the local Soviets are thousands of industrial enterprises which earlier had been directed by all-Union or Republican Ministries, mainly factories manufacturing consumer goods.

The local Soviets' administrative organs are their executive

committees; they are elected at a session of the particular Soviet and are accountable to it.

The executive committees have departments to direct the different spheres of economy and culture: local industry, trade, management of residential buildings and housing construction, public education, public health and social maintenance. Executive committees of rural Soviets carry out agricultural inspections.

All Soviets except rural and settlement Soviets have planning commissions, whose functions include current and long-range planning of economic and cultural development on the territory served by them.

The executive-committee departments as a rule have small staffs, as the Soviets count on the participation of the voters in their activity. Millions of men and women in town and country participate in the work of the local Soviets' standing commissions, which are appointed by the Soviets from among the deputies.

The local Soviets and the deputies regularly report to their electors on their activity in directing economic and cultural development, and take note of the critical remarks and suggestions of the people.

9 |

Do classes exist in the U.S.S.R.?

YES, they do. But they are new classes—the working class and the collective-farm peasantry, and the intelligentsia (which has nothing in common with that which existed in old Russia).

What is the ratio of these classes to the country's total population (200,200,000 in April 1956)? At the beginning of 1956 wage and salaried workers and their families numbered roughly 117 million; collective farmers, and handicraftsmen united in producers' co-operatives and their families numbered about 82 million, and peasants farming individually and handicraftsmen working on their own without hired help numbered, together with their families, approximately 1 million. Wage and salaried workers made up (in 1955) 58.3 per cent; collective farmers and handicraftsmen united in producers' co-operatives 41.2 per cent,

and peasants farming individually and handicraftsmen working on their own 0.5 per cent.

These figures alone are enough to show that in the U.S.S.R. there are no exploiters, no classes that live by exploiting the labour of others. Exploiting classes were eliminated in the U.S.S.R. long ago.

Soviet society consists of two friendly classes—the workers and the peasants—and the intelligentsia which comes from the workers and peasants.

The working class of the U.S.S.R. is an entirely new working class, one that is free from exploitation, a working class that has become master of its country's material and spiritual wealth. The Soviet worker is a person of great public interests, versatile knowledge and a constructive attitude to his work. Many workers regularly contribute articles for the press, write books and pamphlets on their experience at work, or lecture on it in colleges and specialised secondary schools, and so on. Being the advanced class in society, the working class exercises state leadership of society in alliance with the peasantry.

The Soviet peasants are similarly free from exploitation. Previously the peasants worked individually on their small holdings, with backward technical equipment; or they worked for landlords and rich peasants, suffering hunger and want.

Today, Soviet peasants have voluntarily united their farms into agricultural collectives (artels) and are developing them on the basis of collective labour and modern technical equipment. Consequently, the Soviet peasantry is an entirely new class, the like of which mankind has never before known.

The intellectuals—man and women engaged in mental labour—faithfully serve the Soviet people. They stem from the workers and peasants, and are bound up with the people by their very roots. The Soviet intelligentsia is devoting its strength and knowledge to the common cause of the working people, the building of communist society.

10

What forms of public property are there in the U.S.S.R.?

IN the Soviet Union there is no private ownership of the means of production.

In the U.S.S.R. public socialist ownership of the means of production is the invariable rule. This means that Soviet society, which is made up of working people of town and countryside, itself owns the means of production.

Article 4 of the U.S.S.R. Constitution reads as follows:

"The economic foundation of the U.S.S.R. is the socialist system of economy and the socialist ownership of the instruments and means of production, firmly established as a result of the liquidation of the capitalist system of economy, the abolition of private ownership of the instruments and means of production, and the elimination of the exploitation of man by man."

Public socialist ownership is the basis of the Soviet system, the source of a prosperous and cultured life for all the working people.

Socialist property in the U.S.S.R. exists in two forms: state property (belonging to the whole people) and collective-farm and co-operative property (property of peasant collective farms, property of co-operative societies).

The land, its mineral wealth, waters, forests, mills, factories, mines, rail, water and air transport, banks, communication facilities, large state-organised agricultural enterprises (state farms, repair and technical service stations, and the like), and also municipal enterprises and the bulk of the dwelling houses in the cities and industrial localities, are state property, that is they belong to the whole people.

The common enterprises of collective farms and co-operative organisations, with their livestock and implements, the products of collective farms and co-operative organisations, as well as their buildings, constitute co-operative or collective-farm property.

Thus, under socialism, the means of production in the towns and in the countryside are public property.

While the means of production are public property, citizens' incomes and savings from work, their dwelling houses and

subsidiary home undertakings, articles of domestic economy and use, and articles of personal use and convenience (*see answer No. 11*) are their personal property. The personal property of citizens is also protected by law.

How is the right to own and inherit personal property protected?

11

ARTICLE 10 of the U.S.S.R. Constitution declares:
"The personal property right of citizens in their incomes and savings from work, in their dwelling houses and subsidiary home enterprises, in articles of domestic economy and use and articles of personal use and convenience, as well as the right of citizens to inherit personal property, is protected by law."

Every Soviet citizen is free to dispose of his savings as it seems best to him. He or she may use them to build a home or a cottage in the country, to buy a car or anything else desired. It all depends on one's earnings and savings, which are not restricted.

A worker who wishes to build his own house is given a plot of land by the state, free of charge. On application, endorsed by both the trade union and the management of his place of work, the State Bank grants a loan of 5,000 to 10,000 roubles, repayable over five to ten years on easy terms. Interest is charged at the low rate of 2 per cent per annum. In addition, the state provides building materials and free technical advice.

It is, however, against Soviet law to derive unearned income from one's savings or other personal property. Speculation or usury is a criminal offence punishable by law.

A citizen of the U.S.S.R. has the right to bequeath his personal property, i.e. savings from work, house, personal effects, copyrights and patents.

12

SOVET women enjoy complete equality with men in the family, in rearing the children, and in the right to inherit property. There is no sphere of economic or cultural, political or other public activity, where women may not display their knowledge, talents or talent.

In pre-revolutionary Russia the overwhelming majority of women working for hire were employed as domestic servants (50 per cent), or farm-hands working for rich peasants or landed proprietors (25 per cent).

In the Soviet Union women make up practically half of all wage and salaried workers; 45 per cent of those employed in industry, approximately 70 per cent of those employed in the educational system, 85 per cent in the public health service, and 49 per cent of those working in administrative bodies or public organisations.

The Soviet people rate highly the work of their mothers, wives and sisters, as can be seen from the fact that more than a million working women have been awarded orders or medals, and almost 3,000 have won the title of Hero of Socialist Labour.

Since Soviet power opened wide the doors to schools and higher educational establishments for all people several generations of talented women engineers, technicians and agricultural specialists have developed.

More than 10,000 women have degrees or titles, with more than 1,000 employed on the staff of Moscow University as teachers or scientific workers, among them twenty-nine professors and 500 docents and Candidates of Science.

Soviet women of various nationalities prominent in the arts—ballet and drama, music and folk dancing, circus and music hall—are known throughout the U.S.S.R. and abroad as well. The Soviet people are justly proud of many women architects, sculptors and painters, and there are also many famous women prose writers and poets.

The Soviet Government draws women citizens widely into the work of state administration. More than half a million women workers, peasants and members of the professions, are deputies to local Soviets, and more than 2,000 are deputies to Supreme Soviets of the Union or Autonomous Republics.

The number of women deputies to the U.S.S.R. Supreme Soviet keeps growing from one election to the next. The Fifth Supreme Soviet elected on March 16th, 1958, has 366 women

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12

What does the equality of all Soviet citizens mean?

SOVIENT society does not recognise any difference in rights as between men and women, "residents" and "non-residents", educated and uneducated, religious and those without religion. In Soviet society all citizens enjoy equal rights. Position in society is determined not by property status, sex, or national origin, but by work and ability.

Every Soviet citizen is guaranteed the right to work, rest and leisure, education, material security in old age and in sickness or disablement. All citizens are guaranteed political freedoms: freedom of speech, of the press, of meeting and demonstration, of uniting in public organisations. They are also secured freedom of conscience.

A Soviet citizen of any nationality is eligible for election to any organ of state power, or for appointment to any governing post. All citizens receive equal pay for equal work. They are free to take up any trade, to enter any educational establishment, to engage in any scientific, literary, political or other public activity.

Women in the U.S.S.R. are accorded equal rights with men in all spheres of economic, government, cultural, political and other public activity.

13

What role do women play in the life of the Soviet Union?

THE U.S.S.R. Constitution, the country's fundamental law, defines women's place in the life of the Soviet people, their role in building and developing the socialist state.

Article 122 of the Constitution has secured them equal rights with men in all spheres of economic, government, cultural, political and other public activity.

The age-old aspirations of women have come true in the U.S.S.R.: equal right to work and equal pay for equal work, state protection of the interests of mother and child (*see answer No. 88*), unlimited opportunity to acquire an education, profes-

sion or trade, complete equality with men in the family, in rearing the children, and in the right to inherit property.

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deputies, or 26.4 per cent of the total. Four women are members of the Presidium of the U.S.S.R. Supreme Soviet.

Participation by women in governing the state and in other public activity is not confined to those elected by the people as their deputies.

A great many women have been elected people's judges or people's assessors, and there is no trade union committee anywhere in the Soviet Union in which women are not widely represented.

A woman Minister can be found in every Union and Autonomous Republic, and a woman factory director, school principal, or collective-farm chairman is a common phenomenon.

The socialist system has at the same time raised high the dignity of mothers (see answer No. 88). Motherhood is recognised in the U.S.S.R. as an important social function of women, and care of mother and child is a major duty of the state.

Soviet times have witnessed the establishment of 7,000 women's medical consultation centres and 200,000 beds in maternity homes.

14

What are the rights and duties of Soviet citizens?

THE Constitution of the U.S.S.R. has secured to Soviet citizens extensive rights in all spheres of political, economic and cultural activity.

These liberties testify to the true democracy of the Soviet system, to the harmony of personal and public interests.

Soviet citizens' fundamental rights are: the right to work, that is, the right to guaranteed employment and payment for their work in accordance with its quantity and quality; the right to rest and leisure; the right to maintenance in old age and in sickness or disablement; the right to education; personal property rights to their incomes and savings from work, to their dwelling houses and subsidiary husbandries and the right to inherit personal property.

Citizens of the U.S.S.R. have also been secured the following freedoms: the freedom of conscience, that is, the freedom of professing or not professing a religion and likewise the freedom of religious worship or anti-religious propaganda; freedom of

speech and of the press, freedom of assembly, including the holding of mass meetings, street processions and demonstrations.

Citizens are also guaranteed the right to form and belong to public organisations. The most active and politically conscious citizens in the ranks of the working class, working peasants and working intelligentsia voluntarily belong to the Communist Party of the Soviet Union, which is the vanguard of the working people in their struggle to build communist society (see answer No. 21).

The Soviet State guarantees the citizens of the U.S.S.R. inviolability of the person and of the home, and the privacy of correspondence.

Citizens of the U.S.S.R. have the right to elect and be eligible for election to the representative bodies of the state.

A cardinal feature of Soviet democracy is that the rights and freedoms are secured to all citizens of the U.S.S.R., irrespective of sex, nationality or race, social status, origin or office.

The rights and freedoms are not merely proclaimed in the Constitution; they are actually guaranteed and the means provided for exercising them.

Thus, the right to work is ensured by the socialist organisation of the national economy, the steady growth of the productive forces of Soviet society, the elimination of the possibility of economic crises and the abolition of unemployment.

Freedom of the press is ensured by placing at the disposal of the working people and their organisations printing presses and stocks of paper for the publication of books, magazines and newspapers, and the possibility for every citizen to write to newspapers and criticise any state official, and so on.

Along with securing citizens of the U.S.S.R. democratic rights and freedoms, the Constitution also imposes on them certain duties, among which are: the duty to abide by the Constitution of the U.S.S.R., to observe the laws, to maintain labour discipline, honestly to perform public duties, to respect the rules of socialist behaviour and to safeguard and fortify public socialist property.

Military service in the armed forces of the U.S.S.R. is an honourable duty of the citizens of the U.S.S.R., and to defend the country is the sacred duty of every citizen.

The duties as well as the rights apply equally to all citizens.

15

What are the Soviet laws regarding marriage and the family?

THERE is complete equality between husband and wife in the Soviet family, which is built on a foundation of mutual respect, friendship and affection.

The Soviet State safeguards and protects the stability of the home. Both parties are guaranteed full equality in their rights and duties under the law, which allows no impairment of the woman's rights, and holds both parties equally responsible for the upbringing of their children.

Property accumulated after marriage belongs to both parties in equal measure. Each of the parties is responsible for the maintenance of the other in case of disability.

Soviet laws provide penalties for undermining the home by irresponsible conduct and for failure to support one's children.

A marriage in the Soviet Union is contracted by registration at the Civil Registry Bureau of the local Soviet of Working People's Deputies. The fact of marriage is recorded in the passports of both parties.

With the aim of strengthening family life, and protecting the interests of mother and child, Soviet law allows termination of the married state only through court proceedings and only on serious grounds. Divorce proceedings are held in private at the request of either party.

If the court finds it proper to grant a divorce, it specifies in the judgment which parent is to keep the children, divides the property between the husband and wife, and permits the parties to resume their original surnames if they so desire.

Re-marriage without the dissolution of a previous marriage, bigamy and polygamy are prohibited by law.

How is freedom of conscience exercised in the U.S.S.R.?

16

IN the Soviet Union, in conformity with Article 124 of the Constitution, the Church is separated from the state, and the school from the Church. The Church has no right to interfere in the political activities of the state. Neither does the state interfere in the internal affairs of the Church. No Church receives any money from the state. All Church organisations and the clergy are supported by voluntary contributions from members of the Church. All churches and religions enjoy equal rights. There is no state religion in the U.S.S.R.

All believers may freely attend church, mosque, synagogue, or other house of worship, in accordance with their religion to worship and perform religious rites. Any believer may invite a clergyman to his home to perform religious rites.

The right of Soviet citizens to profess any religion or none, to freely express atheistic views and conduct anti-religious propaganda, without, however, offending the feelings of believers, is guaranteed by law.

The Soviet State makes no distinction between citizens because of religion. In official documents (passports, marriage certificates, birth certificates etc.) the citizen's religion is not indicated. Officials have no right to enquire into the religion of citizens applying for work or admission to an educational establishment. Religion is the private, personal affair of the citizens, a matter of their conscience, the freedom of which is strictly protected by Soviet law. Religious intolerance, even the slightest, is not permitted in the Soviet Union.

Believers who wish to perform religious rites collectively may set up religious congregations on a voluntary basis. Such congregations may be formed if as few as twenty members are ready to join them. The state grants these congregations the free use of buildings to hold services and perform other religious rites. Congregations may also build new houses of worship. Central or local authorities assign premises for religious schools and provide paper and printshops for the publication of religious books and church magazines.

The denomination having the largest number of adherents in the U.S.S.R. is the *Russian Orthodox Church*. It is headed by

Alexey, Patriarch of Moscow and All Russia, who was elected at a Church Council held in 1945. The Patriarch took his monastic vows more than half a century ago, in 1902. He has an advisory body—the Holy Synod.

The religion having the second largest number of adherents in the U.S.S.R. is the *Moslem Faith* (Islam). The Moslems residing on the territory of the U.S.S.R. have four ecclesiastical centres (Religious Boards): in Baku, capital of the Azerbaijan S.S.R.; in Tashkent, capital of the Uzbek S.S.R.; in Ufa, capital of the Bashkir A.S.S.R.; and in the city of Buinaksk, in the Daghestan A.S.S.R.

The overwhelming majority of the Moslems in the U.S.S.R. are Sunnites, but there are a good many Shi-ites in the Azerbaijan Republic, the Central Asian Republics and in a number of other districts of the Soviet Union. In contrast to pre-revolutionary times, there is no strife today between the Sunnites and Shi-ites in the U.S.S.R.

At the Congress of the Peoples for Peace held in Vienna in 1952 Sheikh Ul-Islam Akhund Aga Ali Zade, the representative of the Moslems of the Soviet Union, said in his speech: "By the will of Allah, it has been the good fortune of myself and my contemporaries to live to the day when I could see with my own eyes how the peoples of the multi-national Soviet Union—and the Moslems among this friendly family—have gained their happiness on earth. . . . In the Soviet Union all peoples enjoy equal rights and have their independent states—the Soviet Republics; the native language is used in all institutions, all peoples are prosperous and among them fraternal friendship has been established; they have become cultured and they have mastered science and art. Moslems have full religious liberty and Islam enjoys the same rights as all other religions."

Other large denominations are:

The Buddhists, headed by the well-known Buddhist spiritual leader, the Bandido Hambo Lama Lobsan Nima Darmayev. He is chairman of the Central Ecclesiastical Board of the Buddhists in the U.S.S.R. and maintains his residence in the city of Ivolginsk, in the Buryat A.S.S.R.

The Roman Catholic Church, mainly to be found in the western part of the U.S.S.R. in the Latvian and Lithuanian Republics.

The Staroobriatsi (Old Believers).
The Orthodox Church of Georgia.

The Armenian (Gregorian) Church.
The Evangelical Christian Baptist Church.
The Lutheran Church.
The Jewish Religion.

Besides the larger religious denominations enumerated above, there are in the U.S.S.R. also other denominations with much smaller numbers of adherents. These are the *Seventh-Day Adventists*, *Reformati*, *Molokani*, *Karaites*, *Dukhobors*, *Methodists* and so on.

All of these religious associations, regardless of the number of their adherents, enjoy the same rights as the larger denominations. Only fanatical sects, which make mutilation the basis of their creed (such as the Skoptsy, who castrate their followers), are not allowed in the U.S.S.R.

To consider problems relating to the internal affairs of the Church, central ecclesiastical bodies convene congresses or conferences, which are attended by the clergy and representatives of the laity. Religious denominations have their own academies, seminaries and other schools for training clergymen. Ecclesiastical centres freely maintain intercourse with their co-religionists abroad, and some of them, the Russian Orthodox Church and the Armenian Church, for instance, have their own eparchies or representatives in foreign lands.

The clergy enjoy all political rights equally with all other citizens of the U.S.S.R. They may vote in all elections to organs of state power and they are eligible for election to them.

Leaders of all religious denominations, the rank-and-file clergy and the believers are actively participating in the peace movement in the U.S.S.R. Nikolai, Metropolitan of Krutitsy and Kolomna (Russian Orthodox Church), Archbishop Turs, head of the Evangelical-Lutheran Church of the Latvian S.S.R., with headquarters in Riga, are members of the U.S.S.R. Peace Committee. The late Mufti Ishan Babakhan Ibn Abdul Medjid-Khan, the head of the Moslems of Central Asia and Kazakhstan, was also a member of the committee.

In the activities of religious denominations questions arise that require solution by government bodies, and this has been taken into account by the Soviet Government. For this purpose there have been set up a Council for Affairs of the Russian Orthodox Church and a Council for Affairs of Religious Cults. These Councils assist ecclesiastical bodies to solve problems requiring consultation with state authorities and institutions; they also

supervise the proper application of the laws covering freedom of conscience and freedom of religious worship, and they draft bills and regulations on questions raised by religious bodies

17 |

How is justice administered?

THE function of Soviet courts of justice is to safeguard the labour and property rights and interests of Soviet citizens and to protect the rights and lawful interests of state institutions, enterprises, co-operative and other public organisations.

All courts, from the People's Court, which is the lowest, to the Supreme Court of the U.S.S.R., which is the highest, are elective

The jurisdiction of each court is strictly defined. The bulk of criminal and civil cases are tried by the People's Courts (each composed of a Judge and two People's Assessors), which are found in every town and district. The territorial, regional, city and area courts hear cases involving crimes against the state and disputes between state and public organisations, and consider appeals and protests against sentences and decisions of the People's Courts.

Supervision of the judicial activities of all courts in a particular Union Republic is exercised by the Supreme Court of the Union Republic, and the Supreme Court of the U.S.S.R. exercises supervision to ensure compliance with federal laws by the courts and hears disputes in which the interests of Union Republics are involved

In all courts, cases are tried with the participation of People's Assessors

The powers of these People's Assessors, who are elected on the same basis as People's Judges, are the same as those of the Judges, and this equal authority constitutes the most important principle of the entire Soviet judicial system.

The Soviet Constitution provides for the complete independence of Judges. No government body or official may influence in any way the outcome of a trial. The court's judgment or decision must be in strict conformity with the law and based on the evidence in the case.

It must be stated, however, that for a certain period these

clear and strict requirements of the law were distorted. The vigorous measures taken by the Communist Party and the Soviet Government have resulted in rectification of the injustice done in the cases in which wrong verdicts were rendered, and provision has been made to preclude the possibility of similar deviations from the law in future.

All citizens are equal before the law. There are no special courts in the U.S.S.R. for any category of the population. The People's Court is the same for all citizens.

Judicial proceedings are conducted in the language of the Union or Autonomous Republic, Autonomous Region or National Area, persons unfamiliar with that language being provided with an interpreter. All citizens have the right to use their own language in court.

One of the most important principles of the Soviet court is that cases are heard in public. The only exceptions are cases involving state or military secrets, or at the request of the litigants where their intimate relations are concerned.

The Soviet court performs a great educational function.

The laws of the U.S.S.R. reject punishment as an aim in itself or as a revenge, as a method of humiliating the human dignity of the convict. While punishing criminals, the Soviet court at the same time makes provisions for their correction and re-education. Of major importance for this is that convicts serving sentences are given work paid at regular rates and living conditions not incompatible with human dignity.

The Soviet State creates conditions of life and work for convicts which enable them to atone for their guilt by honest labour and conduct, and regain their status as decent Soviet citizens.

Who may become a Judge?

| 18

ANY Soviet citizen of either sex may become a judge in the U.S.S.R., provided he or she has reached the age of twenty-three and wins the confidence of the voters.

People's Judges and People's Assessors are elected by the citizens of the particular district in which the court sits on the basis of universal, direct and equal suffrage, by secret ballot for a term of three years.

One Judge and from fifty to seventy Assessors are elected in

each election district. The overwhelming majority of the Judges possess a higher or secondary legal education.

Judges and Assessors of the higher courts—the territorial and regional courts—as well as members of the Supreme Courts of the Republics and members of the Supreme Court of the U.S.S.R. are elected by the respective Soviets of Working People's Deputies and Supreme Soviets for a term of five years.

19 | *Is there a legal profession in the U.S.S.R.?*

YES, there is. There are associations (collegiums) of lawyers in all big cities, district centres and in many industrial settlements.

Any citizen may practise law who has had a legal education and legal experience. Questions of admission to the legal profession are decided by the associations themselves, which are independent in all their activity.

The legal profession in the Soviet Union renders legal aid to citizens and organisations, including state enterprises and collective farms. Lawyers appear in court as counsel for defendants in criminal cases and as representatives of litigants (plaintiffs or defendants) in civil cases.

Fees for legal services are low. The defendant may choose his lawyer himself, or may ask a lawyers' collegium to appoint one. If a defendant cannot afford to pay the lawyer's fee, the court provides legal assistance in all cases handled by the Procurator's Office, or where the accused is physically unable to defend himself (deaf mutes, the blind, and so on), and also where the accused is a minor.

The right to legal defence entitles the defendant in a criminal case (and the litigants in a civil suit), or the lawyer, to ask the court to subpoena any number of witnesses, to order any written or material evidence to be produced in court and to have the necessary documents made exhibits in the case, and also demand expert testimony or recommittal of the case for further investigation.

What are the powers of the Procurator-General of the U.S.S.R.?

20

THE Procurator-General of the U.S.S.R. is appointed by the Supreme Soviet of the U.S.S.R. for a term of seven years. He has supreme supervisory power to ensure the proper application and strict observance of the law by all government institutions, officials and private citizens of the U.S.S.R. He is vested with the right to protest against any action, order or instruction of any official, Ministers of the U.S.S.R. included, if it is in contravention of the law.

The Procurator-General appoints the Procurators of the Union and Autonomous Republics, territories and regions; they are responsible only to the Procurator-General of the U.S.S.R. and function independently of any local organs. The Procurator-General of the U.S.S.R. approves the appointment by the Procurators of the Union Republics, of area, district and city Procurators.

The Procurator-General of the U.S.S.R., the Procurators of the Republics, territories and regions, and the city and district Procurators prosecute for the state in court proceedings.

Any citizen of the U.S.S.R. may file a complaint with the Procurator-General against any institution or official violating the law, or a petition seeking protection for his legal rights and interests.

Article 127 of the Constitution of the U.S.S.R. reads:

"Citizens of the U.S.S.R. are guaranteed inviolability of the person. No person may be placed under arrest except by decision of a court or with the sanction of a Procurator."

The Procurator's Office enforces the observance of this Article, and those violating it, no matter what office they may hold, are called to strict account.

In the performance of its duties the Soviet procuratorate receives great help from the community. Like the Soviet court, the procuratorate has close ties with the working people who regard it as the defender of the Soviet social and state system.

II. PUBLIC ORGANISATIONS

21

What is the role of the Communist Party in the U.S.S.R.?

THE Communist Party of the Soviet Union is the guiding and directing force of the Soviet State, the leading force of Soviet society.

By the will of the people this role of the Party is embodied in the U.S.S.R. Constitution. Article 126 of the Constitution says that the Communist Party of the Soviet Union is the vanguard of the working people in their struggle to build communist society and is the leading core of all organisations of the working people, both public and state.

How does the Party guide the Soviet State and the people?

It determines the political line to be followed in respect of major questions of foreign and home policy. It thoroughly studies the state of the national economy—industry, transport and agriculture—problems of the development of science and culture, studies the experience of the foremost people, and brings shortcomings to the surface, and on the basis of these studies the Party gives guidance on particular questions of communist construction.

In directing the activity of the Soviet State the Party does not replace the U.S.S.R. Supreme Soviet. In its work it does not take the place of either the Soviets, which are the organs of state power, or other organisations of the working people, such as the trade unions, peasants' co-operatives (collective farms), the Y.C.L. and so on. These organisations are non-Party organisations, uniting tens of millions of working people of Soviet society—workers, peasants and professional people. The Party puts forward its line in the mass organisations through the Communists working in them. Party members working in the Soviets, trade unions, peasant and producers' co-operatives, ministries, factories, cultural and scientific organisations explain to the working people the Party's line, its counsel and proposals and they muster the people to carry out the Party's proposals.

Explanation and persuasion is the principal method used by the Party to guide all organisations of the working people which make up the system of the Soviet State.

The Communist Party has guided Soviet society successfully, leading the country along the path of progress year after year. It adheres to the Leninist principle of collective leadership of the country, which means that all of the Party's decisions on the affairs of the Soviet State are decided by Party leaders not individually, but collectively after thorough discussion by Party congresses, meetings of the Central Committee, or the Presidium of the Central Committee. Collective leadership ensures correct decisions on problems of policy, economy and culture.

The Party policy is carried out not only by the Communists but also by the non-Party masses and their organisations. This is due to the fact that the policy of the Communist Party is in accord with the vital interests of the people and of the whole of society.

The people and the Communist Party have one and the same goal: to build Communist society and to live in peace and friendship with the peoples all over the world. That is why all members of Soviet society support and follow the policy of the Party, regarding it as their own.

The strength of the Party consists, firstly, in that it is armed with advanced Marxist-Leninist theory.

This revolutionary, scientifically-grounded theory enables the Communist Party to learn to know the laws of development of society, to foresee the course of events, and to direct them in the interests of the working people, to outline and carry through the correct policy. Knowledge of the economic laws of development of society, for instance, helps the Party constantly to develop the national economy, to enhance the material welfare of the people and to hurdle all barriers to the goal—the building of the classless Communist society.

The strength of the Communist Party lies, secondly, in the unity and solidarity of its ranks, its millions of like-minded people. Lenin, founder of the Party, said that every member of the Party was responsible for the Party, and the Party was responsible for every member. A characteristic feature in the life and activity of the Party is the unity of its ranks and views (world outlook).

Finally, the strength of the Communist Party lies in its inseparable ties with the people. It is a truly people's Party, for it is made up of society's best people—foremost workers, peasants and professionals—and serves the people only.

The Party is guided by the Marxist-Leninist teaching that the people are the makers of history. It therefore constantly strengthens its ties with the working people, listens to what they have to say, understands their needs, and not only teaches them, but also learns from them. That is why the Communist Party enjoys the utmost confidence of the people.

Its inseparable ties with the people are the major source of the strength of the Communist Party of the Soviet Union.

22

Why is there only one political party in the U.S.S.R.?

THE Communist Party is the only political party in the U.S.S.R.

This stems from the country's historical development, from the fact that in Russia triumphed the ideology of the working class expressed in the programme and policy of the Communist Party.

The working people of the U.S.S.R. need no other party as there are no antagonistic classes in the country, society being made up of workers and peasants, who are bound together by the same aims and actions; by ties of profound friendship and indestructible union; the people's intelligentsia is closely joined with them.

Before the establishment of Soviet power Russia had several political parties, as the country then had antagonistic classes: capitalists and proletarians, landlords and peasants. Besides these classes there was also a rural bourgeoisie (kulaks) and an urban petty-bourgeoisie.

Each class had its own party, which expressed and defended its interests.

The party of Russia's working class is the Communist Party, founded by Lenin. It defends the interests not only of the workers but of all working people. It led the peoples of Russia to victory in the Great October Socialist Revolution.

The class structure of Soviet society differs fundamentally from the class structure of pre-revolutionary Russia. There have been no capitalists, landlords, kulaks, or urban petty-bourgeoisie in the Soviet Union for a long time. The class of imperialist big bourgeoisie and the landlord class were eliminated during the

revolution and civil war, and the urban bourgeois classes ceased to exist following the complete victory of the socialist system in the whole of the national economy. With the elimination of the exploiting classes their political parties also disappeared.

Today there are only two friendly classes in the U.S.S.R.—the workers and peasants—and the people's intelligentsia. The political, economic and spiritual interests of the workers, peasants and intelligentsia are identical. Their ultimate goal is also the same—to build up communist society in the U.S.S.R. The interests of all the working people are expressed and defended by one party: the Communist Party of the Soviet Union. The people have long recognised it as their leader and teacher, for they have become convinced from their experience over many years that the Communist Party had no aim other than working for the happiness of all working people, and has no other aim today.

There is therefore no social ground in the U.S.S.R. for other political parties.

What is communism?

23

WHAT is communism, and in what way does it differ from socialism?

The teaching of the founders of scientific communism, Marx and Engels, a teaching developed comprehensively by Lenin, propounds that socialism and communism are the two phases, two stages of development of one and the same social system, communist society.

Socialism is the first (lower) stage, and communism is the second (higher) stage of communist society.

The Soviet people have built up socialism and are now building communist society.

While socialism and communism have much in common, there is, nevertheless, a difference between them.

The following features are common to both socialism and communism:

Under both socialism and communism the economic foundation of society is the public ownership of the instruments and means of production and an integrated system of economy.

Neither under socialism nor communism is there social oppression. There are no exploiting classes, no exploitation of man by man, and no national oppression.

Under both socialism and communism the national economy is developed according to plan, and there are neither economic crises, nor unemployment and poverty among the masses.

Under both socialism and communism everyone is equally bound to work according to his ability.

Under communism, just as under socialism, the basic economic law is the maximum satisfaction of the constantly rising material and cultural requirements of the whole of society through the continuous expansion and improvement of production on the basis of higher techniques.

What then, is the difference between communism and socialism?

Socialist society affords full play for the development of the productive forces. The level reached by socialist production makes it possible for society to give effect to the principle: "From each according to his ability, to each according to his work." This means that the products are distributed in accordance with the quantity and quality of the work performed.

In communist society the productive forces will reach an incomparably higher level of development than under socialism. The national economy will develop on the foundation of very high techniques, the production processes will be mechanised and automatized in an all-round way, and people will extensively utilise every source of energy.

The productive forces of society will reach so high a level of development that they will ensure an abundance of all consumer goods and all material and cultural wealth. This abundance of products will make it possible to meet fully the needs of all members of communist society. Social life under communism, therefore, will be guided by the principle:

From each according to his ability, to each according to his needs.

Through lack of knowledge, or sometimes because of hostility towards communism, it has been argued that under communism there will be a levelling of the tastes and needs of all people. But tastes and needs of people are not and cannot be the same or alike in quality or quantity, either under socialism or communism.

Under communism there will be an all-round and full satisfaction of every demand of the people.

Under socialism there are still the working classes—the workers and peasants—and the intelligentsia, among whom there still remains a difference. Under communism there will be no class differences, and the entire people will become working folk of a united, classless communist society.

Under socialism there still exists a distinction between town and country. Under communism there will be no essential distinction between town and county, that is, between industry and agriculture.

Under socialism there are two forms of public property, namely, state property (belonging to the whole people) and collective farm and co-operative property (property of collective farms and of co-operative societies). Under communism there will be a single form of property—property belonging to the whole people.

Under socialism there still exists an essential distinction between mental and manual labour.

This distinction consists in that in contemporary socialist society there is still a gap between the cultural and technical standards of people engaged in physical labour and those engaged in mental labour.

Although among the workers and peasants there are a good many who have risen to the level of engineers or technicians, the cultural and technical level of most workers and peasants, people engaged in physical labour, is still behind the cultural and technical level of the intelligentsia.

The very fact that in socialist society the intelligentsia remains a special social stratum is proof that under socialism there still exists an essential distinction between mental and manual labour.

Under communism this distinction will disappear, for the cultural and technical standard of all working people will reach the standard of engineers and technicians.

Under socialism there still exist the survivals of capitalism in the minds of people. Under communism all survivals of capitalism will disappear.

Under communism work will no longer be merely a means of livelihood, but man's primary need in life.

These are the main features of communism.

24

What is the cult of the individual? How is the C.P.S.U. overcoming its consequences?

THE cult of the individual is the exaggerated adulation of individuals, attributing to them supernatural qualities, deifying and worshipping them. It is an idealistic notion attributing to outstanding individuals a decisive influence on the course of history.

This phenomenon has nothing in common with the ideology of Soviet society which is based on the Marxist-Leninist teaching that the working people are the motive force of social progress, the real makers of history. Any leader may lose the ability of giving correct leadership if he places himself above the people, or divorces himself from them. The cult of the individual is thoroughly alien to the nature of the Soviet system, a system which arose, grew in strength and developed as a result of the consciousness, labour and will of the popular masses headed by their collective leader and organiser—the Communist Party of the Soviet Union.

The cult of the individual is an intolerable phenomenon in the Communist Party and socialist society.

The harm resulting from it lies in the fact that its dissemination diminishes the role of the Party and the people, and the role of collective leadership in the Party, and leads to serious defects in work and gross violations of socialist law. Yet this ugly phenomenon was observed in the Soviet Union over a number of years, it was connected with the cult of J. V. Stalin which had spread among the members of the C.P.S.U. and among the Soviet people at large as well.

The Stalin cult manifested itself in attributing to him personally the major achievements of the people and the Party in building socialism and in defending the country against aggressors.

Principled criticism of the mistakes connected with the Stalin cult of the individual was made and measures for overcoming the consequences of the cult were taken by the Twentieth Congress of the C.P.S.U., held in 1956. The Party launched its criticism of Stalin's mistakes firstly in order to overcome their consequences, and secondly to prevent a repetition of the mistakes.

While giving due credit to Stalin for his work in the building of socialism and in the struggle against the anti-Party groups,

the Congress pointed out that in his latter years Stalin had made a number of mistakes, violating the standards of Party and state activity.

The criticism by the Party and its big effort in eliminating the consequences of the cult of the individual have contributed to the improvement of all the Communist Party's activities and to the consistent adherence to the Leninist principles of collective leadership and standards of Party activity, to strict observance of revolutionary law, to the further development of inner-Party and Soviet democracy, to an upswing in ideological work and a growth of the initiative and activity of the working people.

The C.P.S.U. and the Soviet people give Stalin his due as a devoted Marxist-Leninist and staunch revolutionary.

While criticising the wrong aspects of his activity the Party has fought and continues to fight those who, under the guise of criticising the cult of the individual, are incorrectly picturing and distorting the whole historical period during which Stalin headed the Central Committee of the Party.

The Party and the Soviet people know well that such "criticism" and talk of "Stalinism" is nothing but a cover for departing from the principles of Marxism-Leninism. That is why the Communists have combated and will continue to combat all deviations from Marxism-Leninism, all attempts to distort its essence, and will fight against all those who would belittle and compromise the leaders of the Communist and Workers' Parties who are devoted to the Marxist-Leninist cause, to the principles of proletarian internationalism.

What is the role of criticism and self-criticism in Soviet society?

25

IN the Soviet socialist state, in which the workers, peasants and intellectuals are themselves masters of their country, all working people are equally interested in having all their institutions and organisations, their industrial enterprises and collective farms, work well, so that day by day, they provide more material and cultural values for the people.

That is why, at their meetings and conferences, at sessions of the Soviets and in the newspapers, the Soviet people, both Communists and non-Party people, expose in a forthright way

defects in the work of state institutions or public enterprises, and criticise poor leaders. They also view their own work critically.

This critical attitude towards the activity of government officials, Deputies to the Soviets and towards the work of fellow-workers, Soviet people call criticism. A critical attitude towards their own work and honest public admission of shortcomings in their own work, is called self-criticism.

Criticism and self-criticism have always been and are now methods applied by the Communist Party of the Soviet Union in its daily work. And, since in the U.S.S.R. communists and non-Party people have the same tasks, and one and the same goal—the building of communist society—these methods used by the Party in its work have become the daily working methods of all Soviet people.

Criticism and self-criticism have become a great force in the development of Soviet society. Forthright criticism of defects in work prompts Soviet people not to be satisfied with their successes, not to become set, but always to go forward, to develop their socialist economy.

Criticism and self-criticism help to enlist millions of working people to take part in the solution of important problems of state, develop their activity and inculcate in them the feeling that they are the masters of the country.

By availing themselves of this opportunity to criticise openly defects in work, the working people take an active part in guiding the country and its economy.

Criticism, by the broad masses, of inferior work of state, economic and public organisations is a vivid illustration of the genuine democracy of the Soviet socialist system.

The spirit of criticism and self-criticism pervades the entire work of the Communist Party, the Soviets and all organisations of the working people of the U.S.S.R.

What is the Young Communist League?

| 26

THE Lenin Young Communist League of the Soviet Union, or Komsomol, as it is known for short, has been in existence since October 29th, 1918. On that day the first congress of Russia's Young Communist League opened in Moscow. It added "Lenin" to its name in 1924 after the death of the founder of the Soviet State.

In the forty years it has existed, the Komsomol has grown from a small group of young revolutionaries, 22,000 in all, into a mass organisation of foremost Soviet youth. Today it counts 18,500,000 youngsters in its ranks.

Although a non-Party organisation, the Komsomol maintains close ties with the Communist Party, working under the latter's leadership.

It admits to membership youths and girls who accept its rules and programme, and express a desire to work in one of its organisations. Applicants must be not less than fifteen years old and membership terminates at the age of twenty-eight.

Komsomol organisations are set up in factories, on state and collective farms, in institutions, schools and higher educational establishments. Its primary organisations today number nearly half a million.

All leading bodies—from the primary organisation committee to the Central Committee—are elected by secret ballot at meetings, conferences or congresses.

The main task set itself by the Komsomol is to educate Soviet youth in the spirit of devoted service to their country. It takes an active part in the country's political life, in building Communist society, inculcates love for work among the youth, sees to it that the youth regularly improve their working skill, master knowledge and the achievements of advanced science and engineering and know how to apply it in practice in all spheres of the national economy and culture. Over 120,000 Komsomol members are Deputies to Soviets. Seven thousand are Heroes of the Soviet Union.

Very often Komsomol organisations initiate valuable undertakings that are of importance to the entire country. During the First Five-Year Plan, the Komsomol was one of the chief initiators of socialist emulation among the working people (see answer No. 45).

A good many towns and industrial settlements, factories and mines built by the youth have been named in honour of the Komsomol; among the towns are Komsomolsk-on-the-Amur, Komsomolsk-on-the-Volga, Komsomolsk-on-the-Pechora, and Komsomolsk in Kazakhstan.

Late in 1956 the youth undertook to build thirty-five new coal-mines in the Donbas, and 30,000 youths and girls participated in this work. Formerly it took from two to three years to build a mine of this kind; this time the young people built all thirty-five in one year.

The Komsomol played an exceptional part in putting virgin land under crops. In two years more than 350,000 young people settled on the new lands.

In the spring of 1958 roughly 100,000 Komsomol meetings were held throughout the country at which the young people discussed the further development of the collective farm system and re-organisation of the machine and tractor stations. A good many suggestions were made at the meetings and they were taken into account by the U.S.S.R. Supreme Soviet in enacting the law (see answer No. 53).

Representing as it does the interests of the youth, the Komsomol deservedly enjoys great prestige. It has been given the right to take up direct with the government or individual Ministries questions of work, education, cultural services and problems of every-day life of interest to young people.

The Komsomol organisations have their own clubs and libraries, publishing houses, newspapers and a great number of juvenile and children's magazines.

The Komsomol helps and directs the work of the Lenin Young Pioneer Organisation (see answer No. 27).

Soviet youth take an active part in the work of the World Federation of Democratic Youth, in the Olympic and World Student Games in international festivals. They carry out an extensive exchange of delegations with foreign countries and take a most active part in the people's struggle for peace.

Who are the Young Pioneers?

| 27

YOUNG Pioneers is the name given to schoolchildren who belong to the Lenin Young Pioneers, a mass children's organisation with a membership of 19 million boys and girls between nine and fourteen years of age.

The main function of the Young Pioneers' organisation is to help the school and teachers. By their study and conduct Young Pioneers serve as an example for other schoolchildren to follow.

All kinds of clubs flourish in Young Pioneer organisations: young technicians, radio amateurs, aircraft modellers, young naturalists, book friends and amateur art circles are just a few. All over the country are to be found Palaces and Houses of Young Pioneers, Young Pioneer parks and sports grounds.

In summer-time, millions of Young Pioneers go out to camps, make special tours, or go on excursions to see the country.

Through all of its varied and absorbing work, the Young Pioneer organisation inculcates in the children a conscious attitude towards study, discipline and labour, physical endurance, honesty and truthfulness, a sense of comradeship, respect for elders, and accustoms them to socially useful activities.

How do the Soviet trade unions function?

| 28

THE Soviet trade unions have a membership of close to 50 million workers. They are organised along industrial lines: all workers in an enterprise or institution belong to the same union. (Membership is, of course, voluntary.)

Every Soviet citizen working in a factory or institution, or studying in a higher educational establishment, specialised secondary school or trade school has the right to join a trade union.

The union statutes provide that every member is entitled to vote in elections and is eligible to election to any union body.

He has the right to criticise activities of trade union bodies or their officials at meetings and in the press, and to address requests to, or lodge complaints with any leading body, to apply to the union for protection and support of his rights if the management violates the collective agreement or laws in force, covering work, social insurance, cultural or every-day services.

All trade union bodies, from the lowest to the highest, are elected by the members of the union and are accountable to them. Trade union funds come from membership dues, which run from 50 kopeks to one per cent of the wages monthly, depending on the amount earned.

All the activity of Soviet trade unions is based on broad democracy and the initiative of the masses on experience gained and approved by the masses.

The history of the trade union movement in the U.S.S.R. is a history of drawing ever wider sections of workers into the country's economic and political activities. The trade unions regularly concern themselves with raising the workers' living and cultural standards and educating them in the spirit of communism.

In every stage of development of the Soviet Union the trade unions have played an important part in building up the economy and in drawing workers into managing industry and deciding urgent economic and political questions.

The role and scope of activity of the trade unions in the socialist state becomes broader all the time.

In the Soviet Union the functions of the trade unions are not restricted to defending the economic interests of the working people. Lenin called the trade unions a school of administration, of management, a school of communism, and it is on this classical definition that the Soviet trade unions base their activity.

Among the principal functions of the Soviet trade unions are the following: participation in drafting long-range plans of nation-economic development; participation in drafting legislation pertaining to industry, labour and culture; supervision to ensure observance of labour protection laws and industrial safety rules; participation in planning wages and seeing to it that they are properly calculated; administration of the state social insurance funds organisation of socialist emulation and conclusion of collective agreements with the management (*see answer No 41*), and settlement of work disputes (*see answer No. 42*).

Union committees at factories organise socialist emulation, help the workers to train for higher qualifications, take part in arranging course schools and study circles, pass on the experience of the foremost workers, and popularise new and better production methods and technical innovations.

The unions also cater for the workers' material needs and cultural interests. They maintain many Palaces of Culture, clubs,

libraries and stadiums. They see to it that programmes for housing, cultural and other services are carried out as scheduled, take part in the distribution of flats in houses belonging to industrial establishments, and provide accommodation at health and holiday resorts.

The central trade union body for the entire country is the All-Union Central Council of Trade Unions (A.U.C.C.T.U.), which is elected at the All-Union Congress of Trade Unions. The central body for each trade union is the central committee, which is elected at the Congress of the particular union.

Trade councils direct the activity of the trade union organisations in the localities (the administrative economic areas).

What scientific and cultural associations are there in the U.S.S.R.?

29

IN affording the working people unlimited opportunities to acquire an education, Soviet power has made science and culture available to all the people, and that is why the once backward country, three-quarters of whose population were illiterate, is now occupying a leading place in world science and culture.

Contributing to this development, among other things, has been the activity of various societies in which scientific and cultural workers are united.

The Constitution of the U.S.S.R. (Article 126) secures to Soviet citizens the right to unite in public organisations and societies, and on this basis many associations of scientific and cultural workers have been organised in the U.S.S.R. The more important are named below:

The Writers' Union of the U.S.S.R., founded in 1932, today has a membership of roughly 4,500. It helps to create emulation among writers, growth of artistic skill, all-round development of the forms, styles and genres of the multi-national Soviet literature and gives assistance to budding writers.

The highest leading body of the union is the U.S.S.R. Writers' Congress, and the executive body is the Board, elected by the Congress. Serving under the Board are the following commissions: on the literatures of the peoples of the U.S.S.R., on literary

criticism, on work with young writers and on children's literature.

The union has its own newspaper, magazines and a publishing house, the Soviet Writer Publishing House. The union maintains the Gorky Literary Institute and the Higher Literary Courses.

It also has an office for the protection of authors' rights and a Literary Foundation, the function of which is to help improve the general amenities of writers.

The other associations of people engaged in creative activity function similarly, each in its own field, and have a similar structure.

The U.S.S.R. Journalists' Union (recently established) caters for journalists working on magazines and in publishing houses.

The U.S.S.R. Artists' Union, founded in 1939, has a membership of 7,800.

The U.S.S.R. Architects' Union, founded in 1932, has over 7,400 members.

The U.S.S.R. Composers' Union, also founded in 1932, has a membership of 1,240.

The recently established *Union of Cinema Workers* has 1,450 members; it is made up of directors, operators, actors and actresses.

Each Union Republic has its own writers' union, composers' union, and so on, and they are affiliated to the appropriate U.S.S.R. organisations on a federative basis.

The Union Republics also have theatrical societies, to which the actors, stage directors and other art workers belong. The largest is the All-Russian Theatrical Society, which has sixty-odd branches in regional towns and Autonomous Republics of the R.S.F.S.R.

There are many scientific societies in the country helping the development of different branches of science and the putting into practice of the more important scientific achievements.

Among them are the U.S.S.R. Geographical Society, one of the world's oldest geographical societies, established in 1845; the U.S.S.R. Mineralogical Society, founded in 1817, and the U.S.S.R. Astronomical and Geodetic Society.

There are also twenty-four country-wide medical societies, such as the Society of Anatomists, Histologists and Embryologists, the Pediatricists' Society, the Society of Neurosurgeons, and so on, each representing a particular field of medicine.

The twenty-five U.S.S.R. engineering and technical societies, organised along industrial and technological lines, occupy

themselves with raising and solving new scientific and technical problems and maintaining close contact between science and industry.

These unions and societies have their own publishing houses, newspapers and magazines.

What peace and international organisations are there in the U.S.S.R?

30

THERE are many public organisations in the U.S.S.R. set up for the purpose of developing and strengthening economic and cultural relations and friendship and co-operation between the Soviet people and the peoples of other countries.

The principal organisations are the following:

The U.S.S.R. United Nations Association is working to make the United Nations a real instrument of peace, an organisation of international co-operation. It is affiliated to the World Federation of United Nations Associations.

The Soviet Peace Committee, founded in 1949, heads the peace movement in the U.S.S.R. and maintains contact with peace organisations elsewhere in the world. The Soviet Peace Committee represents the peoples of the U.S.S.R. in the World Peace Council, taking an active part in the latter's work. It publishes the Russian edition of the magazine *Peace*.

The Union of Soviet Societies for Friendship and Cultural Relations with Foreign Countries is doing much to acquaint the Soviet public with the life and culture of other peoples and to acquaint the public abroad with the life and culture of the Soviet people. The Union has affiliated to it fifty-odd societies for friendship and cultural relations with foreign countries. The Union's ties with many people prominent in the field of culture and with scientific and cultural societies in different countries help to promote international co-operation, better understanding and to strengthen world peace.

The Soviet Women's Committee is a public organisation serving as a medium for contact between Soviet women and women in other countries.

On the invitation of the Committee women's delegations from Greece and Indonesia, Poland and Italy, the German Federal

Republic, Great Britain, Yugoslavia, Burma and many other countries have visited the Soviet Union. With the active assistance of the committee delegations of Soviet women have visited countries abroad.

Being a national section of the Women's International Democratic Federation, the Committee takes an active part in the work of the Federation. The Committee publishes *Soviet Woman*, a monthly magazine, which comes out in nine languages.

The Committee of Youth Organisations of the U.S.S.R. helps to promote friendship and co-operation between the Soviet youth and the youth of other countries, to extend relations between Soviet youth organisations and international, regional and national youth organisations of other countries; it ensures participation by Soviet youth in international undertakings and the preparation and holding of international youth and student affairs in the U.S.S.R. Among other things, the Committee took a very active part in organising the Sixth World Youth and Student Festival in Moscow in 1957.

The Committee of Youth Organisations of the U.S.S.R. is a member of the World Federation of Democratic Youth, is affiliated to the International Union of Students, and maintains relations with youth organisations in seventy-odd countries.

The Soviet Asia and Africa Solidarity Committee is a public organisation whose function is to extend in every way friendly ties between the peoples of the U.S.S.R. and the peoples of Asia and Africa. Represented on the Committee are public organisations of the U.S.S.R., of the Kazakh, Kirghiz, Tajik, Turkmen, Uzbek, Armenian, Georgian and Azerbaidjan Union Republics.

The Soviet War Veterans' Organisation plays a big part in strengthening ties with international and national organisations, which are combating the danger of another war. The Soviet Veterans' Organisation is affiliated to the International Federation of Resistance Movements and takes an active part in the work of the Federation.

III. NATIONAL ECONOMY

What is the basic economic law of socialism? | 31

THE basic law of socialism is an objective law of social development. It defines the essence of the socialist mode of production and all the principal aspects of economic development under socialism.

The aim of production under socialism is not profit, but to provide man and his needs. Maximum satisfaction of the constantly rising material and cultural requirements of the whole of society and of every member of society is the aim of socialist production; continuous expansion and perfection of socialist production on the basis of higher techniques is the means for the achievement of the aim.

Being an objective law, the basic economic law can arise only on the basis of certain economic conditions. As a result of the Great October Socialist Revolution in Russia the mills, factories, the land, the banks and transport facilities became the collective property of the people. Thus, for the first time in history, the working people had the opportunity of employing the means of production to satisfy their growing requirements. The basic economic law of socialism became operative from that moment.

The operation of the basic economic law of socialism is reflected, firstly, in the development of the productive forces of society, in their flourishing. Between 1913 and 1955, in spite of the immense damage caused to the national economy by two world wars, the civil war and foreign intervention in 1918-1922, per capita industrial output rose 19.4 times over. (By way of comparison, United States industrial production in the same period went up 2.3 times, in Britain 1.6 times and in France 1.8 times).

Since 1930 the U.S.S.R. has known no unemployment. By the close of 1957 the number of workers had reached 52 million, an increase of nearly 40 million over 1913.

The operation of the basic economic law of socialism is reflected, secondly, in the steady advance of the material welfare and cultural standards of the people of the Soviet Union. The working people in the U.S.S.R. receive about three-quarters of the national income for the satisfaction of their personal material

and cultural requirements, and their income is going up year by year (see answer No. 34).

In the two post-war five-year plan periods (1946-1956) the new homes built for the working people in towns and industrial settlements totalled over 254.5 million square metres of living floor space* (i.e. 2,636 million square feet), and 5 million houses were built in rural areas.

In 1957 more than 48 million square metres (i.e. 516 million square feet) of living floor space were turned over for occupancy in towns, and in the countryside 770,000 houses were built by collective farmers and rural intelligentsia.

Every able-bodied person in the Soviet Union is ensured work and the opportunity of acquiring a higher qualification free of charge. Children and adults studying in the U.S.S.R. in 1955-1956 numbered more than 50 million, with the cost of instruction met by the state.

In 1957, the state spent more than 201,000 million roubles for social and cultural purposes (health services, education, social security, physical culture, and so on).

Socialism gives the working people a life of prosperity and culture. It has emancipated the individual, allowing full play for individual and collective creative effort. The material and cultural requirements of the people in the U.S.S.R. are constantly rising, and this, in its turn, is a permanently operating and powerful factor in the development of production, because production is being set new tasks and demands all the time. Socialist production is constantly growing and expanding on the basis of machines that are being more and more improved upon. An essential condition for continuous expansion of socialist production is the priority development of production of the means of production.

* Figures for domestic floor space in the U.S.S.R. do not include kitchens, bathrooms, lavatories, halls and passages.

How is the U.S.S.R. national economy planned?

32

AN essential condition for planning the national economy is public ownership of the means of production and of the natural resources. Public ownership provides the state and its economic and planning bodies the needed material means for solving economic tasks which make up the basis for the plan.

National economic planning began in the U.S.S.R. immediately after the victory of the October Revolution, but it was only at the end of the period of civil war and intervention that economic planning could be widely developed.

At first, plans were compiled for individual branches of the economy or areas covering brief periods.

The first long-range plan of development of the U.S.S.R. economy as a whole was drawn up in 1920; it was the G.O.E.L.R.O. Plan (State Plan for the Electrification of Russia), covering ten to fifteen years, envisaging the rehabilitation of the national economy and the establishment of socialism's industrial base, with wide electrification of industry to serve as the foundation. That plan was fulfilled ahead of schedule—in ten years.

Starting with 1928, the U.S.S.R. began to compile five-year plans of national economic development. Before World War II three five-year plans had been worked out of which two were fulfilled or overfulfilled; fulfilment of the third was interrupted as a result of fascist Germany's attack on the Soviet Union.

The war years showed the decisive advantages planned economy had for the mobilisation of the country's forces to deal a crushing rebuff to the enemy.

The fourth and fifth five-year plans, compiled after the war, were successfully fulfilled, with the result that the pre-war economic level was considerably exceeded.

Today the U.S.S.R. is drawing up a seven-year plan to cover the 1959-1965 period (see answer No. 33).

Besides the long-range plans, annual, quarterly and monthly plans are compiled, concretising the principal tasks of the long-range plans and ways of carrying them out in practice.

The concrete forms of planned guidance of the national

economy depend on the maturity of the socialist economy and of planning itself, on the number and size of enterprises to be covered by planning, and the scope and nature of the plan's tasks.

When industries consisted of a few enterprises and the economy of individual areas was not mature or comprehensive enough, the best way of planning the industries was through the Union Ministries, whose plans were combined by the U.S.S.R. State Planning Committee into a consolidated national economic plan.

This system, however, had a number of inconveniences, which were especially felt when the number of enterprises in the individual industries had increased sharply and when a sufficient number of more comprehensively developed areas had emerged. Under these conditions the planning centre naturally was shifted from the Union Ministries to enterprises in the districts and Union Republics.

Since the reorganisation of the management of industry and construction (see answer No. 37), the establishment of economic councils in economic administrative areas, and the great extension of the rights of the Union Republics, the present system of planning has ensured the best combination of centralised planning and economic initiative of the local planning bodies and enterprises.

Compilation of a long-range national economic plan begins simultaneously in the central planning body and locally.

The State Planning Committee of the U.S.S.R. Council of Ministers (Gosplan), taking the level of development reached and the principal national economic tasks for the planned period as a basis, works out the more general targets for the development of the main branches of the national economy, the financial resources and their utilisation and the programme of capital investment, and determines the national economic requirements and the resources to meet them.

Simultaneously the enterprises and the economic councils work out draft plans for their territories; the drafts are sent to the state planning committees of the Union Republics which consolidate them and send them on to the Gosplan.

The latter appraises them from the point of view of practicality and the extent to which the available resources are used, and

whether the drafts are in line with the tasks of the national economic plan as a whole.

Representatives of the enterprises, of economic councils and the republics widely participate in this work; they may defend their projects and at the same time they can get a concrete idea of the place their plans occupy in the country's consolidated plan.

Local initiative, coupled with central guidance, makes for practical and efficient planning. Only the countrywide working out of the plan makes it possible to bring out all development possibilities and potentials and make maximum use of them.

At the same time it is only centralised planning that ensures a balanced development of the economy and casting the plan to solve the problems that are most important in the particular period.

The consolidated long-range plan contains the tasks for developing the branches of industry, agriculture and transport, and for distributing production over the country.

An important section of the plan is the capital construction programme, which ensures the carrying out of production tasks through the required increase in production capacities. Underlying the production and construction plans are targets for higher labour productivity and lower production costs.

Occupying an important place in the plan are the provisions for raising the material and cultural standards of the people, namely, the targets for increased retail sales, higher incomes, housing and other construction, education, social security, and so on. The financing of all measures under the plan is worked out in the financial plan's indices.

Not all parts of the national economy are planned directly by the state.

Collective farms draw up their plans of development independently. Neither are the personal and auxiliary husbandries of the working people or prices of goods sold on collective farm markets planned.

However, the state influences these spheres economically in the needed direction and the state plan includes provision for such influence: the amount of purchases of farm produce and the prices paid for them, lowering prices for the state trading system to influence the price movement on collective farm markets, and so on.

A limited range of basic planned tasks for economic councils

and republics are approved by way of centralised planning. In carrying out these tasks, those implementing the plan have the opportunity of manoeuvring with the resources and attain the objectives set most economically and rapidly.

Local bodies enjoy the greatest independence in compiling annual and quarterly plans, as the basic ratios of development are already determined by the long-range plan.

The principal task of the central planning body now is therefore scientific long-range planning of national economic development; and operative planning and check-up of plan fulfilment have become in the main the function of the local economic and planning bodies.

33

What are the tasks of the long-range Seven-Year Plan—1959-1965?

THE Seven-Year Plan of national economic development covering the years 1959-1965 is a new stage in the development of long-range planning of the socialist economy of the U.S.S.R.

The period to be covered by the plan—seven years—has been picked so that the considerable programme of industrial construction outlined for the immediate period ahead could be completed in the main, that most of the enterprises under construction might be put into operation and yield a substantial increase in the chief items of industrial production.

The combination in a single plan period of large capital investments and the economic results therefrom (in the form of products from the new enterprises) has great advantages.

Besides providing for the completion of most of the construction works, the 1959-1965 plan envisages at the same time the necessary carry-over construction to ensure an even rise in output in the years to follow.

The Seven-Year Plan is a continuation of the earlier Five-Year Plans and at the same time a part of the general long-range programme of the country's economic development designed to reach a per capita output level for the main items of production, surpassing that of the United States.

The Seven-Year Plan is to solve a number of major problems

faced in the development of principal industries, the elimination of shortages of a number of industrial products, and better geographical distribution of industry in the country.

The plan envisages important tasks for the development of the iron and steel industry, the power industry, the fuel industry (especially oil and gas) and the building materials industry.

A major task of the Seven-Year Plan will be the development of the chemical industry, which today does not meet all the requirements of the national economy. By 1965 output of the more important branches of the chemical industry is to double or triple, and output of synthetic fibres and plastics is to go up 4.5 to eight-fold.

Along with the further development of heavy industry a more rapid expansion is outlined for light industry. For instance, the output of woollens and silks is to be almost doubled and the production of footwear is to go up 60 per cent.

In addition to the manufacturing and construction programme, the 1959-1965 Plan sets large tasks for the development of agriculture, transport facilities, a considerable programme of housing construction and a number of important undertakings for the greater well-being and higher cultural standards of the Soviet people.

Actively participating in compiling the Seven-Year Plan are enterprises, the economic councils of economic administrative areas and the planning organs of the Union Republics.

On the basis of their draft plans, made more precise and revised so as to have them correspond to the basic tasks of the national economic plan, Gosplan is working out a consolidated long-range plan of development of the national economy, which, following approval by the Supreme Soviet, will become a state law.

How is the national income distributed?

34

IN the Soviet Union the national income belongs to the working people.

One part (about a quarter) goes for the further expansion of socialist production and for other public needs, and the remainder (approximately three-quarters) is used for the satisfaction of the working people's material and cultural requirements.

What makes up the three-quarters of the national income

which goes to satisfy the personal needs of the people?

This figure includes wages and salaries and the income received by collective farmers. It includes the money spent by the Government on pensions and other forms of social maintenance, social insurance, on free education and medical services and on other cultural services and amenities.

Thus, in 1950, cash payments and various benefits received by the population from the state amounted to 122,000 million roubles, or almost three times the 1940 figure.

In 1955 they amounted to 154,000 million roubles, or 3.6 times as much as in 1940 and in 1957 to 201,000 million roubles, the sharp rise being due to the large increase in pensions under the new law.

The expansion of socialist production (building new enterprises, equipping enterprises with new machinery, etc.) is in the interests of the working people themselves, since increasing output means a higher material and cultural standard for them all.

The advantages of the socialist system of economy (development according to plan, no economic crises, unemployment or impoverishment of the people) make for an unprecedented rate of increase in the national income. In 1957 the national income was up more than twenty-fold compared with 1913 and in 1960 it will be twenty-seven times as high as before the Revolution, with the income of the population growing in the same proportion.

35

How has the U.S.S.R. become an advanced industrial power?

WHEN the Socialist Revolution took place in Russia the country was backward and in a state of ruin. Yet Marxist-Leninist teaching says that socialism can be built only on the basis of a developed large-scale machine industry, which provides the foundation for equipping the national economy with advanced technique.

Only if this was done could the young socialist system show its superiority over capitalism: a higher productivity of labour, a rapid rate of industrial expansion and the possibility of a steady rise in the well-being of all members of society.

The U.S.S.R. thus had the choice of either giving up the building of socialism or doing away with Russia's age-old backwardness in the shortest possible time, rapidly developing heavy industry and, on that basis, all of the national economy.

Overcoming the greatest difficulties, the Soviet people have successfully solved the problem of industrialising the country, the problem of building up the material and technical foundation for socialism.

In forty years the U.S.S.R. became a great industrial power with an all-round developed and economically independent national economy, and with a progressive science capable of solving the most difficult scientific and engineering problems.

The country's economic advance has been brought about by socialist industrialisation, which has provided the best solution of this problem in an unprecedentedly brief time.

When industrialisation of the U.S.S.R. began, its industrial level was extremely low and it did not have enough means, qualified personnel or experience in socialist construction, and, moreover, it had to combat the resistance of the enemies of socialism within the country and without.

What has made possible the decisive progress was the superiority of the socialist economic system, and above all, the fact that industrialisation was carried out in the interests of the people, who therefore threw themselves heart and soul into the job.

With ownership of the basic means of production passing over to the state it became possible, in a centralised way, to manage the material resources available and to start industrialisation first with developing heavy industry, that is, the iron and steel, engineering, fuel, and ore-mining industries.

An acute problem faced in industrialisation, especially at first, was the shortage of finance, the problem of capital investments. The problem was solved by exercising strict economy and by the centralised use of accumulation to develop heavy industry.

Investments in heavy industry came largely from the accumulation of light industries, agriculture, trade, and so on. Soviet heavy industry was developed without outside assistance, entirely by means of domestic resources.

Today Soviet heavy industry is developing mainly by using its own accumulation, which makes it possible to allocate con-

siderably more resources to develop agriculture, the light and food industries and housing construction. Capital investments in 1957 alone equalled the total for both the First and Second Five-Year Plans.

A serious obstacle to the development of industry during the early Five-Year Plans was the shortage of technical personnel and skilled workers and the inadequate development of science. A country-wide cultural revolution was required to solve these problems. Today the U.S.S.R. has the largest number of qualified engineering and technical personnel.

A special feature of socialist development is that obstacles have been tackled consciously; it has been a country-wide constructive process with all the people united in the struggle for objectives that are important for all the people.

There is no record in history of a single case of capitalism being able to utilise such factors to solve its economic problems.

Adhering as they did to the principles of private initiative and unplanned development it took the United States, Germany and Britain from 80 to 150 years to increase industrial output thirty times. The U.S.S.R. accomplished this in less than forty years, of which but little over half were years of peaceful development.

The U.S.S.R. built up a strong and technically advanced heavy industry under the first two Five-Year Plans. A number of industries (the automobile, machine-tool and instrument-making industries and most branches of the chemical industry) had to be developed from scratch.

By 1937 more than 80 per cent of the country's industrial output had come from plants built or completely reconstructed under the Five-Year Plans, and when the Second World War broke out the Soviet Union had become a power of great economic potential, capable of smashing the Hitler war machine both economically and militarily.

Under the post-war Five-Year Plans the country's industrial power kept increasing and the industrial structure and technical equipment of the national economy were further improved.

While during the First Five-Year Plan period coal output increased on the average by 7,200,000 tons a year, and in the Second Five-Year Plan period by 12,700,000 tons, the annual increase in the Fourth Five-Year Plan period was 22,400,000 tons, and in the Fifth 26,000,000 tons; in 1957 the increase was 33,000,000 tons.

The annual increase in the production of cement went up from 407,000 tons in the First Five-Year Plan period to 4,000,000 tons in 1957, and in oil production from 2,400,000 tons to 14,200,000.

Industrial output in 1957 exceeded the 1913 output 33 times over, with output of the means of production up 74 times, of electric power 110 times; coal output went up 16-fold and steel 12-fold, and output of the engineering and metal working industries increased more than 200 times.

In 1913 Russia accounted for 2.5 per cent of the world's industrial production, while today industrial output of the U.S.S.R. is approximately 20 per cent of world production.

For output volume the U.S.S.R. has moved up to second on the list, being behind only the United States.

The high level of industrialisation reached by the U.S.S.R. provides a solid foundation for the socialist system, and is a reliable guarantee of the country's defensive capacity and a material base for further economic progress and greater well-being for the Soviet people.

How has the national economy of the non-Russian Union Republics developed?

36

FROM the earliest years of Soviet power the Soviet State and people have given special attention to the development of the non-Russian Union Republics of the U.S.S.R.

This was required for eliminating in the shortest possible time the backwardness those republics received as a legacy from the past to enable their people to catch up with the Central part of Russia economically and culturally. What had to be done to solve the national question (*see answer No. 6*) in such a multi-national state as the Soviet Union was precisely to do away with the economic and cultural inequality of the peoples.

This task has been successfully carried out. Today each Union Republic has its own up-to-date and diversified industry, large-scale mechanised agriculture and a developed culture.

Let us cite a few examples.

The Kazakh Soviet Socialist Republic is second among the Soviet Republics for territory (over 1,100,000 square miles) and third for population.

Before the Revolution Kazakhstan was a region of stock-breeding nomads, scarce mining enterprises run by foreign concessionaires and a few small primitive factories—a region with a poverty-ridden and illiterate population.

In those days it accounted for less than half of one per cent of the country's industrial output.

In Soviet times, rich deposits of various minerals have been found in the Republic, and some 3,000 industrial enterprises have been built.

Today Kazakhstan produces ferrous and non-ferrous metals, coal, oil, chemicals, machinery, industrial equipment, footwear, fabrics, meat products, tinned goods and other commodities.

The Republic's largest coalfields, the Karaganda Basin, is the third largest supplier of coal in the U.S.S.R. In 1957 the Karaganda coal miners produced more coal than all of tsarist Russia did in 1913.

Kazakhstan comes third for industrial output in the country

Kazakhstan's industrial development is continuing. Among the many enterprises under construction at the present time are the huge Karaganda steel mills and the Sokolovsk-Sarbai concentration mills.

The Republic's agriculture is also progressing steadily.

While it remains an important animal husbandry centre, as a result of the subjugation in recent years of more than 50 million acres of virgin land in the Republic, Kazakhstan has become the country's second-ranking cereal supplier, next to the R.S.F.S.R. In 1956 it accounted for 30 per cent of the grain delivered to the state granaries.

In Uzbekistan, too, a diversified industry has been developed since the establishment of Soviet power. This Republic has been and remains the country's chief cotton producer, today producing 5½ times as much as it did before the Revolution.

Cotton-growing, the leading branch of Uzbekistan's agriculture, has had a considerable effect on the development of the Republic's industry, too.

The output of technical equipment used for raising and processing cotton occupies a leading place in its engineering industry. Uzbekistan today is the main producer of machinery for cultivating and harvesting cotton, and at the same time it turns out roughly three-quarters of all spinning machines made in the Soviet Union.

It is also an important centre of the textile industry, and

coal, oil, iron and steel and chemical industries have been developed following the discovery of mineral deposits, all prospected since the Revolution.

Electric power has been considerably developed in the Republic, which today produces almost 1,300 times more electricity than in 1913.

Kirghizia, Tajikistan, Turkmenia, the Trans-Caucasian and Baltic Republics, and other Union Republics possess today a highly developed industry and up-to-date mechanised agriculture.

Compared with 1913, gross output of large-scale industry in 1957 was up as follows: in the Kazakh Republic 97-fold, in the Kirghiz Republic 717 times and in the Tajik Republic 1,049 times.

Industry in Latvia, Lithuania and Estonia, which joined the Union of Soviet Socialist Republics in 1940, has also reached a high level of development. To illustrate, Lithuania has become richer by many new industries, among them the machine-tool and turbine manufacturing industries; the Republic's total volume of industrial output has increased seven-fold.

The industrialisation of the Union Republics and their rapid economic expansion have resulted in a steep rise in employment and in the material and cultural standards of the working people.

In each Republic the working class and native intelligentsia have grown in numbers.

On the eve of the Revolution Turkmenia, for example, had altogether 300 Turkmen factory and office workers, while in 1957 it had more than 85,000. Forty years ago Turkmen were engaged in primitive crop growing and livestock breeding; today they produce oil and coal, work in the chemical industry, at electric stations, and light and food industry plants.

Economic development in the non-Russian Union Republics is proceeding at a steadily rising rate. The long-range plans, based on accurate calculations and practical possibilities, envisage a further advance in all branches of the national economy, a growth of the productive forces in each Republic and in the Soviet Union as a whole.

37

Why has the management of industry and construction been reorganised and how?

IN the middle of 1957, the management of plants and construction jobs was reorganised all over the country by decision of the Supreme Soviet of the U.S.S.R.

The reorganisation plan, which was put forward on the initiative of the Central Committee of the C.P.S.U., was submitted to a country-wide discussion. Millions of people discussed the draft law at hundreds of thousands of meetings and in tens of thousands of letters which they addressed to editorial offices of newspapers.

In the discussions and letters they presented concrete suggestions for improving the draft.

What is the purport of the reorganisation and what are its advantages as compared with the old system of management?

In the past the basic organisational form of management of industry and construction was the Ministries or independent offices for the individual branches of the economy.

That structure served well in the period when the Soviet people launched the country's industrialisation. The principle of management by industry made it possible to concentrate the effort on the key branches of heavy industry and to train the necessary engineering and technical personnel and industrial executives.

However, as Soviet economy expanded and more and more branches of industry and construction jobs appeared, it became necessary to set up new Ministries and departments, and that led to the management staffs swelling all the time and growing more complicated.

Many departmental barriers appeared between branches of industry and between enterprises, and under those conditions, with the vast scale of production (there were more than 200,000 industrial enterprises and more than 100,000 construction works), concrete and operative direction from one centre became difficult.

A situation had been created when the principle of direction by a branch of industry began to check the growth of the country's productive forces and hamper the work of industry. It became necessary to work out more flexible methods of managing industry and construction, to shift the centre of economic management to the localities, to bring management closer to the factories and construction jobs.

It was therefore decided to switch over to the principle of territorial management; 104 economic administrative areas were established, each with its Economic Council, which is directly subordinate to the Council of Ministers of the Union Republic.

All enterprises and construction works of Union-Republic importance in the particular economic area are directed by the Economic Council, and those of local importance by the local Soviets.

The reorganisation has resulted in the elimination of 141 All-Union and Republican Ministries; their enterprises have been placed under the authority of the Economic Councils or local Soviets.

The industrial enterprises turned over to the Economic Councils account for roughly three-quarters of the country's total industrial output.

What has been the practical result of the reorganisation?

With centralised direction retained by the state, the reorganisation has made it possible considerably to enlarge the rights and responsibility of the Republican and local organs in economic development and to release local initiative, and it has made for broader and more active participation by the people in the management of industry.

The territorial principle has made it possible to remove departmental barriers and to make more efficient use of the vast potentials and possibilities offered by planned socialist economy.

Direction of enterprises has become more energetic and operative. All enterprises in the area now have one director—the Economic Council or local Soviet, instead of the many Ministries as in the recent past. This has made it possible to take quick decisions on urgent questions of production right on the spot.

The reorganisation has created favourable possibilities for the overall development of the economic areas and more deliberate and effective co-operation and specialisation of plants. And this has made for a considerable increase in the volume of output, together with better quality and lower production costs.

The technical councils set up under the Economic Councils have opened up wider possibilities for drawing the working people into the management of industry and construction.

The technical councils, made up of representatives of research organisations, worker-inventors, executives, trade union and Party officials, take up problems of the general industrial development of a particular area, greater labour productivity, higher

technical level of plants, better organisation of production, and so on.

Proposals and recommendations submitted by the technical councils make it possible to solve the complex problems of the development of industry and construction most efficiently.

Testifying to the substantial results already produced by the reorganisation of economic management is Soviet industry's record for 1957 and the first half of 1958.

The 1957 plan for gross industrial output was overfulfilled by all Economic Councils, and overfulfilment continued in 1958. In 1957 Soviet industry produced goods exceeding the state plan by 100,000 million roubles.

The country's industry has begun to work considerably better, increasing output from month to month. The reorganisation has thus ensured a fresh advance of socialist industry, greater material resources for the country and a higher national income and, consequently, a further rise in the material welfare of the people.

38

Who manages Soviet industrial enterprises?

THERE are two kinds of industrial enterprises in the U.S.S.R.—state enterprises, belonging to the whole people, and co-operative enterprises, belonging to the workers of the particular enterprise, the members of the particular producers' co-operative.

State industrial enterprises—the bulk of the country's enterprises—are managed by a director appointed by an appropriate Ministry, by the Economic Council of the particular area, or local Soviet.

Co-operative industrial enterprises are managed by a board of management and its chairman, who are elected by the members at a general meeting.

The director of a state industrial enterprise has charge of the material and financial resources and personnel of the enterprise, and bears full responsibility to the state for the enterprise's work, for fulfilment of state plans on schedule and targets for quantity and variety, and for the cost of production. He is also answerable for the strict observance of labour laws.

The directors of Soviet enterprises are, as a rule, former workers or peasants, or the children of workers and peasants;

they possess vast experience, and most of them have completed a course in economics or engineering in a college or specialised secondary school.

Thus, the director of a Soviet enterprise and the people working under him, are representatives of the same class; they are all working people and their interests fully coincide.

Defining the relations between the management of a state industrial enterprise and the workers employed in it is the collective agreement, concluded annually between the management and the trade union organisation (*see answer No. 41*). The collective agreement covers all aspects of the enterprise's work, including production and payment of factory workers, engineers and office workers, rate-fixing and working conditions, and cultural and everyday services.

The socialist system ensures broad and active participation by the workers of every enterprise in the management of production.

They do this through the trade unions, which in a socialist society are a school in which millions learn to manage the economy, and through the standing production conferences, where every worker may submit proposals for further improving techniques and production technology, may criticise the activity of any executive, from foreman to director.

The administration of every Soviet industrial enterprise has to report to the production conferences, or their committees, how the proposals submitted by workers and specialists have been carried out.

The enterprise's communist and trade union organisations in their daily work help the management, at the same time exercising public supervision over the activity of the administration. They regularly hear and discuss reports and communications by directors, deputy directors and shop superintendents, and make proposals and recommendations for improving the work of the enterprise.

39

How do Soviet workers take part in the management of enterprises?

A NUMBER of measures have been taken in recent years to further develop Soviet democracy and improve the organisation of industrial management (*see answer No 37*). One feature is the greater role given the trade unions (*see answer No. 28*).

There are many ways in which members of Soviet trade unions, workers in industry, transport, construction, and on state farms, machine and tractor stations and repair and technical service stations, participate in the management of production.

The most common ways are participation in making up their enterprise's annual and long-range plans; participation in the factory scientific and technical councils, the function of which is to work out measures for technical progress and for economising raw and auxiliary materials, and to give practical assistance to innovators in their work; also participation in production conferences, which make it possible to combine the principles of one-man management with control from below.

In the summer of 1958 the Presidium of the U.S.S.R. Supreme Soviet approved a special statute covering the rights of factory trade union committees; the statute underscores that the committee represents the workers on all questions of work, living conditions and culture and is vested with legal rights for this purpose.

It takes part in drafting production and capital construction plans, and proposals for housing repairs and cultural and service establishments.

The factory committee hears reports by the manager on the fulfilment of the production plan, of undertakings under the collective agreement, of measures for improving working and living conditions.

It also takes part in settling questions relating to rate-fixing and payment for work, in seeing to the observance by the administration of labour laws, rules and standards, of safety measures and industrial hygiene.

The Statute prohibits dismissal of factory or office workers without the consent of the trade union committee.

Recently the Council of Ministers of the U.S.S.R. and the All-

Union Central Council of Trade Unions have jointly approved a statute providing for setting up standing production conferences, which are one of the principal forms of drawing workers into managing industry.

The conferences settle the most complex and varied production problems, and inculcate in every participant a sense of personal responsibility for the implementation of the state plan and the technical progress of their enterprise.

Production conferences are made up of production and office workers, representatives of the trade union factory and shop committees, of the administration, of the Party and Komsomol organisations, of the primary organisation of the scientific technical society and of the inventors' and innovators' society.

The production conference directs all of its activity to ensuring successful work by the enterprise and to spreading the experience of innovators and outstanding workers in production, and so on.

The production conference examines problems of the organisation of production, work, pay and rate-fixing.

It discusses plans for organisational and technical measures for the introduction of new techniques, and the mechanisation of production; it also considers plans for industrial and housing construction and the building of cultural and service establishments.

Coming within its scope of activity are questions of improving working conditions, industrial safety, training of personnel and the proper employment of workers.

The production conference works under the direction of the trade union committee and is a broadly representative body. It discusses all questions collectively and decisions are taken by a majority vote.

The enterprise's administration sees to the implementation of the decisions and proposals adopted at the conference, and at the following meeting reports on how they have been carried out.

40

What are the working conditions at Soviet enterprises?

WORKING hours at Soviet enterprises, holidays and leaves are fixed by labour legislation, which is based on the principles underlying the Constitution of the U.S.S.R.

Until 1956 eight hours constituted the maximum working day and for trades involving hard working conditions the working day was seven, six or even four hours. In 1956 the working day was cut by two hours on Saturdays and days before holidays. And beginning with 1957 the country is gradually going over to a seven-hour working day, and for workers of the leading trades of some branches of industry to a six-hour working day, without a reduction in wages.

Overtime is prohibited, and is permitted only in exceptional cases (combating natural calamities, putting things in order following accidents, and so on).

All workers receive annual paid holidays ranging from two weeks to two months, depending on the conditions of work and the nature of the industry.

Besides these general rules which apply to all working people, there is Soviet legislation specifically covering the working conditions of juveniles and women. Soviet laws prohibit child labour. Juveniles between the ages of sixteen and eighteen may not be employed at jobs requiring physical strain or on night shifts. In 1956 the working day for juveniles was cut to six hours, leaving their wages the same as before. The employment of women on work requiring physical strain, or which is harmful to women, is also prohibited. Pregnant women are transferred to lighter jobs for which they are paid their regular average pay, and in addition to their normal paid holiday they receive maternity leave of 112 days, or more if the confinement does not proceed normally. In addition to their regular lunch time, nursing mothers are allowed time off—half an hour every three-and-a-half hours—to feed the baby. These leaves are paid for by the place of employment.

The extensive mechanisation of production processes and automation which the Soviet State has been carrying out has had

a decisive effect on improving conditions of work and health in industry.

Today, the arduous and labour-consuming operations in coal, iron and steel, oil, transport, building and other industries are completely mechanised.

The Soviet Union also has automatic transfer machines, automatic shops, and automatic plants, where everything is done by machines with people merely watching the operations.

Provision has been made for overall mechanisation and automation of the main and auxiliary operations in all branches of industry, and the further mechanisation of agricultural production.

The U.S.S.R. has a well-organised system of labour protection, safety technique and industrial hygiene in mills, mines and transport. Working clothes and footwear are issued free.

Workers engaged in hazardous occupations (chemical plants, non-ferrous metal works, printing works, and so on) receive special foods (milk, butter, sour cream, etc.) at their place of work, the cost being met by the state.

The Soviet State spends immense sums of money on labour protection and safety measures. During the Fifth Five-Year Plan period, from 1951 to 1955, the amount came to about 10,000 million roubles, or more than eight times as much as was spent during the first two Five-Year Plan periods (1928-1937).

Huge sums have been allocated to increase the mechanisation of arduous processes and improve working conditions.

State control of observance of the regulations and standards covering labour protection, safety technique and industrial hygiene has been entrusted to the trade unions. Several million workers are members of the trade union labour protection commissions and social insurance councils. They keep a check on the proper expenditure of the money allotted by the state for these purposes and on the enforcement of the measures covering labour protection and safety technique stipulated in the collective agreement (*see answer No. 41*).

41

How are collective agreements concluded?

COLLECTIVE agreements are negotiated each year by and between the management and trade union committees of Soviet enterprises, the latter acting on behalf of the workers, engineers, technicians and office employees.

The agreements stipulate each side's undertakings with respect to fulfilment and overfulfilment of state plans and the establishment of working and living conditions that best help to raise production and improve output quality, and to ensure higher material and cultural standards for the workers. The agreements specify exactly what and when the management and trade union committee are to do towards improving production technology, introducing new machinery, increasing workers' skill, improving labour protection and safety technique, building houses for the workers, organising healthy recreation, adding to the facilities of children's institutions and service establishments, and so on.

The workers take an active part in drafting collective agreements; at the thousands of shop, shift and general meetings and conferences they submit proposals and discuss individual items and the draft as a whole.

After the collective agreement has been signed it is put out in booklet form—or as a poster—and is widely distributed among the workers of the particular enterprise. Every three months the factory director and the chairman of the trade union committee report to the workers at the general factory meeting on how the agreement is being carried out. At the end of the year the trade union committees enlist large numbers of workers to check up on how the provisions have been carried out and to collect proposals for the draft agreement for the following year.

76

Do disputes between workers and management occur in the U.S.S.R.?

42

IN socialist society there are no class conflicts, nor can there be, between workers and managements, as there are between employers and workers under the capitalist system, since there are no exploiters and exploited in a socialist country.

Nevertheless, labour disputes may arise in Soviet enterprises between individual workers and the management involving the wage rate, the conditions or organisation of work, and so on.

Under the statute covering disputes, approved by the Presidium of the U.S.S.R. Supreme Soviet early in 1957, labour disputes are examined by labour disputes commissions, which are set up at enterprises, offices and institutions and are composed of an equal number of representatives of the trade union committee and the management.

Any worker or other employee with a grievance, whether it concerns the wage rate paid him, transfer to another job, or dismissal, or any similar matter, files his complaint with the commission, which must examine the complaint and hand down a decision within five days.

If the commission fails to reach agreement, or the worker is not satisfied with the decision, he may apply within ten days to the factory (or office) trade union committee, which has the power to reverse the commission's decision. The trade union committee must examine the worker's complaint within seven or eight days. If the worker does not agree with the decision of the trade union committee he may start a suit in the People's Court.

The management also has the right to appeal against the decision of the committee, but only where it believes that the decision is contrary to the law.

Should the management fail to carry out a decision in a labour dispute, the trade union committee issues the worker with a certificate which has the force of a writ of execution. The certificate is turned over to a bailiff, who enforces execution of the decision.

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43

What systems of payment exist at Soviet enterprises?

THE following systems of payment for work operate in the U.S.S.R.; piece rate, progressive piece rate, time-work and time-work plus bonus.

The principal system in operation in Soviet industry is the straight piece-rate system, which best conforms to the socialist principle of payment for work in accordance with its quantity and quality.

Piece rates are based on the established technical standards of expenditure of labour in the production process (time per unit of product), a record of which is kept on a strictly scientific basis. The standards are usually fixed for one year, during which time they are not changed. Revisions are made in connection with the introduction of new machinery, improvements in technological processes and the mastering by the bulk of the workers of advanced methods of work.

New standards are set up with the active participation of the workers.

The Soviet worker's higher output comes not from physical over-exertion but from better organisation of work and further mechanisation, which lightens his labour. That is why revision of technical standards does not, and cannot, result in lower earnings.

There are rates and wage scales for each branch of industry, drawn up with the participation of the trade unions and approved by the Government. The rates and scales vary for the different categories, according to the skill and effort required to perform a given operation, and the complexity and character of the work. Skilled or difficult work is rated higher than unskilled or less difficult work.

The piece rate per unit of product is fixed on the basis of these scales and standards. The rates for piece workers are 10-15 per cent higher than for time workers. The worker is paid for every piece produced by him that passes inspection. The piece worker's earnings are not limited.

Soviet industry sometimes makes use also of the progressive piece-rate system, which is a combination of the piece-rate and bonus systems. Under this system, workers exceeding quotas

are paid at progressively rising rates for the portion turned out over and above the standard quota.

The higher the per cent of overfulfilment the higher the rate. The progressive piece-rate system is usually applied to particularly important production sectors of industry and also where it is especially necessary to stimulate initiative and invention.

Under the time-work system, workers are paid according to the wage and salary scale established for each industry and for each trade. The time-work system is used only where piece work is impossible or impracticable. In many cases, the time-work plus bonus system is used as an incentive to overfulfilling production plans, improving quality of output, and economising materials.

In such cases a bonus is given ranging from 10 to 15 per cent of the monthly scale or salary.

Directors of enterprises, engineers, technicians and office workers receive fixed monthly salaries, the amount depending on the conditions and volume of work, the importance of the enterprise, the complexity of the technology, the qualifications and length of service of the particular individual.

Engineers, technicians and office employees of industrial enterprises receive bonuses for fulfilment or overfulfilment of the production plan by the enterprise.

Workers in industry also receive cash bonuses for good work. The bonuses are paid from what is known as the enterprise fund.

Many enterprises also have a fund which they get for achievements in country-wide socialist emulation (*see answer No. 45*). Approximately two-thirds of the money is distributed as bonuses to individual workers, office employees, engineers and technicians, and the rest goes to improve cultural and other services for the workers.

The systems of remuneration apply to all workers alike, irrespective of sex, age or race. The principle applied in the U.S.S.R. is "equal pay for equal work", and any violation of this principle is punishable.

The central committees of trade unions and the factory trade union committee have the right to check all wage calculations and payments.

44

Who receives service bonuses?

THE Soviet State provides every possible incentive for long and conscientious service. One such incentive is the service bonus, paid annually or monthly.

The amount of the bonus varies in the different fields.

In the coal-mining industry, for example, such bonuses are paid to all personnel, including those working underground and those at enterprises serving the mines.

Miners who have worked in a mine for two years get a bonus of 10 per cent of their annual wage. Those who have worked for five years get a 20 per cent bonus, and miners with a service record of fifteen and more years get 30 per cent. This bonus is paid in December each year.

Service bonuses are also paid to iron and steel, chemical, gas and oil workers, geologists, airmen, timbermen, engine and train crews, and many other categories of workers.

The salaries of college instructors, doctors and schoolteachers and of certain other classes of workers also depend on the length of their service. To illustrate, scientific workers receive increases in their monthly salaries starting with the sixth year of work. The amount of the increase varies in different fields of work.

45

What is socialist emulation?

SOCIALIST emulation in the U.S.S.R. is a manifestation of a new attitude towards work which arose with the consolidation of the socialist system; it is a mass patriotic movement of the Soviet people in which tens of millions of working people in town and country are taking part.

It came from below, on the initiative of the working people themselves, and its object is higher labour productivity, more social wealth, to make society as rich as possible so as to secure the fullest possible satisfaction of the material and cultural requirements of the members of socialist society.

When Soviet power became firmly established in Russia, the workers and peasants became the masters of production. The fruits of their labour no longer belong to individuals or

groups but to society as a whole, to the state, and society distributes them among all working people in accordance with the quantity and quality of their work.

Society has made its main goal a steadily higher standard of living for the people, with more and more material wealth being allocated for the personal consumption of the working people. Consequently, in the Soviet Union, work for society, for the people, is at the same time work for oneself, and conversely, work for oneself is at the same time work for society.

A new feeling has appeared among Soviet people, the feeling of being collective owners of industry, and it has made for a new attitude towards work.

In the U.S.S.R., work is regarded as an important duty to the people and the state, a public duty, and Soviet people therefore try to put into their work their creative energy, to do more and better. This is the source of the spirit of emulation, of the striving for higher labour productivity which has swept the country.

Socialist emulation has nothing in common with competition; it is based on entirely different principles.

Competition is a fierce struggle bringing defeat, want and death to some, and victory, dominion and prosperity to others.

The principle of socialist emulation may be expressed as follows: "Some work well, others better, and still others lag behind, so let us catch up with the best and help those lagging and we will have a general advance."

This principle conforms to the nature of socialist society, in which the relations between people are relations of comradely co-operation, and mutual assistance of workers free from exploitation.

Those taking part in emulation who have achieved high production results are called foremost workers, production innovators.

These are men and women workers, office employees, engineers and technicians, field-crop cultivators, vegetable growers and animal husbandry people, tractor drivers and combine operators, people who are technically competent and cultured and have mastered technique well.

Knowing their machines perfectly they revise designed capacities and old technical standards, improve technology, and develop new and more progressive working methods, all of

which has an important effect on economic development and helps to fulfil and overfulfil state plans.

The introduction and wide application of the experience of production innovators is accomplished in various ways.

Widespread use is being made, for instance, of what are known as schools for progressive working methods. In these schools innovators show at the bench how one should work more productively and how to obtain the best results. Innovators also tell of their work at factory production conferences and at Ministries, at meetings of Economic Councils and at conferences in research institutes.

Posters and booklets are published on innovators' work, with many foremost workers themselves writing books about their experience. Enterprises send groups of their workers to similar plants, to study the advanced experience in the other places, the employing enterprises paying the costs.

Socialist emulation in the U.S.S.R. is of diverse forms. One is emulation by individual workers for higher labour productivity, better quality and lower production costs, for maximum economy of material resources and the most efficient operation of machines.

Collective farmers and state farm workers emulate one another for high yields of cereal and industrial crops, for improved animal husbandry, for greater productivity of agriculture.

The emulation of individual workers leads to the signing of emulation pacts between whole groups: team with team, shop with shop, factory with factory, collective farm with collective farm and state farm with state farm.

Do material incentives play a part in this emulation?

Of course. In their effort for higher labour productivity, a voluntary task, assumed on their own initiative, Soviet people do not merely feel moral satisfaction; they also improve their material position. Higher output means higher earnings.

At the same time steadily rising labour productivity and declining production costs enable the Soviet Government to cut retail prices, raise pay, spend more money for social and cultural needs and amenities, build more houses from year to year, and produce more goods to meet the growing demand (see answer No. 83).

Soviet society encourages labour by the Soviet people in every way. People who have distinguished themselves in their work are surrounded with honour and attention. The press writes

about foremost production workers and front-ranking enterprises, they are publicised by the cinema and radio and appear on television.

The names of those who have distinguished themselves most are placed on Honour Boards and they get Certificates of Honour, money prizes or valuable gifts. Outstanding services bring people orders or medals, and the best of the best have the title of Hero of Socialist Labour conferred upon them (see answer No. 92).

In the U.S.S.R. it is not social origin or the amount of money one has that brings one distinction, but work for the good of the people.

How is invention encouraged? What are the rights of inventors?

46

THE vast scale of invention by workers in the U.S.S.R. graphically reflects the Soviet working people's desire to see industry developed as rapidly as possible.

In 1957 the number of innovators who put forward suggestions for improving production processes and inventors who submitted inventions exceeded 1 million. In the rubber works of Moscow, for example, one out of three workers is an innovator and in the Ural machinery works, one out of four.

The movement of inventors and innovators is supported by public organisations, among them the trade unions. Factory trade union committees have special invention and innovation committees to give assistance to innovators and inventors of the particular plant.

Every enterprise has an innovation and invention bureau whose function is to examine proposals submitted and to put them through if they are worth while. As a rule, working in such bureaux are experienced engineers and designers who render technical assistance.

It goes without saying that inventors are found not only at plants but also in research organisations where they are afforded every opportunity to use laboratory facilities.

Under existing regulations, where the management of an enterprise, trust, Ministry or the appropriate department of an Economic Council receives an application covering an invention

which comes within the scope of their activity, the application has to be considered by the enterprise within ten days, by the trust within twenty, by the Ministry (or Economic Council) within two months, and the result of the examination must be reported to the author of the application.

The author may apply directly to the State Committee on Inventions and Discoveries.

If the invention is found to be worth while the appropriate institution gives the author the opportunity of developing the invention, and the author may be released from his regular job, receiving wages based on his average earnings.

The rights of inventors and innovators are protected by Soviet law. An inventor has the choice of taking out either a certificate of authorship or a patent, depending on the value of his invention.

Anyone appropriating another's invention, or divulging the essence of the invention before formal registration of its authorship, to the detriment of the inventor's interests, is liable to criminal prosecution and the payment of damages.

Officials who unwarrantably hold up the examination of the invention or payment of rewards are called to account; they may be removed from their posts and prosecuted.

Inventors and innovators receive remuneration, the amount depending on the value of the proposal. The maximum reward is 200,000 roubles.

In 1957 the Committee on Inventions and Discoveries of the U.S.S.R. Council of Ministers and the All-Union Central Council of Trade Unions jointly drew up a new statute covering inventions, discoveries and proposals to improve efficiency. It provides for rewarding, besides the author, also the workers, engineers and technicians who help to put the new invention or innovation proposal into practice.

The draft statute provides for giving inventors and innovators extra holidays, passes to sanatoria, and so on. It also envisages conferring on inventors the title of "Honoured Inventor of the U.S.S.R." and awarding them a gold medal, and on innovators the title of "Honoured Innovator of the U.S.S.R." and awarding them a silver medal.

The new draft is being discussed by enterprises, institutions, construction works and research institutes.

How is the training of skilled workers organised?

47

A PLANNED system has been set up for training workers for industry, transport and other branches of the national economy, at state expense.

As far back as 1920, enterprises all over the country began to open factory apprenticeship schools, the number of which increased as industry expanded. Between 1929 and 1937 some 2 million young workers were trained by them.

While keeping the factory apprenticeship schools in a number of enterprises, the Soviet Government in 1940 set up an extensive system of labour reserves, and the trade schools and factory apprenticeship schools were merged into the system. In 1954 technical schools began to function.

The course of study in the trade schools which prepare workers of the more difficult trades, is from two to four years; in the factory apprenticeship schools, which turn out workers for the mass trade, it is from six to ten months; and in the technical schools, which prepare workers for the higher skilled trades and junior technical personnel, it is from one or two years.

The explanation for the relatively brief course of study in the technical schools is that boys and girls admitted to these schools must have completed a secondary education (the ten forms of a general education school). The other Labour Reserves schools admit young people with less than a ten-year education.

Tuition in these schools is free; technical school students receive a stipend, and those of the trade schools and factory apprenticeship schools are fully maintained by the state. The latter are provided with accommodation and receive their board, clothing and textbooks free.

In addition to this centralised system, qualified workers of a particular trade are trained directly by many industrial enterprises. All factories and mills maintain apprenticeship courses in which young workers are taught, singly or in groups, and also advanced training courses.

In 1953 the Labour Reserves system was charged with training skilled workers to repair farm machines, and tractor drivers and combine operators who are at the same time mechanics.

The State Labour Reserves system has played an extremely

important role in training skilled workers for the national economy. Between 1941 and 1955 they turned out close to 8 million workers, and in the 1956-57 school year 1,365,000 boys and girls studied in the system's schools and factory apprenticeship schools.

In 1958 the technical schools alone were able to turn out 94,000 young workers, mainly metal workers for the country's machine-tool engineering plants.

In 1957, 361,000 youths and girls from among the graduates of technical, trade, railway, factory apprenticeship schools, building trades and mining schools were sent to work in industry, on construction jobs or transport. Farm-machine operators' schools trained 325,000 persons, and all received work on collective farms, state farms or machine and tractor stations.

48 | *What does automation mean to Soviet workers?*

AUTOMATION is one of the general directions of technical progress in the Soviet Union. It is not only a technical problem, but a social and economic problem as well; its solution means continued improvement of the material well-being of the working people.

Industrial development in the Soviet Union has reached a level which ensures extensive, and, eventually complete automation

Mechanisation is widely practised in all branches of industry. In the coal industry, for example, the main processes of mining and loading the coal on to railway trains is already fully mechanised. Machines and other equipment have substantially lightened the labour of coal miners, steel workers, oil workers, and so on.

Many production sectors are already automatised.

In the engineering industry there are hundreds of automatic transfer machines, and there are also automatic shops and factories. The principal power systems and the larger sub-stations are automatically operated.

Automatic control has also been introduced in steel smelting; many rolling mills, oil wells and other means of production are operated automatically.

The U.S.S.R. has also developed a unique system of self-regulated automatic control of production processes. Undergoing

tests in the Soviet transport system are automatic locomotive engineers which drive trains and automatic bus drivers which can drive buses on schedule more reliably than people do.

Output of automation equipment in the next seven years (1956-65) will be up five-fold compared with 1958, instruments six-fold and electronic computing machines fifteen times over.

This development will make for an immense rise in labour productivity, amounting to hundreds per cent. It will ensure a vast decline in production costs and overheads, and consequently will mean an abundance of products and a considerable rise in living standards.

The growing automation enables the Soviet Government as a whole and each enterprise individually to increase accumulation and therefore spend more and more money to improve living conditions, build more housing, develop and improve cultural services, and so on.

Making work easier and cutting down the expenditure of labour, automation also does away with the use of physical labour in hazardous occupations or on arduous jobs.

Moreover, it considerably raises the cultural and technical standards of the workers, as automation requires greater technical knowledge and the mastering of a higher and more difficult speciality, for the worker's labour is connected with radio electronics, telemechanics, and so on.

Under conditions of automation, the labour of Soviet workers is such as to bring it close in character to the work of engineers and technicians, and that means higher earnings.

Automation also opens up wide possibilities for further cutting the working day. The gradual shift-over of factory and office workers to a six- or seven-hour working day now being put through in the U.S.S.R. (it is to be completed in 1960) is based on the extensive introduction of automation.

But does not automation threaten the worker with the loss of his job?

It is nearly thirty years since unemployment has been abolished in the Soviet Union, and the national economy, developing as it does at a high rate under a unified national economic plan, needs a great many more workers of the most diverse trades from year to year. Under these conditions automation does not compete with the workers and does not force them out of industry.

Obviously when new automatic machine tools and automatic transfer machines are set up in factories, a certain number of workers are no longer needed on their particular jobs.

However, they do not remain without work; they get new jobs, as a rule in the same enterprise. Under the law they may not be paid lower wages.

Workers are also offered the opportunity of taking courses, at state expense, to learn a higher-skilled trade to enable them to operate automatic machines. While learning the new trade they receive pay based on their average wages.

Should a worker not get a job in the particular enterprise he will get one in another; the trade union and the factory management see to that.

Under socialism, technical progress brings workers benefits and not misfortune; the machine is their friend, not a competitor.

That is why wide sections of the working people in the U.S.S.R. are champions of automation and the army of inventors and innovators, many millions strong, is growing from year to year (see answer No. 46).

49

Why is there no, and can be no, unemployment in the U.S.S.R.?

ARTICLE 118 of the Constitution of the U.S.S.R. reads: "Citizens of the U.S.S.R. have the right to work, that is, the right to guaranteed employment and payment for their work in accordance with its quantity and quality.

"The right to work is ensured by the socialist organization of the national economy, the steady growth of the productive forces of Soviet society, the elimination of the possibility of economic crises, and the abolition of unemployment."

The socialist system of the national economy, based as it is on the public ownership of the instruments and means of production (the land, its mineral wealth, mills, factories, mines, transport, and so on), has made it possible to organize the development of the national economy according to a unified state plan (see answer No. 32). The plan envisages the uninterrupted growth of the country's productive forces, continuous expansion of production and steady advance in living standards.

The vast construction in all spheres of the national economy and the continuous growth of the people's purchasing power preclude the possibility of economic crises, ensuring the population full employment, and requiring additional manpower besides. Under these conditions there can, of course, be no unemployment in the U.S.S.R. The state spends substantial funds to train more and more qualified workers to meet the needs of the national economy, which keep growing from year to year.

The number of wage and salaried workers is increasing all the time. Thus, at the end of 1950 the national economy of the U.S.S.R. counted 8,300,000 more workers than at the end of 1940. Another 8,000,000 were added during the Fifth Five-Year Plan period (1951-1955) bringing up the total by the close of 1955 to 47,900,000, exclusive of members of producers' co-operatives, who numbered 1,800,000 in 1955.

By the end of 1957 the number of workers reached 52,100,000, an increase of 2,100,000 over the previous year.

Everyone has work in the Soviet Union and is sure of the morrow.

What are collective farms?

50

COLLECTIVE farms, or *kolkhozes* (abbreviated from the Russian *kollektivnoye khozyaistvo*) are large socialist farming enterprises, in which Soviet peasants have joined of their own free will to make farming more productive by pooling their means of production and working together in an organized way, thus ensuring themselves a prosperous and cultured life.

In collective farms the peasants work collectively and the principal means of production—farm implements (except minor ones), draught animals and productive livestock and farm buildings are owned in common.

Crops, farm buildings, machinery and other implements, draught animals and productive livestock and the entire output of the collective farm constitute the co-operative, collective farm property, that is the common property of the members of the collective farm. The land cultivated by the collective farm is state property, that is, belongs to the whole people, but the farm

is given the title deeds to the land by the state for free use in perpetuity.

The foundation of the collective farm structure, the principles on which the farm's activity is organized and managed, and also the rights and duties of its members are defined by the Rules of the Agricultural Artel, which are adopted by the general membership meeting and have the force of law.

The farm's affairs are directed by the general meeting of its members. It elects a board of management, made up of five to nine persons and headed by the chairman, for a term of two years. The board manages production and is accountable to the general meeting for the state of the farm's affairs.

The general meeting also elects an auditing commission, which checks up on the economic and financial activity of the board.

The general meeting considers and decides all major questions of running the common husbandry, approves the annual and seasonal production and financial plans and estimates, examines the annual and quarterly reports on the work of the farm, decides the amounts of the common funds, such as the seed and fodder stocks, indivisible funds, and so on, the amount of produce and cash to be distributed among the members, and it admits new members.

Able-bodied members are divided into brigades, which constitute the chief form of organizing the work. Field brigades are assigned plots of land and the necessary implements, draught animals and farm buildings. Animal husbandry brigades are assigned productive livestock, the necessary equipment and livestock premises.

A collective farmer's income is derived from his or her work in the common husbandry. The standard unit for calculating the work performed by the farm member, and the consequent remuneration, is the work-day unit.

Daily standards have been established for each operation, and collective farmers are credited with from one-half to two-and-a-half work-day units for fulfillment of a daily standard, depending on how difficult or complex the task and on the skill required.

A certain part of the crop and animal husbandry produce the collective farm sells to the state in fulfillment of its obligation to the state; next it lays in its planned store of seeds, fodder and other stocks required for carrying on the farming, and sets aside the produce to be sold at the collective farm market.

Out of the money realized from the sale of produce to the state and on the market it pays off loans and taxes and fixes the amount to go to the common assets.

The rest of the crops, animal husbandry products and cash are distributed among the farm's members in accordance with the work-day units credited to them. The cash and products are clear income for the collective farmers, for no taxes have to be paid on them.

Besides the common husbandry each collective farmer has a plot of household land ranging in size from a half to a whole acre, exclusive of the area on which the house stands. This land is used by the collective farm family to grow vegetables and for planting an orchard.

A collective farmer may have as his personal property a cow, a calf, several pigs, goats and sheep, and an unrestricted number of rabbits and poultry.

The size of the household plot and the number of personal livestock are fixed by decision of the general membership meeting of the collective farmers in accordance with the number of able-bodied members of a collective farm family taking part in the common husbandry.

The personal husbandry on the collective farmer's household plot is subsidiary in character, the main source of a collective farmer's income being the common husbandry.

The country now has 78,000 collective farms, which unite some 20,000,000 peasant households, practically the entire peasantry.

As a rule, a collective farm has under cultivation roughly 5,000 acres, but in grain-growing districts many have 25,000 to 37,000 acres or more.

Besides growing crops, collective farms engage in dairy farming, sheep breeding, hog breeding and poultry farming, they also grow vegetables, fruit and berries. Every collective farm has subsidiary enterprises, such as blacksmith, metal and carpenter shops, brick and tile works, flour mills or other enterprises for processing farm produce.

A collective farm's original capital, the so-called indivisible funds, came from small cash payments made by members and the pooling of the means and implements turned over by each member on joining the collective farm: a plough, a harrow, a horse and seeds.

The indivisible funds are increased by adding to it a certain amount of the collective farm's income for the year, the amount being fixed by the general membership meeting. Today the amount is no less than 15 and no more than 35 per cent of the cash income, depending on the farm's economic strength.

The money set aside for the indivisible fund is used for capital outlays to enlarge the common husbandry—to put new land under cultivation, put up farm buildings and cultural establishments, to buy machinery and other equipment or breed stock.

The money set aside for the indivisible fund has served as the basis for the rapid development and improvement of collective-farm production.

In 1932, that is, in the early years of collectivisation the indivisible funds of the country's collective farms were valued at 4,700 million roubles, and by the beginning of 1958 they had exceeded 100,000 million roubles, an increase of more than twenty-fold.

Of even greater importance is the qualitative change in the indivisible funds which has taken place since the collective farms have been first organised.

By the beginning of 1958 the collective farms owned 330,000 motor lorries, 162,000 mechanical engines and a large number of electric motors. The value of tractors, farm machinery, motor lorries and other equipment on collective farms was 24,000 million roubles.

Today collective farms are developed and economically sound socialist enterprises, and as a result the old forms of service they received from the state machine and tractor stations (M.T.S.) proved antiquated. The old forms were becoming a brake on the development of the productive forces in agriculture.

Consequently, the U.S.S.R. Supreme Soviet early in 1958 passed a Law on the Further Development of the Collective Farm System and the Reorganisation of the M.T.S.

Under this law the machinery in the possession of the stations is being sold to the collective farms, and the M.T.S. have been reorganised practically everywhere into repair and technical service stations. Before it was taken up by the Supreme Soviet the bill was submitted to countrywide discussion and it was supported universally by the people in town and country.

The shift from service by machine and tractor stations to the

purchase by collective farms of tractors and other machines is an important stage in the development of socialist agriculture and the consolidation and further development of the collective farm system.

In the hands of the collective farms are now concentrated the machinery and the land, which though it belongs to the state is secured to them for use in perpetuity. This makes for more efficient use of both the land and machinery and will lead to a still more rapid advance of the country's agriculture.

What is a state farm?

| 51

A STATE farm, or *Sovkhoz* (abbreviated from the Russian *Sovietskoye khozyaistvo*—Soviet farm), is a large-scale state establishment, the highest form of organisation of socialist agricultural production in the Soviet Union.

State farms operate on land which belong to the whole people, and their means of production and produce are state property. Guidance of the activity of the state farms, including approval of their plans, has been entrusted to the public Ministries of State Farms.

By the beginning of 1958 the country had 5,800 state farms, including grain-growing, beet-growing, cotton-growing, fruit-growing, vegetable-growing, dairy or meat and dairy farms, hog-raising, sheep-breeding, poultry-raising, and so on.

However, state farms are not narrowly specialised but diversified enterprises. Thus, animal husbandry occupies an important place on state grain-growing farms, and crop cultivation on animal husbandry farms.

Proper proportions between the various branches coupled with high mechanisation and scientific methods of farming serve as the main foundation for high productivity and marketability of state farms and their profitability.

The average number of tractors per state farm is fifty-four, of grain combines fifteen and of motor lorries sixteen. In 1957 the state farms had almost twice as many tractors as they had in 1933. They have close to 156,000 electric motors with an aggregate capacity of some 700,000 kw.

Ninety-three per cent of the state farms have electricity with

98 per cent of total power capacity furnished by mechanical engines. The average area of a state farm is over 40,000 acres, and the area under crops, 15,000. The average number of workers per farm is 376.

State farm workers' wages are paid by the state. Production and office workers on state farms have a trade union of their own and they enjoy the social benefits and privileges enjoyed by members of other unions.

Any state farm worker can, if he so desires, get a small plot of land on which to build a home for himself and the needed outbuildings, also to plant an orchard, grow vegetables and other crops. The farm provides lorries to transport building materials, and the state gives the home-builder a long-term loan. Those who have no houses of their own receive living quarters from the farm.

State farms are divided into several sections, each headed by a manager who is appointed by the director; most of the managers are agricultural specialists. Each section has assigned to it the needed number of tractors, horses, machines, buildings and other means of production.

The first state farms were set up in the U.S.S.R. in the year after the Great October Socialist Revolution, at first by assigning for the purpose confiscated landlord estates.

Later much more land from the state reserves, in particular virgin land, went to enlarge old and establish new state farms. A good illustration is the 425 new state farms set up between 1954 and 1956 on virgin and long-fallow lands.

The area under crops on state farms today is nearly triple that of 1940 and amounts to 75 million acres. Since 1940 the area under grain crops has gone up from 18 million acres to 53 million.

Animal husbandry sections of state farms have roughly 4 million head of cattle, more than 6 million pigs, close to 12 million sheep and more than 13 million head of poultry.

State farms play an important part in the advance of agriculture, especially in the output of produce for the market, furnishing the state nearly a third of the country's marketable grain. Gross output of state farms in 1956 was up 170 per cent compared with 1940; in the last three years it has almost doubled and marketable grain increased 4.2-fold.

State farms have been from their very inception not merely producers of grain, meat, milk and other produce; they have

also been a school of new techniques, of proper organisation of work and of the introduction of scientific methods in farming.

They became models of large-scale socialist production, showing the peasantry the advantages of large-scale collective farming. The state farms have thus played a big part in the consolidation of the collective farm system.

Lenin, the founder of the Soviet State, held that the main function of the state farms was to be model state farming enterprises yielding more produce with minimum expenditure of money and labour. The state farms are carrying out this task creditably.

*How has the steep advance of agriculture in
1953-1958 been carried out?*

52

THE Second World War delayed the development of agriculture in the U.S.S.R. and caused it great damage. The Hitlerite invaders ruined and plundered 98,000 collective farms, some 2,000 state farms and almost 3,000 machine and tractor stations. More than 64 million head of productive livestock and 110 million head of poultry were seized and slaughtered or sent to Germany.

Nevertheless, the difficulties caused by the war and aggravated by the drought in 1946 were quickly overcome. Already in the third year after the war, the pre-war level of grain production was reached, and in the sixth year the pre-war level of production of oil-bearing plants, potatoes, and fodder crops.

For volume of wheat grown the U.S.S.R. moved up to top place in the world.

The following years saw a further rise in agricultural output. However, serious shortcomings were found in certain branches of agriculture in some parts of the country and output failed to meet the growing demand. Though there had been a big increase in agricultural output the demand still exceeded the supply.

In September 1953 a plenary meeting of the Central Committee of the C.P.S.U. worked out a comprehensive programme for a steep advance of the country's agriculture, and it is being successfully carried out.

One of the important measures was to put under cultivation

immense tracts of unused land in the eastern part of the country. In the last four years more than 90,000,000 acres in Kazakhstan, Trans-Urals, Siberia and the Volga area have been subjugated.

In addition to the subjugation of virgin land a whole series of important measures have been carried out in recent years to ensure an upswing in agricultural production.

In the past four years 908,000 tractors (in terms of 15 h.p. units) and millions of other farm machines have been sent to the countryside. Today agriculture has around 1,700,000 tractors, 660,000 motor lorries and more than 450,000 grain combines.

Much help was given agriculture by supplying it skilled personnel. While in 1953, 83,000 specialists possessing a higher or specialised secondary education worked on collective farms and in machine and tractor stations, by the end of 1957 the number had gone up to 277,000.

In the past four years the state has invested in agriculture 75,400 million roubles, or 10,000 million roubles more than in the preceding nineteen years.

Another measure was to raise considerably the prices paid by the Government for the chief agricultural produce purchased by the state and to reduce the agricultural tax. From January 1st, 1958, the personal husbandries of collective farmers, factory and office workers have been completely exempted from obligatory deliveries of produce to the state.

A new planning system has been introduced, under which collective farmers themselves decide which crops are most profitable for them to grow, and which livestock to raise.

Collective farms have been granted the right to revise the Rules of the Agricultural Artel taking into account local conditions.

These measures have released the collective farmers' initiative. Special attention has been given to the proper distribution of branches of agriculture and to specialisation of farming in conformity with the natural and economic conditions of each district.

As a result of all this, Soviet agriculture has overcome the lag of individual branches and is now advancing steeply.

Gross cereal harvests in the past four years have increased 27 per cent as compared with the previous four years, and the harvests of industrial and other valuable crops on old cultivated land have also gone up.

For example, the sugar beet crop in 1957 was up 70 per cent compared with 1953, flax nearly 200 per cent, raw cotton 13 per cent, potatoes 20 per cent, and vegetables 27 per cent.

The impressive rate of development of the field husbandry has created the necessary conditions for an upswing in animal husbandry.

The extension of the area under maize was of decisive importance in establishing a stable fodder supply. In 1957 the area sown to maize for corn, green fodder and silage was more than 43,000,000 acres, practically seven times the area in 1953. That year collective farms and state farms silaged some 90,000,000 tons, including 42,000,000 tons of maize; in 1953 the total silage was 27,700,000 tons.

Putting the fodder supply on a firm basis has considerably improved the situation in animal husbandry. Meat production (taking into account the increase in the herd) went up 38 per cent in the last four years; milk production for the country as a whole went up 50 per cent, and collective and state farms increased their production by more than 100 per cent.

The plan provided for raising the average milk yield per cow by 600 kilograms between 1954 and 1960, but the task was carried out in three years. The average yield per cow on collective farms in 1957 was 786 kilograms more than in 1955.

Hundreds of collective farms and state farms annually produce 10 tons of meat or more and 40 tons of milk or more for every 250 acres of farm land.

The progress made in crop-growing and animal husbandry development has made it possible to recommend Soviet agriculture the task of bringing the annual grain crop in the next few years up to over 180,000,000 tons, meat to 20,000,000 and milk to 70,000,000 tons and the task is being carried out successfully.

The reorganisation of the machine and tractor stations and sale of the machinery to the collective farms (see answer No. 53) now under way will also help the further steep advance of agriculture. This measure has opened up still greater prospects for an upswing in crop growing and animal husbandry, through highly-efficient use of the machines.

53

*Why have the machine and tractor stations
been reorganised?*

ON March 31st, 1958, the U.S.S.R. Supreme Soviet passed a law on the further development of the collective farm system and the reorganisation of the machine and tractor stations, under which the system of technical service rendered the collective farms has been changed.

Tractors, combines and other machines belonging to machine and tractor stations have been sold to the collective farms, which pay cash or undertake to pay in instalments over two or three years, depending on the economic position of the particular collective farm. Collective farms also buy newly manufactured machines.

Machine and tractor stations have been reorganised into repair and technical service stations, whose function is to repair farm machinery, sell machines and spare parts, fuel, fertiliser and other commodities needed for production purposes, and to arrange to rent-out road-building, reclamation and certain other types of machinery.

By the beginning of spring in 1958 two-thirds of the country's collective farms had already bought the machinery, and tens of thousands of tractor drivers, combine operators and other skilled workers, and thousands of agronomists and zootechnicians who were previously working in machine and tractor stations joined collective farms and became members.

Before the reorganisation, the machine and tractor stations served the collective farms under contracts to cultivate the fields and harvest the crops. This system originated thirty years ago when large masses of the Soviet peasantry began to form collective farms.

The new collective farm system required a new material and technical base, and so the Soviet Government built factories to manufacture tractors, combines and other modern farm machinery. However, the young collective farms could not afford to buy the machines, and, besides, there were no people in the villages who could operate them.

The country-side needed substantial help from the state, and the most expedient form of such help was the machine and tractor stations (M.T.S.). The first M.T.S. was set up 1928; it

was followed by others, and before long a dense network of them covered the country.

During the time the M.T.S. existed the government spent more than 300,000 million roubles on their organisation, maintenance and development.

The machine and tractor stations were a vehicle of technical progress in the countryside, helping the peasants to learn to run large collective farms, and training an army of qualified tractor drivers, combine operators, motor lorry drivers, fitters and turners.

The M.T.S. were a force without which it would have been impossible to strengthen the collective farms, to achieve a rapid advance of agriculture and a higher standard for the peasantry.

Recent years witnessed a complete change in the situation in the Soviet country-side.

The collective farms grew stronger, small farms amalgamated to form bigger ones; the peasants gained a wealth of experience in running collective farms, and the number of machine operators and other farm specialists multiplied.

And finally the financial position of the collective farms became considerably stronger. Between 1949 and 1957 the average annual money income per collective farm increased more than ten-fold—from 111,000 roubles to 1,247,000. Today the country has thousands of collective farms with annual money incomes of 10 to 20 million roubles or more.

Under these conditions, the question arose whether it was not time to change the system of the material and technical service of the collective farms. It was the collective farmers and M.T.S. workers who raised the question, and the Communist Party and the Soviet Government supported them, and their proposal was embodied in a state law.

The measures outlined under this law are a component part of the effort to improve the management and guidance of the national economy so as to permit the country's productive forces to develop more fully all the time and the standard of living to rise ever higher.

54 | *How is domestic trade organised in the U.S.S.R.?*

THE sale of goods in town and country is carried on by state and co-operative organisations, the two principal forms of Soviet trade. The state organisations account for 65 per cent of the retail trade, and the co-operative for 28; the other 7 per cent are accounted for by the collective farm markets.

The goods sold by the state and co-operative trading organisations are supplied to them by industry or are produced, contracted for or purchased by them (farm produce, mushrooms, wild berries, game, and so on).

The quantities to be supplied and time of delivery are determined by the national economic plan. The state fixes the wholesale and retail prices, which are uniform for the state and co-operative trading organisations.

Farm produce is also sold at collective farm markets, to which collective farms, collective farmers and individual peasants bring their surplus products for sale. The price of produce sold in these markets is governed by supply and demand.

More shops, stalls, public dining rooms, restaurants, snack bars and other retail trade establishments are opened up every year.

In 1957 there were 620,000 of them, or roughly 120,000 more than in the pre-war year 1940.

The number of public catering establishments has grown particularly rapidly; in the last thirty years the number of dining rooms, restaurants and snack bars has increased forty-two-fold, now exceeding 126,000.

The number of warehouses and cold storage plants has also grown.

More than 3 million persons are employed in trade. There are special educational establishments to train workers for this job, including institutions, specialised secondary schools and trade schools.

As a result of the balanced expansion of production and steady rise in the income of the population, the volume of sales keeps going up from year to year.

In the last four years it increased by 52.2 per cent, reaching 616,500 million roubles in 1957.

Compared with 1940, state and co-operative retail sales in 1957 were up 250 per cent for meat and meat products, 260 per cent for butter, milk and other dairy products, 220 per cent for sugar and 180 per cent for fabrics, with the rise in the sale of woollens being 300 per cent, and silks 800 per cent. Sales of clocks and watches, bicycles, radios, TV sets, domestic refrigerators, washing machines and vacuum cleaners increased many times over.

What Co-operatives are there in the Soviet Union?

55

BESIDES the agricultural co-operatives (collective farms) the Soviet Union has consumers' and producers' co-operatives.

The consumer's co-operatives are mass public organisations in the country-side with more than 34 million members.

There are more than 20,000 of these co-operatives. Their highest organ is the general membership meeting, and in the intervals between meetings—the elected board of management. The co-operatives are organised in unions for each district, region, territory and republic, and their boards, too, are elected by the membership.

The highest guiding body of the Soviet consumers' co-operatives is the delegate congress, which elects the Council of Centrosoyuz (Central Union of Co-operative Societies of the U.S.S.R.), the board of directors of Centrosoyuz and the auditing commission, all for a term of four years.

The consumers' co-operatives trade in the rural localities, where they have 315,000 retail trading and public catering establishments. Their volume of sales is growing steadily and rapidly as a result of the rising income of the collective farm peasantry, especially in recent years. In 1957 retail sales were up 17.2 per cent over 1956 and were 190 per cent greater than in 1940.

The co-operatives sell produce for collective farms and individual collective farmers on a commission basis in towns, for which purpose they have opened up special stores. The produce is sold at prices lower than those prevailing on collective farm markets. In 1957 total sales by these stores came to 7,700 million roubles, an increase of 26 per cent over 1956.

These co-operatives are the chief procurers of a number of farm products and raw materials. They also operate small enterprises processing certain food products and manufacturing certain consumer goods (bakeries, sausage factories, vegetable, fruit and berry canneries, and so on). The annual output of these enterprises exceeds 11,000 million roubles.

Centrosyuz is affiliated to the International Co-operative Alliance, of which it is the largest single constituent organisation.

The *producers' co-operatives* unite handicraft workers making various articles of consumption and repairing household articles, furniture, clothing, shoes and rendering certain other services, such as painting and decorating and cleaning flats, and so on. These co-operatives have tens of thousands of small plants and workshops, barber shops, photo studios and so on.

The management boards of the co-operatives and of the unions of producers' co-operatives are elected by the membership.

There are several other kind of small co-operatives, among them co-operatives of workers' and office employees for building houses for themselves in towns and summer cottages in the suburbs.

The Soviet co-operative organisations are given every support by the state.

56

Who fixes prices in the U.S.S.R.?

PRICES are fixed by the state planning authorities, subject to approval by the Government. The prices of some goods are fixed by the local organs—the Councils of Ministers of the Republics.

For the more important articles other than food, state prices are uniform in all parts of the country. For the more important food products, prices vary according to zone. For these purposes the country has been divided into a number of zones, and in setting the special prices for the various zones, account is taken of carriage and other overheads.

Since most manufactures and foodstuffs are concentrated in the hands of the state, and their distribution is handled by the

state and co-operative trading systems, there is nothing to hinder the establishment of uniform prices. Soviet economy is free from fluctuating or rocketing prices due to speculation.

The prices of goods produced by the co-operatives are fixed by them at approximately the same level as state prices.

Retail prices in collective farm markets are influenced by supply and demand. But, with state and co-operative shops nearby selling products at uniform state prices, the collective farmers have to sell at the same or lower prices. In this way the Soviet State uses economic means to control the prices in the collective farm markets.

What banks are there? Where do people keep their savings?

57

ALL banks in the U.S.S.R. belong to the state. There are no private banks.

In the hands of the Soviet State, finance and credit represent an important instrument for advancing the national economy and culture. Through the banks, the state also exercises financial control over the work of individual enterprises, institutions and the economy as a whole.

The chief Soviet bank is the State Bank of the U.S.S.R. All state institutions, co-operatives, public organisations, factories and offices keep current accounts in the State Bank, through which their mutual accounts are settled. The State Bank also handles the state budget revenues, including the profit tax and income tax.

The State Bank grants short-term credits to enterprises and institutions, and finances organisations, funds for which are provided by the state budget.

The bank has branches in all Republics, territories, regions, cities and district centres.

Foreign trade transactions are financed by a special bank, the Foreign Trade Bank of the U.S.S.R. (see answer No. 97).

The U.S.S.R. also has four special long-term credit banks: the Industrial Bank, the Trade Bank, the Central Agricultural Bank, and the Central Bank for Municipal Economy and Housing Construction.

These banks finance capital construction and handle clearing operations in their respective branches of national economy.

The people keep the money they save from their earnings in state savings banks.

Savings banks are to be found in all towns, large villages, district centres and industrial settlements.

The number of depositors increases every year, and by the beginning of 1958 it reached 40 million, a fact which bears witness to the growing well-being of the people.

It is estimated that in 1957 savings bank deposits will amount to approximately 90,000 million roubles compared with 7,300 million before the war. In 1957 they went up by 16,800 million roubles.

58 |

What taxes do the people pay?

PEOPLE in the Soviet Union pay small taxes, which make up an insignificant portion of their income.

Factory or office workers, art workers, artisans and other citizens who have independent sources of income pay income tax. The tax is progressive, rising in proportion as the earnings rise.

Workers whose earnings do not exceed 370 roubles a month, and pensioners, regardless of the amount of their pensions, are exempt from paying taxes.

Other workers pay income tax monthly out of their earnings for the preceding month. The rate is as follows:

<i>Monthly Earnings</i>	<i>Tax</i>
400 roubles	18 roubles
500 roubles	26 roubles
600 roubles	36 roubles
1,000 roubles	82 roubles
1,500 roubles	147 roubles
etc.	etc.

The maximum tax does not exceed 13 per cent of the income. Workers with four or more dependents are allowed a deduction of 30 per cent of the amount of the tax.

Single men and childless married people who are working pay a special bachelors' and childless people's tax. Men between

the ages of twenty and fifty and women between twenty and forty-five pay tax at 6 per cent of all income above 450 roubles a month.

Income taxes paid by the population are a minor item in the state budgetary revenue. Under the 1958 budget they will constitute only 7.8 per cent of total revenue.

How is the U.S.S.R. State Budget made up? | 59

THE state budget of the U.S.S.R. has important distinctive features. It is a budget of a socialist country, in which public ownership of the means of production predominates, and the national income belong to all of society.

Through the Soviet budget a small part of the national income is switched to the development of the productive forces of society and the improvement of living standards.

The state budget of the Soviet Union is thus a major means of the marshalling and balanced employment of the state's financial resources for enlarging socialist production and raising general living standards for all members of society—workers, peasants and intelligentsia.

The state budget is also the country's chief financial plan, as it is closely linked with the national economy as a whole and serves the latter's requirements.

The chief revenue items are the receipts from the socialist enterprises and organisations, and the budget resources are used to finance the socialist enterprises in conformity with the national economic plan.

Revenue and expenditure items are approved annually by the U.S.S.R. Supreme Soviet, which also discusses and approves the Government's report on the fulfilment of the budget for the preceding year.

The 1958 budget, as passed by the U.S.S.R. Supreme Soviet, provides for a revenue of 643,000 million roubles, and an expenditure of 627,800 million roubles, that is an excess of revenue over expenditure of 15,200 million roubles.

The Soviet budget has been yielding a surplus year after year, and the fact that it has no deficit shows that U.S.S.R. finances rest on a healthy foundation. They are not squeezed out through

taxation; their source is income from a steady expanding socialist economy.

The chief revenue items are the accumulations of state industrial, transport and trading enterprises—in the form of turnover and profit taxes, and income tax paid by co-operative organisations (collective farms and producers' co-operatives).

In 1958 the socialist economy accounted for almost 89 per cent of total budgetary revenue against 85 per cent in 1957.

Taxes paid by the population play a minor part in the budget; in 1958 they will come to 7.8 per cent.

The Soviet budget is the budget of a peace-loving power. This is clearly shown by the items of the expenditure side.

Out of the total 1958 appropriation of 627,800 million roubles, more than 257,000 million was allocated to the national economy and close to 213,000 million roubles for social and cultural services.

Thus, two-thirds of the budgetary appropriations go to develop the national economy and for social and cultural purposes.

Of the 213,000 million roubles allotted for social and cultural purposes (nearly 25,000 million more than in 1957) more than 84,000 million were earmarked for public education and science, more than 40,000 million for health and physical culture, and more than 55,000 million for social maintenance and social insurance (against 71,400 million in 1957).

Defence expenditure is reduced from year to year, the 1958 allotment being 15.4 per cent of total budgetary appropriations, against 16 per cent in 1957 and 19.9 per cent in 1955.

In this distribution of state funds we see clearly the endeavour of the Soviet state to satisfy the rising material and cultural needs of the people and further to develop the peace-time economy.

IV. EDUCATION, SCIENCE, CULTURE

What is the system of public education in the U.S.S.R.?

60

IN the U.S.S.R. all children attend school.

The Soviet Union has built up its system of public education on principles that were set forth in a government decree in 1918.

Briefly, these principles were: free general and polytechnical education for children up to the age of seventeen irrespective of sex or nationality; instruction in the native language; the promotion of vocational training.

Full observance of the principle of a system of uniform schools closely bound up with socially productive labour excluded the rise of private schools.

The curriculum of the Soviet school combines general and polytechnical instruction and moral, physical and aesthetic education.

Included in the public education system are pre-school establishments, many types of general schools, specialised secondary schools, institutions of higher learning (*see answer No. 61*) and also various cultural and educational establishments.

The pre-school establishments (kindergartens, playgrounds, children's homes) carry out the social education of children between the ages of three and seven.

Next comes the general school, where children are educated from the age of seven to seventeen. This is divided into the seven-year and secondary (ten- or eleven-year) schools. There are also music, ballet and other schools, as well as special schools for mentally deficient children, the blind, and the deaf and dumb.

There are special seven-year and secondary schools for young workers and farmers who for some reason did not obtain a secondary education at the proper time.

Vocational schools train skilled workers or specialists with intermediate qualifications. They are divided into trade, railway, arts and crafts, and mining schools.

Technical schools train highly-skilled workers and junior technical personnel. Secondary technical, medical, teacher training, music, theatrical and other schools graduate young specialists with intermediate qualifications.

Boarding schools were established in the U.S.S.R. in the autumn of 1956, chiefly for orphans, children of unmarried mothers or mothers with large families, and children whose families cannot give them the proper upbringing.

Orphans and the children of parents with low earnings are maintained at the boarding schools completely at state expense.

The boarding schools follow the curriculum of the secondary school. Education and upbringing are based on the principle of combining instruction with productive work.

Such, in general outline, is the system of public education in the U.S.S.R.

The Soviet system inherited a small and underdeveloped network of schools.

In the 1914-15 academic year 9,700,000 children and adolescents in Russia attended school. In 1956-57 enrolment in the general schools of the Soviet Union (not counting the schools for young workers and farmers and the schools for adults) was 28,200,000.

If we include all the types of schools, we find that more than 50,000,000 persons in the U.S.S.R. are studying.

During the Soviet period more than 100,000 schools have been built, nearly 30,000 of them since the end of the Second World War. They have spacious classrooms, laboratories, auditoriums, gymnasiums, rooms for extra-curricular activities, libraries, lunch rooms, and so on.

Altogether, there are 213,000 schools in the Soviet Union.

More than 200 million text-books are published annually. This is enough to supply each pupil with text-books in all the subjects he studies.

Teachers for the elementary forms (the first to the fourth) are prepared at teachers' training schools, and those for the fifth to the tenth forms at teachers' training colleges and universities. In the 1956-57 academic year there were 1,811,000 teachers in the Soviet Union.

Under the Fifth Five-Year Plan (1951-55) universal secondary (ten-year) education was introduced in the big cities and industrial centres. Now it is being put into effect in the other towns and in the rural areas.

In the 1956-57 academic year the secondary schools graduated 500,000 boys and girls.

Another important measure being carried out in the Soviet

Union is the introduction of polytechnical training in the secondary schools. This will familiarise the pupils, in theory and in practice, with modern industrial and agricultural production and prepare them for future socially-useful activity.

How is higher education organised?

| 61

THERE are several main types of higher education in the U.S.S.R.; university, technical, agricultural, medical, economic, teachers-training, artistic, architectural, musical and theatrical. The higher educational establishments in all the Union and Autonomous Republics, territories and regions are attended by young men and women of all nationalities.

Today the Soviet Union has thirty-nine universities with a total enrolment of about 200,000.

The universities have a five-year course of study. They graduate qualified philologists, historians, biologists, geologists, physicists, and so on, who have the right to teach in the secondary school. The universities carry out extensive research activities, for which they possess the necessary laboratories and up-to-date equipment and apparatus.

Inasmuch as scientific and technical progress depends largely on the level of knowledge of the engineering personnel, the Soviet Union has always devoted great attention to its technical colleges. There are more than 200 of them: polytechnical, industrial, power engineering, electrical engineering, radio engineering, physical engineering, machine-building, civil engineering, machine-tool building, and so on and so forth.

Their course of study is five or five-and-a-half years, and they have a total student body of 645,000.

Like the universities, the technical colleges do extensive research. In 1957, for instance, they conducted investigations in the field of radio-electronics, heat-resistant alloys, gas turbine design, the use of isotopes in science and engineering, and so on.

In 1956 the U.S.S.R. had 721,000 engineers with diploma, or 431,000 more than in 1940.

The specialised secondary and higher schools graduated more than 770,000 young men and women in 1957.

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ing is offered in many fields: soil science and agro-chemistry, fruit and vegetable cultivation and viticulture, plant protection, sericulture, animal husbandry, land use, mechanisation, land reclamation, forestry, the economics and organisation of agriculture, and so on.

In 1954 the colleges and universities gave training in 500 specialities, but now the number has been reduced to 274 with the aim of giving students a more thorough general scientific and general engineering education.

The curricula encourages diverse forms of independent work by the students. This gives the instructors more time for a fuller elucidation of the more complex and important scientific problems, as well as an opportunity to acquaint students with the latest achievements in domestic and foreign science and engineering.

Enrolment in institutions of higher learning is open to citizens between the ages of seventeen and thirty-five who have completed a secondary education and passed the entrance examinations.

Tuition in all the colleges and universities of the Soviet Union has been free of charge since 1956. All students who make good progress receive a state allowance that assures them a subsistence minimum.

New regulations introduced in 1957 stipulate that young men and women who have worked for a period of at least two years after completing secondary school shall be given preference in admittance to higher schools. This is promoting the influx into the colleges and universities of young people with a certain amount of practical experience on the job.

Six out of every ten persons entering higher schools in the 1957-58 academic year had worked at least one or two years.

The Soviet Union's 767 colleges and universities have an aggregate student body of more than 2 million.

Of these, upwards of 800,000 study by correspondence or in evening departments, in their spare time. They enjoy a number of privileges, such as, for instance, an additional paid holiday during the examination periods.

Can a Soviet worker become an engineer by studying in his spare time?

62

YES, he can.

Many secondary technical schools and colleges provide evening or correspondence courses. There are also correspondence colleges, for instance, the U.S.S.R. Polytechnical Correspondence Institute, with a student body of more than 20,000.

Most of the evening courses are attached to big factories. The students attend lectures and do their laboratory assignments after working hours.

Correspondence students receive assignments by mail. Twice a year they are summoned to the college to take examinations.

That is how, by studying in the evenings or by correspondence, a worker can obtain a higher education in his spare time. This education is free.

Soviet labour legislation stipulates a number of privileges for evening correspondence students. Among them are additional holidays for consultations, examinations and preparation of their graduation theses.

On completing their studies, evening and correspondence students receive diplomas on the same basis as regular students. Under the Fifth Five-Year Plan (1951-55), the higher educational establishment graduated 247,000 correspondence students. In 1955 more than 175,000 students were admitted to the correspondence departments of colleges and universities and the correspondence colleges.

More than 3,500,000 persons studied in their spare time in 1957 at evening or correspondence courses provided by specialised secondary and higher schools, in general schools for young workers and farmers, and schools for adults.

63

How is science advancing in the U.S.S.R.?

SOVIET people hold the view that science is born of practice and that the ultimate aim of scientific cognition of the world is to gain active mastery over the laws governing the development of nature and society in order to place them at the service of society and social production.

In the second half of the nineteenth century and the first decade of the present century a number of scientific discoveries of first-rate importance were made in Russia.

Even with the limited material and technical facilities they had in old, pre-revolutionary Russia the country's scientists did some magnificent work, the crowning point of which was Mendeleyev's Periodic Table of the Elements, the foundation of all modern natural science.

In the sphere of the social sciences, Lenin provided a development of Marxism, that most progressive scientific theory which discovered the materialist laws of social development.

The Revolution of 1917 put the ideas and conclusions of this theory into practice. A new social system, Socialism, emerged victorious.

Subsequently, socialist production, the object of which is to satisfy the requirements of the entire population, had to be founded, and actually is founded, on the latest scientific and technological achievements.

Socialism implies the organisation of the life of society on a planned, scientific basis. By its very nature it is a social system containing unprecedented potentialities for scientific progress.

In the early Soviet period, when the country was working to restore the economy that had been wrecked by the war and foreign intervention, science took an active part in the solution of many practical problems.

The first research institute founded by the Soviet Government was the Physico-Technical Institute in Leningrad. Its purpose was to promote the introduction of achievements of modern physics into technology. Scientists were active in developing expeditionary work to study Russia's great mineral riches, which had been explored only to an insignificant degree in pre-revolutionary times.

They also played an important role in distributing the country's productive forces rationally and promoting the specialisation of

economic districts in conformity with their particular natural factors.

Scientific personnel was likewise drawn into the training of highly-qualified specialists in all branches of learning, something to which great attention has always been paid in the Soviet Union.

The system of planning takes into account both short-term and long-range economic requirements. Alongside the development of the applied sciences it therefore provided for a great advance in the theoretical departments of the natural sciences as a major motive force in scientific progress as a whole. This long-range policy fully justified itself.

Fundamental discoveries have been made in the U.S.S.R. in studying the behaviour of matter at temperatures approaching absolute zero (by P. L. Kapitsa and his associates). Recently this research received theoretical interpretation in a new theory of super-fluidity and super-conductivity propounded by N. N. Bogolyubov.

In 1934 P. A. Cherenkov, working under the guidance of S. I. Vavilov, discovered a new phenomenon which has been named the Vavilov-Cherenkov Effect. Subsequent studies have shown the practical importance of this phenomenon in making extremely sensitive instruments with which to investigate the properties of atomic nuclei.

V. I. Veksler has worked out a new principle for accelerating charged particles which has made it possible to produce energies more than a thousand times greater than those known before. This principle has been incorporated in powerful accelerators built in the U.S.S.R.

N. N. Semyonov evolved the theory of branching chain reactions, on which the processes of combustion, explosion and other types of oxidation are based. Proceeding from this theory the Soviet scientists Y. B. Zeldovich and Y. V. Khariton made the first calculations that were correct in principle of nuclear chain reactions in the fission of uranium. This directly preceded the experimental construction of the first nuclear reactors.

In the Soviet period N. D. Zelinsky and his followers have conducted fundamental investigations in the transformation of hydrocarbons, which served as the basis for the development of modern methods of chemical refining of oil.

A. E. Arbusov, A. N. Nesmeyanov, K. A. Andrianov and

others laid the foundation of the chemistry of organic compounds. Further work has led to the development of a number of extra-powerful insecticides, drugs, high-temperature-resisting oils, rubber, insulating resins, and so on.

V. I. Vernadsky and A. P. Vinogradov founded a new science, biogeochemistry, which deals with the natural laws governing the accumulation and dispersion in the earth's crust of elements connected with the activity of living organisms.

The development of theoretical geology enabled I. M. Gubkin to predict the existence of many new oil-bearing regions, including the vast fields in Bashkiria and Tataria that have come to be known as the Second Baku. Extensive work by geological prospecting parties provided the basis for broad generalisations expressed in the compilation of unique geological and tectonic maps embracing the territory of the U.S.S.R. and neighbouring countries.

In biology, Ivan Pavlov developed the theory of higher nervous activity. Ivan Michurin evolved new forms of plant life and in Soviet times made broad generalisations which are of importance for biology as a whole.

The Soviet Union's planned system of economic and scientific development provides excellent conditions for an all-round approach to the solution of major problems of science and engineering. An example was the collaboration of scientists of many specialities to create the powerful inter-continental rockets with which the Soviet sputniks were subsequently launched. Work along a similarly broad line is being conducted on the peaceful uses of atomic energy.

The Soviet Union is now able to increase its appropriations for science from year to year according to plan. Appropriations for science under the U.S.S.R. budget were 11,700 million roubles in 1957 and 15,000 million in 1958. Scientists themselves take part in deciding how these sums are spent. Fundamental research is a priority.

Proceeding from the practical requirements of the national economy, the U.S.S.R. has planned a greater development of the whole complex of sciences making up the foundations of modern knowledge—its physico-mathematical, chemical and biological groups. In each of these groups Soviet economy sees immense potentialities for developing the techniques of the future.

In the physical sciences, for example, Soviet researchers are combining work on the design and construction of atomic electrical stations and atomic power installations with experiments aimed at producing controlled thermo-nuclear reactions. Solution of this problem would free man for ever from all worry about sources of energy.

Extension of the sphere of application of semi-conductor instruments demands broader experimental and theoretical investigations.

Also requiring considerable theoretical development are the new researches being conducted in radio and electrical engineering (for example, work connected with the building of a single high-voltage system for the whole Soviet Union, employing long-distance transmission lines) and in the design of new electronic computing machines.

Chemistry is called upon to play an important part in the Soviet Union's further economic progress. In this case, too, science will be a reliable compass for the national economy.

Soviet scientists are working on ways of extracting the most valuable chemical products from fuel before it is burned.

An example of the comprehensive technological approach in processing minerals is the production of aluminium from nepheline (this was first done in the U.S.S.R.; up to now all over the world, aluminium has been obtained from bauxite). The alkalis in nepheline (soda and potash) are extracted at the same time as the aluminium, and the waste-products are made into high-grade cement.

Mendeleyev's dream of underground gasification of coal and the turning of oil into a universal chemical raw material is coming true.

The growing importance of chemistry is understood in the U.S.S.R. not only as the use of more substances and materials in industry but also as a fundamental change in production technique.

Broadest use of plastics and of what is called "powder metallurgy" will help to eliminate inefficient intermediate processing. Ready-made articles are more and more being shaped directly from atoms and molecules.

In the biological sciences, along with further work on methods of scientific farming and livestock raising, an important place is occupied by the study of problems of human longevity and

the search for radical cures for the most widespread diseases (malignant tumours, cardio-vascular disorders, and others) and the elaboration of a complex of measures for prolonging human life.

In the Soviet Union's new stage of economic development science is being advanced according to plan, as before, and its latest achievements are, in turn, being made part of long-range plans.

64 | *What scientific institutions are there in the U.S.S.R.?*

RUSSIA has given the world many outstanding scientists who have made great discoveries. Lomonosov, Popov, Stoletov, Mendeleev, Sechenov and Pavlov are names known to the whole civilised world.

In tsarist times, however, scientists and scientific institutions did not possess either the necessary facilities or support. The electric arc light invented by Yablochkov, for example, failed to find recognition in Russia and was first used in Paris. The inventor died in poverty.

The Soviet system created exceptionally favourable conditions for the advance of science and placed science at the service of the people.

As early as April 1918, when the young Soviet Republic was living through the difficult period of civil war and economic chaos, Lenin wrote his famous "Draft Plan for Scientific and Technical Work" which outlined the broad development of science in close contact with the needs of industry.

Science in the U.S.S.R. is called on to promote the maximum development of productive forces and best use of natural resources with the help of the most up-to-date techniques. The object is to satisfy the constantly growing material and cultural requirements of Soviet society.

Science in the Soviet Union has achieved an unparalleled development in a short span of years. In 1913 tsarist Russia had only slightly more than 10,000 research workers. In 1939 the Soviet Union had about 60,000. By 1956 there were 240,000. There were close to 2,800 scientific institutions in the Soviet Union in 1957.

Today, when we observe, on the one hand, a great differenti-

ation and specialisation of separate departments of knowledge and, on the other, the rise of numerous fields taking in several of these departments, a thorough study of problems is impossible unless they are approached from all angles.

All-round investigation of major scientific and technical problems by the joint efforts of large groups of research workers has become common in the U.S.S.R.

The Soviet Union's scientific institutions work in close co-operation with industrial and agricultural establishments and help them to improve production.

For example, the Paton Institute of Electric Welding of the Ukrainian Academy of Sciences has close ties with more than 700 factories which apply the new welding method it has evolved.

The centre of scientific thought in the Soviet Union is the Academy of Sciences of the U.S.S.R. (founded in 1724), which embraces more than 100 research institutes. The Academy has eight departments (physics and mathematics, chemistry, geology and geography, biology, technical sciences, history and philosophy, economics and law, and literature and language).

The Academy's twelve branches, situated in the Moldavian Republics, the Karelo-Finnish, Tatar, Bashkir, Yakut and Daghestan Autonomous Republics, Primorye Territory, Siberia, Sakhalin, the Urals and the Kola Peninsula, have thirty-four research institutes, about eighty independent departments and laboratories, eight botanical gardens, and other auxiliary establishments. These branches have grown into major scientific centres.

In May 1957 the Soviet Government adopted a decision to set up a Siberian Department of the U.S.S.R. Academy of Sciences.

This large new scientific centre is to guide the work of all the Academy branches situated in Siberia and the Soviet Far East, and organise more effective assistance by science to the rapidly growing industry and agriculture of that rich territory.

A town consisting of twelve research institutes, a university, residential area, cultural establishments, public service establishments, and so on is now being built for it near the city of Novosibirsk.

By March 1958 the Siberian Department included eight Academicians and twenty-seven Corresponding Members of the Academy.

In recent years Soviet scientists have made big progress in nuclear research. This is thanks largely to the work of such relatively new establishments as the Atomic Energy Institute headed by Academician I. V. Kurchatov and the Institute of Physical Problems headed by Academician P. L. Kapitsa.

In the laboratories of these institutes scientists are working on problems of controlled thermonuclear reactions, are studying the behaviour of plasma at temperatures of more than 1 million degrees, are perfecting methods of obtaining liquid helium, and so on.

Thirteen of the fifteen Union Republics have their own Academies of Science which are doing fruitful work. They comprise 262 research institutions. (The Union Republics that do not have Academies are Moldavia, where there is a big branch of the U.S.S.R. Academy, and the Russian Federation, on the territory of which are situated the U.S.S.R. Academy, several of its branches, and the Siberian Department).

The Soviet Union has a number of specialised academies.

The Academy of Medical Sciences (founded in 1944) consists of three departments: medicine and biology; clinical medicine; hygiene, microbiology and epidemiology. In 1957 it had 96 Members and 136 Corresponding Members.

The Lenin Academy of Agricultural Sciences of the U.S.S.R. (founded in 1929) has six departments: farming; livestock raising; mechanisation and electrification of agriculture; hydro-engineering and reclamation; forestry and afforestation; and land reclamation; and the economics and organisation of agricultural production. The Academy has thirty-five research institutes under its jurisdiction.

The Academy of Arts of the U.S.S.R. is successor to the Art Academy established in St. Petersburg in 1757.

The U.S.S.R. Academy of Construction and Architecture took final shape in 1956.

There are a number of specialised scientific academies in the Union Republics. One is the Academy of Educational Sciences of the Russian Federation founded in 1943. This research organisation uniting outstanding scientists and scholars promotes the development of the educational system, spreads educational knowledge, and studies problems of education.

In addition, extensive scientific work is carried out in universities and other higher educational establishments.

What is the Soviet Union's contribution to the International Geophysical Year?

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THE thousands of scientists in sixty-four countries who are combining their efforts in the research programme of the International Geophysical Year, which began on July 1st, 1957, are conducting investigations along twelve main lines.

In numbers of observation stations and scale of expeditionary work the Soviet Union is one of the largest participants in the I.G.Y.

A great many scientific institutions and organisations are working on the I.G.Y. programme. Of the 496 stations and observatories in the U.S.S.R. which are doing research under the programme 200 were organised or completely re-equipped in connection with the I.G.Y.

There are also hundreds of stations for observing the Northern Lights and phosphorescent clouds. The Soviet Union organised a large Antarctic expedition and set aside twelve big oceanographic ships for research in all the oceans of the world along routes agreed upon with the other countries.

Among the many other investigations is a large-scale study of the zone between the continent and the ocean in the region of the Kuril-Kamchatka ridge.

Under the I.G.Y. programme Soviet scientists have organised joint expeditionary work with scientists from Czechoslovakia, the German Democratic Republic and the United Arab Republic.

A number of studies are being carried out jointly with other countries. In Antarctica, for instance, the Soviet Union and the United States have exchanged meteorologists.

An outstanding achievement of Soviet scientists was the launching of the first man-made earth satellites, in conformity with the I.G.Y. programme (*see answer No. 66*).

Speaking about preliminary scientific results, mention should first be made of the geophysical investigations carried out with the help of the sputniks and rockets. These investigations are of great interest to scientists in all countries.

Since 1949 the Soviet Union has regularly sent up geophysical and meteorological rockets to altitudes ranging from several dozen miles to 125-130 miles. During the I.G.Y. it plans to launch 125 rockets of different types and purposes; part of this programme has by now been fulfilled.

Carrying out the I.G.Y. programme, Soviet scientists sent up a powerful new one-stage rocket carrying a total of 1 ton 10 cwt. of scientific apparatus to a height of nearly 300 miles on February 21st, 1958. Both as regards the altitude reached and the scope of the research programme conducted, this rocket substantially surpassed previous experiments in the U.S.S.R. and other countries in studying the upper atmosphere with rockets. The Soviet Union made a notable contribution to science when it launched Sputnik III on May 15th, 1958. While Sputnik I was hailed the world over as the first step into space, and Sputnik II was particularly interesting because of the test animal it carried, the main feature of Sputnik III is its great weight, 1 ton 6 cwt. and extensive scientific apparatus, weighing over 19 cwt. Sputnik III is a unique space laboratory carrying out a broad complex of inter-connected investigations of the upper layers of the atmosphere along all points of the I.G.Y. programme.

To carry out I.G.Y. research in Antarctica the Soviet Union sent a big expedition there equipped with the latest scientific instruments, aircraft, helicopters, cross-country vehicles, tractors, lorries and other equipment.

This winter Soviet Antarctic explorers will cross three poles—the South Pole itself, the magnetic pole, and “the pole of inaccessibility”.

In 1956 three ships delivered some 8,000 tons of cargo to the bottom of the world to set up the Mirny observatory.

The 180 Soviet research workers encountered harsh conditions on the ice-covered continent. Between February 1956 and January 1957, 262 stormy days, twenty-three of them with hurricanes, were registered at Mirny. But neither the snowstorms, the rarefied air, temperatures as low as 75 and 80 degrees below zero, nor the other difficulties prevented the Soviet scientists from doing extensive research.

They photographed an area of over 23,000 sq. miles from the air, sent up more than 2,000 radiosondes, obtained the first data about temperatures and pressures at medium altitudes in that district by launching rockets, organised stations at high altitude far from the coast, in the district of the south magnetic pole the pole of inaccessibility, and other parts of Antarctica where man had never set foot before.

They are conducting extensive geophysical, meteorological,

oceanographic and other research. After the latest investigations many scientists now believe that Antarctica is a group of islands under an ice cap.

Measurements of the ice made by Soviet, British and American scientists have established that its average thickness is not a mile, as previously assumed, but more than one and a half miles. Hence, the total volume of ice in Antarctica is correspondingly greater. This is important from both the theoretical and practical points of view.

The ice continent has become a continent of friendship. The scientific expeditions from different countries have established close contacts there. They carry on a broad exchange of scientific and general information and are always ready to come to one another's help.

The Soviet oceanographic expeditions have established that the warm Kuroshio current has shifted 200-250 miles to the north. A record ocean depth of 36,000 feet was registered in the vicinity of the Marian Islands.

The Soviet ship *Zarya*, the world's only non-magnetic vessel, especially built without the use of iron so that precise magnetic observations could be made from it, has already finished work in the Baltic Sea and the Atlantic Ocean. Ahead lie thousands of miles through the Atlantic, Indian and Pacific oceans.

Big achievements have been recorded by the scientists studying Fedchenko Glacier in the Pamirs, by the research workers on the stations drifting in the area of the North Pole, and at the permanent Arctic stations equipped with the latest instruments for photographing the northern lights, probing the ionosphere, measuring cosmic radiation, and other work.

It will be possible to sum up the I.G.Y. work of scientists from the Soviet Union and the other countries only after the unique data collected all over the world has been systematised and generalised.

World centres have been set up in the Soviet Union and the United States, which all the I.G.Y. countries are obliged to supply with data on all points of their investigations. Each of the centres will have a complete set of the data; in case of need they will give each other any observation data that are lacking.

Information from Soviet and other scientific institutions has begun coming in to the Soviet centre.

The Fifth Assembly of the Special (International) I.G.Y. Committee was held in Moscow in July-August 1958.

The Assembly, which was attended by some 300 delegates and guests from different countries, paid special attention to concrete forms of co-operation between the scientific institutions of various nations in working up the valuable I.G.Y. materials, to the work of the world centres, and the role of international scientific associations in co-ordinating the processing of I.G.Y. data.

The Assembly also dealt with a number of problems pertaining to subsequent co-operation.

A characteristic feature of the International Geophysical Year is that this major scientific undertaking has not only brought closer together scientists of different specialities who previously were little connected with one another, but has been a striking example of broad international co-operation which strengthens cultural ties between nations and promotes world peace.

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What is the significance of the Soviet Sputniks?

THE successful launching by the Soviet Union of the first artificial satellite of the earth on October 4th, 1957, marked the beginning of man's conquest of space. The sputniks have opened up the broadest of prospects for conducting important scientific observations at high altitudes over various regions of the globe over a long period.

Although the significance of satellites for scientific investigation was known long ago, until recently launching them was a problem that nobody could solve. The main difficulty lay in building a rocket capable of imparting a space velocity of about 26,000 feet per second to a satellite.

It was only after the U.S.S.R. had developed the inter-continental ballistic rocket that the launching of earth satellites became possible.

The weights of the first three sputniks—184.3 lb., nearly half a ton, and 1 ton 6 cwt.—are landmarks in the advances made by Soviet science and engineering in little more than half a year. Each of the sputniks was a new stage.

The instruments inside Sputnik I furnished basic information

about the satellite's orbit, about radio communications with it and about its temperature regimens.

In addition to data about the upper layers of the atmosphere, the equipment of Sputnik II gave us the first idea about the behaviour of a living organism during a flight through space.

Finally, Sputnik III carries instruments for solving a greater number of problems than ever before attempted in similar conditions (the total weight of its apparatus is over 19 cwt.).

It is a unique space laboratory investigating the upper atmosphere according to all the points of the I.G.Y. programme: the state of the ionosphere and its chemical structure; measurement of the pressure and density of the upper layers of the atmosphere; study of the nature of the corpuscular radiation of the sun; study of the primary composition and variations of cosmic rays; study of the electrostatic fields in the upper layers of the atmosphere; study of the earth's magnetic field at high altitudes; study of micro-particles.

Sputnik III, launched on May 15th, 1958, is equipped with improved radio and radio-telemetering apparatus guaranteeing precise measurement of its movement along the orbit, uninterrupted registration of the scientific observations, and the continuous "memorising" and periodic transmission of information to earth while passing over special receiving stations.

Automatic functioning of the sputnik's apparatus is assured by a programme device. Semi-conductors were widely employed in the apparatus; several thousands of them were used.

The apparatus is supplied with power by electro-chemical sources of current and semi-conductor silicon solar batteries which convert the energy of the sun's rays into electricity.

The Soviet I.G.Y. Committee has passed on all the data necessary for observing Sputnik III to the I.G.Y. committees of other nations. Scientists in all countries are thus able to carry out observations of the sputnik's flight.

A feature of the Soviet sputniks is their substantial and steadily increasing payload, thanks to which they can be equipped with a large number of scientific instruments.

Soviet engineering has now reached a level at which it can launch an artificial satellite and send it out beyond the earth's gravitational field, to the moon, for instance. But for such a space rocket to have any scientific importance it would have to be richly equipped with apparatus with which to obtain new

data about physical phenomena in space and the conditions of space flight.

Hence, the key to the problem of establishing permanent space laboratories and travelling to distant planets lies in building satellites of great weight. This is the line Soviet scientists are following.

The size of Sputnik III and its high degree of automation bring Soviet science and engineering close to the creation of space ships.

The Soviet people's achievements in building and launching the sputniks are not just an accident or a stroke of luck. They are logically and naturally connected with the general progress made by the Soviet Union.

The ground for them was prepared by the entire previous development of socialist society and its economy, culture, science and engineering.

It is worthwhile recalling that 1957—the year when the fortieth anniversary of the Soviet system was celebrated—was marked by such events as the launching of the world's first atomic icebreaker, the construction of a uniquely powerful proton synchrotron for conducting nuclear research, the commissioning of huge jet airliners, and many other outstanding scientific and engineering attainments.

At the bottom of these successes lies the socialist system, which creates the most favourable conditions for an uninterrupted advance in the culture of the entire people, the growth of scientific personnel, and the development of free scientific and engineering thought.

The sputniks convincingly illustrate the level Soviet science and engineering have reached. They are the synthesis of a planned economy and a highly-developed industry; they are a result of Soviet achievements in physics, chemistry, mathematics, mechanics and electronics; they are a product of the joint and co-ordinated efforts of Soviet scientists, engineers and workers trained in a socialist country.

The striking fact that the world's first socialist country was the country to blaze a trail into space is a logical reflection of the new stage in the development of human society.

The sputniks have emphasised the strength of the socialist power, its scientific and technical potentialities, and its increased role as an advanced industrial country.

However, the latest scientific and engineering achievements and the resultant further changes in the correlation of forces in the world arena in favour of the socialist camp have not altered, nor could they have altered, the Soviet Union's foreign policy of peaceful co-existence with all states and co-operation and friendship with all nations. For the foreign policy of the Soviet Union is determined by the social nature of the socialist system—a system for whose fullest development peace is essential.

That is why the launching of the Soviet sputniks is a great factor for peace, and not war. It helps to consolidate the forces for peace the world over.

The Soviet sputniks are therefore not only a tool with which to probe the secrets of space but are, at the same time, a symbol of peace and co-operation among nations to give man still greater power over the forces of nature for the welfare of the whole of humanity.

How is engineering developing in the U.S.S.R.?

67

EVER since the U.S.S.R. launched the first artificial earth satellites (see answer No. 66) people all over the world have been taking a greater and greater interest in Soviet engineering achievements.

Regular flights by the first turbo-jet airliners in serial production; the construction of big atomic electric stations; the development of the intercontinental ballistic rocket; the launching of the first atomic-powered icebreaker—all these and other attainments are the fruit of the powerful socialist industries that have been built up in the Soviet period and are continuing to advance at an unprecedented speed.

Here we shall deal briefly with the main trends in the development of engineering in the U.S.S.R.

Way back in the period of the civil war and economic chaos, when the Soviet Republic was in its infancy, Lenin initiated a programme for transforming the national economy on the basis of electrification.

Known as the GOELRO Plan, it was drafted and approved in 1920. Fulfilment of the GOELRO Plan and subsequent development gave the U.S.S.R. large hydro-electric and other power capacities.

Power production has increased by more than 100 times since 1913. More than 100 big hydro-electric stations, including the largest in the world, with a capacity exceeding two million kw., have been built in the forty years of the Soviet system. A hydro-electric station with a capacity of more than three million kw. is under construction.

The share of hydro-electric stations in the country's power output has increased from 2 per cent to approximately 17 per cent.

The construction of hydro-electric stations in the U.S.S.R. follows three main principles: utilisation of the water power along the entire course of rivers; simultaneous development of waterways and irrigation systems; the creation of vast reservoirs to store up colossal masses of spring thaw waters.

Characteristic of thermal power production in the U.S.S.R. is the combined output of electric energy and heat, that is, the development of heat and power stations. This reduces fuel expenditure, improves urban sanitary conditions, and relieves urban transport.

A feature of Soviet thermal power stations is that the capacity of the turbines is steadily being increased. Soviet engineering mills put out turbines with capacities of 100,000, 150,000 and 200,000 kw. A 300,000-kw. turbine is now being built and preparations are under way for the construction of still bigger ones.

Steam pressure and temperature are also steadily being increased, which makes operation of the power stations substantially more economical.

Many thermal power stations in the U.S.S.R. use local peat, shale, brown coal or gas. The target has been set of increasing the share of oil and gas in the country's fuel consumption from 20 per cent to 63 per cent within the next few years.

Gas output is to be increased to between 9,477,000 million and 11,232,000 million cubic feet annually. Big new oil and gas pipelines are being built.

A method of all-round power-chemical utilisation of solid fuel has been worked out (the gas obtained is used as fuel, the liquid products are used as chemical raw materials, and the solid waste is turned into building materials). (For the use of nuclear energy in power production in the U.S.S.R.—see answer No. 68)

The regional power systems of the Soviet Union are now being linked up by long-distance transmission lines as part of a scheme

to create a unified high-voltage network. Work is now nearing completion on a unified power system for the European part of the U.S.S.R.; the Georgian, Azerbaijan and Armenian power systems are being linked up; a unified Central Siberian grid is being set up.

Thanks to exceptionally rapid electrification the amount of electric energy available per worker in industry is nineteen times greater than in 1913. Electrification has been an important factor in the fast rise of labour productivity.

The increase in productivity is due to consistent *mechanisation* of labour, to the introduction of greater numbers of machines and their more efficient use.

An example is the thorough mechanisation of farm labour with the object of creating an abundance of foodstuffs. The Soviet Union's socialist agriculture now has about 1,700,000 tractors (in terms of 15-h.p. units), more than 450,000 grain combine harvesters, about one million tractor-drawn seeders, and hundreds of thousands of other complex machines.

To all practical purposes the ploughing, sowing and harvesting of grain crops has been completely mechanised.

However, it is not a question of merely providing the country with more and more machines. The U.S.S.R. is introducing over-all mechanisation by eliminating manual labour in auxiliary operations as well as the main ones.

In the coal industry, for instance, the pits are getting coal combines, conveyors and mechanical sets. The combine performs all the main operations simultaneously, including loading; the conveyor transports the coal, and the mechanical sets move along the face working with the aid of a special machine as needed.

The former tubmen, horse drivers and pick men have become engine drivers, mechanics and motormen, and pits have become highly mechanised enterprises of an industrial type.

In the building trades, over-all mechanisation had spread to include 85 per cent of the work by the end of 1957.

The highest stage of mechanisation is *automation*, the main line along which engineering is developing in the U.S.S.R. There is not a factory in the Soviet Union today that does not have automatic machinery.

The engineering and food industries, iron and steel plants and shoe factories, and the chemical, textile and other industries are getting automatic machines in ever-increasing quantities.

More than 90 per cent of the country's pig iron is smelted in furnaces equipped with automatic control and regulation devices. Most of the open-hearth furnaces are being equipped with automatic heat regimen regulators. Plate-rolling, tube-rolling and blooming mills are being equipped with automatic controls.

A feature of the present stage is the transition to over-all automation. Automatic transfer lines, shops and entire factories are being introduced in the engineering industry. All the district hydro-electric stations have been equipped with automatic control devices. Over-all automation is spreading to the manufacture of synthetic rubber, alcohol, oil products, building materials, foodstuffs, and so on.

The scale on which automation and mechanisation are being introduced into the national economy may be judged from the fact that the output of the engineering and metal-working industries has increased by more than 200 times since 1913.

In this same period labour productivity in Soviet industries has grown approximately 9.5 times, despite the reduction of the working day. (Incidentally, productivity in the United States has increased only 6.6 times in the last 100 years.)

The growth in power output and the steadily rising level of mechanisation and automation have led to a greater accent on chemistry in all branches of the national economy.

New automatic techniques, the development of nuclear power production, and the big dimensions of modern machines demand many new materials with high physical and chemical properties.

Modern chemistry is creating artificial materials for various specific needs. Manufacture of synthetic resins, plastics and synthetic materials is being expanded.

The Soviet Union's chemical industry is working on the important national-economic problem of reducing, and then altogether eliminating, the use of edible raw materials for industrial purposes.

The chemical production of synthetic alcohol from oil is being developed on a large scale. Much attention is being paid to developing the manufacture of synthetic acids to replace lubricants of vegetable origin.

The manufacture of mineral fertilisers and weed and pest killers, which substantially raise crop yields, has been widely developed in the Soviet Union. Mineral fertiliser output has grown from 80,000 tons in 1913 to 11,200,000 tons in 1957.

Also being expanded is the manufacture of chemical fibres, leather substitutes and household items. Chemical processes are penetrating into all branches of the national economy; they are helping to reduce production costs and improve quality. The role of chemistry will continue to grow at an increasing rate.

How is atomic energy being used for peaceful purposes?

68

ATOMIC energy is used in the Soviet Union for diverse peaceful purposes. A Central Administration for the Utilisation of Atomic Energy has been set up under the U.S.S.R. Council of Ministers. This body is engaged, on the one hand, in solving problems relating to the wide use of atomic energy in the national economy, and, on the other, in promoting co-operation between the Soviet Union and other countries in peaceful uses of atomic energy.

The experience gained in operating the world's first industrial atomic power station (inaugurated in the Soviet Union on June 27th, 1954) and subsequent research have been utilised in the building of large atomic electric plants. The first part of a new plant, with 100,000 kw. capacity, was opened in 1958. When completed the full capacity will be 600,000 kw.

The Soviet Union's big atomic power stations (with capacities of up to 400,000 kw. each) are being equipped with reactors of various types.

The first type is analogous to the one initially put into operation and is designed for the use of turbines with a capacity of 100,000 kw. with steam at a pressure of 90 atmospheres at 500° C.

The second type are thermal neutron reactors with water under pressure—that is, ordinary water is used as the moderator and coolant.

In the third type (also thermal neutron) heavy water is used as the moderator and carbon dioxide circulating under pressure in a closed circuit as the coolant.

In addition to the big stations of these three types, four smaller experimental installations are being tested. In general, the construction of big and small atomic power stations is in the experimental stage. In the course of the operation of these

stations the most efficient types of atomic reactors will be chosen.

Broader use of atomic energy in the national economy and in science and engineering is closely connected with the development of atomic engines of various types, the establishment of methods of directly converting atomic power into electric energy, and the application of radioactive substances.

The icebreaker *Lenin*, the first atomic ship, was launched in the U.S.S.R. in 1957. It is a 16,000-ton vessel with a length of 452 feet, beam of 91 feet, and engines of 44,000 h.p. developing a speed of 18 knots in clear water. The *Lenin* can plough through ice for twelve months without having to make port.

The Central Administration for the Utilisation of Atomic Energy is working on atomic engines for other sea-going vessels, ground transport, aircraft, and so on.

Radio-isotopes are widely used in Soviet science, engineering, industry, agriculture and medicine as a source of penetrating radiation and as tracer atoms.

The penetrating property of radio-active radiation is employed to control and regulate diverse industrial processes, for instance, to check the quality of metal articles. Gamma defectoscopes designed in the U.S.S.R. can detect inner flaws in steel goods up to nearly 12 inches thick.

The absorption and dispersion of rays while passing through substances is also used to check the thickness of sheets and ribbons in the rolling process and the thickness of coatings, to measure the density of substances and the level of liquids and dry substances in closed vessels, in the pouring of molten metal, in counting articles moving along conveyors, in measuring the thickness of the walls of pipes, and so on.

In many fields the action of nuclear radiation on substances is employed. In the chemical industry, for instance, radiation is used to activate a number of important reactions (in particular, in obtaining polymers, the big molecules which are the basis of plastics).

The structural features of deep oil-bearing and other strata are studied with the help of radiation.

In the canning industry radiation treatment is employed to sterilise food products.

Among the medical uses of radiation in the U.S.S.R. a major place is occupied by treatment of skin and internal tumours. Soviet scientists have developed irradiation apparatus charge

with radio-active cobalt which has a number of advantages over installations using natural radium. Cobalt ray machines are in use in medical centres in many towns of the U.S.S.R. Also widely employed are thin cobalt needles which are introduced into the tumour, as well as applicators for treating surface tumours.

Internal organs are also treated by introducing therapeutic doses of artificial radio-active substances into the body.

Radio-isotopes are employed in the U.S.S.R. not only as a source of powerful radiations but as indicators. Tracer atoms are widely used in chemical investigations. They help engineers to study machine friction and wear without taking the machines apart, and to improve blast furnace and steelmaking processes.

Tracer atoms have found application in all fields of biology. In particular, they have enabled Soviet biologists to develop a new field, functional biochemistry of the nervous system. With the help of tracer atoms research workers can observe the rate of metabolism in different parts of the nervous system and obtain data on the distribution of germ cells and the drugs that act against them. Successful efforts are being made to use radio-isotopes for the early diagnosis of cancer.

Radio-isotopes are also employed at fisheries to study migration and propagation.

Equally broad use is made of radio-isotopes in the study of important processes taking place in plants. With the help of tracer atoms scientists have elucidated the most efficient methods of applying fertiliser. Tracer atoms are also employed to observe the movement of salts in the soil in connection with fertilisation and drainage.

The development of diverse peaceful uses of atomic energy contributes to a steady improvement of techniques in many industries.

For example, the construction of atomic power installations has required new chemically pure materials capable of withstanding extremely high temperatures and radio-active radiation.

Improved automatic devices have had to be developed to control reactors and other atomic apparatus. Atomic power production has called into being a new industry of dosimetric and radiometric apparatus to discover and register radiation.

A number of effective steps have been taken by the state to protect the health of people who may be subjected to ionising radiation.

Only a small part of the work done in the U.S.S.R. on peaceful uses of nuclear energy has been mentioned here; a full description would occupy far too much space.

Still wider use of atomic energy in the service of man is bound up with the development of nuclear research.

The Soviet Union has never made a secret of its achievements in the peaceful use of atomic energy. The work of Soviet scientists is widely publicised in the press. A journal, *Atomic Energy*, devoted to peaceful uses of atomic energy, is published in the Soviet Union.

The Soviet Union took an active part in the International Conference on Peaceful Uses of Atomic Energy held in Geneva in August 1955. Soviet scientists submitted 102 papers on the work being conducted in the U.S.S.R.

Travelling exhibitions on the subject have been on display in Geneva, India, Czechoslovakia, Sweden and other countries. A special pavilion showing the peaceful uses of atomic energy in the Soviet Union has been opened at the U.S.S.R. Industrial Exhibition in Moscow.

The Soviet Union is extending scientific and technical co-operation in this field with other countries. With the aid of the Soviet Union a number of other countries are setting up experimental centres for research in nuclear physics and the use of atomic energy for peaceful purposes.

Such work is being done in China, Poland, Czechoslovakia, the German Democratic Republic, Rumania, Bulgaria and Hungary.

An agreement has been concluded to supply Yugoslavia with a research reactor. The U.S.S.R. is also giving Egypt scientific and technical assistance in establishing a nuclear physics laboratory in Cairo and in the peaceful uses of atomic energy.

Of great importance in the development of international co-operation in the peaceful uses of atomic energy is the Joint Nuclear Research Institute founded in the town of Dubna (near Moscow) with the participation of a number of countries.

The U.S.S.R. has placed unique installations for nuclear research at the disposal of the Institute.

Vigorously advocating the prohibition of atomic and thermonuclear weapons, the U.S.S.R. is promoting international co-operation in the use of the powerful energy of the atomic nucleus for the benefit of mankind.

What is the cultural life of the Union Republics? | 69

THE old regime overthrown by the October Socialist Revolution in 1917 barred the working people from acquiring knowledge; it isolated the people from spiritual riches and doomed the entire population of Russia's border regions to ignorance.

The Soviet social system has quickly and completely overcome the cultural backwardness born of centuries of social oppression and national enslavement. In a brief span of years all the country's nationalities, including those that were most backward culturally, have made outstanding progress.

The Kazakh Soviet Socialist Republic, where the overwhelming majority of the population was illiterate under tsarism, has long since become a region of full literacy, with a numerous and highly-gifted intelligentsia.

Supporters of the old regime claimed that the Kazakh people were "organically incapable of attaining modern civilisation, like all the other peoples of the East".

Today the Kazakh people have many scientists of whom the whole of Soviet science is proud, many writers whose books are translated into the languages of all the other peoples of the U.S.S.R. and into foreign languages, and many singers, dancers and musicians who have won renown both at home and abroad.

Here are a few figures: the Kazakh Republic has more than 9,000 elementary and secondary schools, 135 specialised secondary and higher schools, and an Academy of Sciences with twenty research institutes. It has nineteen permanent theatres and nine concert organisations, a film studio, and hundreds of Palaces of Culture and other recreation centres.

Similar big changes have taken place in Tajikistan. A region with an ancient culture, it had descended to complete illiteracy in the centuries preceding the establishment of the Soviet system.

Today Socialist Tajikistan has 40,000 specialists with a secondary or higher education. Universal seven-year education has been put into effect everywhere, including the remotest mountain villages. Ten-year schooling has been introduced in the towns and in many district centres and collective farms.

The Republic's ten institutions of higher learning have a student body of 16,000, chiefly the sons and daughters of

workers and peasants who before the Revolution were oppressed by feudal lords.

Scientific thought is developing intensively in Tajikistan. Its centre is the Tajik Academy of Sciences, where hundreds of research workers are engaged on major economic and cultural problems. Three research institutes in Tajikistan are engaged on problems of agriculture alone.

The great socialist transformations that have taken place in all the Union Republics in the Soviet years have been marked by striking cultural progress.

From the very beginning the Russian people gave the formerly oppressed nations tremendous assistance. Russian scientists and other specialists generously shared their knowledge and solicitedly trained the first school teachers, engineers and scientists in Uzbekistan, Kazakhstan, Kirghizia and other Union Republics. Before long, yesterday's pupils became equal associates and, in some cases, mentors of their former teachers.

The cultural advance in Russia's border regions to which the Soviet system gave freedom and independence was not simply a case of bringing civilisation within the reach of the masses. It was more than that. It was the development of new cultures, national in form and socialist in content, the creation of new spiritual values.

The work of many scientists, writers and artists of the Republics of the Soviet East has won wide recognition in the world. Noteworthy cultural progress has also been made by the Union Republics in the western regions of the U.S.S.R.

Although Latvia, for instance, joined the close-knit family of Soviet nations comparatively recently, in 1940, she has registered considerable cultural advances. Suffice it to say that the number of research institutes in Latvia has grown from 36 in 1940 to 66 today; seven times as many college-trained specialists are being produced today as in 1940; school enrolment has increased nearly eightfold. Before 1940, 10 per cent of the Latvian population was unable to read or write. Since joining the Soviet Union illiteracy has been wiped out.

Do Soviet scientists, writers, artists and musicians enjoy creative freedom?

70

YES, they do. The Soviet social system ensures all citizens, irrespective of their material position, race, nationality, sex or religious convictions the opportunity freely to develop and apply their gifts and energies in any field of endeavour, including the scientific and artistic.

In the Soviet Union all the material riches and political power, and the newly-created material and cultural benefits belong to the working people, to the workers, peasants, and intellectuals. They themselves create and distribute them in the interests of the whole of society. The country's economy, science, education and art, and the people's cultural level are advancing all the time.

While receiving material assistance from society, workers in Soviet science, art and literature are completely free to choose the sphere in which they will apply their talents.

In training scientific workers the Soviet higher schools strive, as President A. Nesmeyanov of the U.S.S.R. Academy of Sciences has noted, to give the student greater independence in his studies and to make the curricula more flexible and individual. This will lead to the graduate scientist being all the more independent in his work.

It goes without saying that in the present age, when the inter-connection of the sciences has become greater than ever before, research has to be conducted according to a definite plan, all the more since the majority of the investigations require substantial outlays from society.

Scientific work, like all other forms of activity in Soviet society, is based on an indivisible combination of the requirements of society and the creative interests of the individual scientist. The scientist is not compelled by anyone to engage in research that does not attract him. And if a scientist feels drawn to an interesting subject or hypothesis, it will be included in the research programme and funds will be allocated for it no matter how remote the possibility of its yielding practical results.

A diversity of creative individualities is characteristic of all spheres of intellectual life in the U.S.S.R. Dmitri Shostakovich, the distinguished modern composer, has said that "Soviet art opens up the road to an all-round development of various

artistic individualities; it ensures broad scope for creative ideas, bold initiative and personal abilities, scope for ideas and imagination".

Each Soviet artist, musician or writer works for the welfare of the people in conformity with his tastes, views and personality. In the same way as it is impossible to confuse the poetry of Alexander Pushkin with that of Leonid Martynov, you cannot confuse the music of Dmitri Kabalevsky with Aram Khachaturian's compositions, or the paintings of Marc Chagall with those of Andrei Rublev.

The voluntary creative associations, the unions of Soviet writers, composers and artists (see answer No. 29) have a membership of thousands of mature masters of literature and the arts, and each has his own voice, his own creative style, his own freely-expressed individuality.

Freedom of creative work naturally presupposes, also, freedom of creative controversy and creative struggle. The different creative styles in art and different hypotheses in science compete with one another. Their advocates carry on lively discussions in the press and from the platforms of public organisations. Every encouragement is given in the Soviet Union to the creative battle of opinions as a powerful factor in progress.

The Communist Party of the Soviet Union, as the guiding and directing force of the people, tirelessly promotes the flowering of socialist culture and the creation of an abundance of spiritual riches in the country.

It indicates the road of development of science, art and literature in the interests of the people; it helps gifted people to develop their talents, one of the ways being comradely criticism; it fosters in the masses high aesthetic tastes and an indefatigable striving for perfection.

The Communist Party's general guidance of socialist cultural development is highly principled and is alien to any form of official regulation. It is one of the main sources of the people's creative strength and of the Soviet Union's scientific and artistic achievements.

Freedom of creative work in the U.S.S.R. means freedom to serve the people and progress. This service is the essence of the Communist Party spirit to which the Soviet Union's creative intellectuals adhere.

Soviet society rejects art and literature that follow amoral trends, incite enmity between races and nationalities, preach

misanthropic views, or advocate war. It does not recognise pseudo-sciences that poison human minds.

The socialist system provides all gifted people with real opportunities to develop their abilities to the utmost in science, literature, art or the practical fields of human endeavour. All it demands of them is that their creative work should promote the further flowering of the life of the people, that they should work for the joy and welfare of the millions of ordinary people.

Soviet science, literature and art are carrying out this noble mission with credit.

What newspapers and magazines are published?

71

ABOUT 8,000 newspapers in eighty-one languages are published in the U.S.S.R. They include twenty-five central, 163 Republican, 320 territorial, regional and area papers, 107 papers of Autonomous Republics, and 4,689 city and district papers. Newspapers are put out at many industrial establishments, institutions and schools. There are sixteen newspapers dealing with engineering, industry and construction, and ninety devoted to transport.

In recent years collective farms have begun publishing newspapers. There are now about 2,000 of these.

Total newspaper circulation is 57,500,000, which is seventeen times more than the circulation of the newspapers published in Russia before the Revolution.

Particularly popular are the central newspapers, which are put out in Moscow: *Pravda*, organ of the Central Committee of the Communist Party of the Soviet Union; *Izvestia*, organ of the Soviets of Working People's Deputies of the U.S.S.R.; *Trud*, newspaper of the Central Council of Trade Unions; *Krasnaya Zvezda*, organ of the Ministry of Defence of the U.S.S.R.; *Komsomolskaya Pravda*, newspaper of the Central Committee of the Young Communist League; *Literaturnaya Gazeta*, organ of the Soviet Writers' Union, and several others.

More than 3,000 magazines and other periodicals in fifty-five languages with a total annual circulation of 533 million were published in the U.S.S.R. in 1957. Magazines are published not only in the languages of the peoples of the U.S.S.R. but also

in English, French, Arabic, Chinese, German, Japanese, Serbo-Croatian and Indian languages (Urdu and Hindi)

The Soviet Union's magazines cover a great variety of subjects, with special publications for practically every branch of the national economy and field of culture and science. There are 136 political and socio-economic magazines; 111 dealing with literature and art; 129 devoted to engineering, industry, transport and communications; seventy-two on agriculture; eighty-seven dealing with the natural sciences; seventy specialising in the health services and medicine, and so on.

There are no privately owned newspapers or magazines in the U.S.S.R. They are published by public organisations (e.g. Communist, trade union, youth, Soviets, writers' unions etc.). Some newspapers are published jointly by Ministries and the central committees of the corresponding trade unions. For example, *Uchitel'skaya Gazeta* is issued jointly by the Ministries of Education of the Union Republics and the Central Committee of the Union of Workers in the Elementary and Secondary Schools.

A new association of newspaper, magazine and publishing house workers, the Union of Soviet Journalists, has been formed.

The Soviet press gives a full picture of the life of the Soviet people, their heroic labour in building communism, and their cultural progress. It devotes much space to world affairs, popularising the ideas of peace and friendship among the peoples of all races and nations.

The newspapers criticise without fear or favour incompetent executives who violate the laws of socialist society as defined by the Constitution.

The Soviet press is a people's press. It is of the people by the people and for the people.

The newspapers carry articles, despatches and letters sent in by workers, collective farmers, engineers, economic managers and government and Party officials. Central and local papers sometimes give over entire pages to letters from readers.

During the countrywide discussion of the further development of the collective-farm system and reorganisation of the machine and tractor stations, for instance, the newspapers published more than 100,000 articles and letters contributed by readers.

What publishing houses are there? Do they publish many books?

72

THERE are more than 260 publishing houses in the U.S.S.R. Most of them deal with a specific range of subjects: fiction and poetry, books on agriculture, geography, medical books, textbooks, books on science and engineering etc.

Large publishing houses are run by the U.S.S.R. Academy of Sciences, the Soviet Writers' Union and the Republican writers' unions, and the All-Union Central Council of Trade Unions.

The Molodaya Gvardia Publishing House, run by the Young Communist League, puts out books for young people. Books for children of various ages are issued by the State Publishing House of Children's Literature.

These two publishing houses alone put out approximately 1,200 titles in a total printing of 140 million annually.

There are publishing houses in each Republic and in most of the regions. Apart from the big central and local publishing houses there are many publishing organisations attached to colleges and universities, scientific institutions and societies. Their total output runs into thousands of titles annually.

In the forty years of the Soviet system 1,327,000 books have been published in a total printing of 19,300 million, in 122 languages of the peoples of the U.S.S.R. and other countries. In 1957 alone 58,800 books and pamphlets were put out in a total of 1,047 million copies.

As compared with 1913 the number of titles published has nearly doubled and the printings have increased 104 times. In pre-revolutionary Russia an average of 62 books was published per 100 persons. Today the average is 550 books per 100 persons.

Political, social and economic literature holds a prominent place in book publishing. Between 1917 and 1958 works by Marx and Engels were published 1,955 times in a total printing of 72 million in forty-eight languages of peoples of the U.S.S.R. and twenty-one foreign languages. In this same period Lenin's works were put out in eighty-eight languages, including sixty-two languages of peoples of the U.S.S.R. The total printing was 300 million. There were 2,357 editions of Lenin's works in Russian, 4,199 in other languages of the U.S.S.R., and 990 in foreign languages.

Works of classical fiction as well as the best books by contemporary Soviet authors are issued in enormous editions. In the Soviet period 79 million copies of works by Pushkin have been printed in eighty-one languages of the U.S.S.R. and foreign countries. Gogol's works have appeared in 31 million copies in forty-nine languages. Printings of Leo Tolstoy's works have totalled 69 million in seventy-six languages. Gorky's works have appeared in 85 million copies in seventy-three languages. The works of the well-known Soviet writer Mikhail Sholokhov have been put out in 21 million copies in fifty-five languages.

Besides books printed in the languages of all nations, national groups and nationalities inhabiting the U.S.S.R., books are also published in English, French, German, Spanish and other foreign languages. A total of 14,583 books by 1,731 foreign authors had been published in the U.S.S.R. in the Soviet period, according to 1956 statistics.

In 1957 works by 388 foreign authors and editions of the folklore of forty-seven countries were published. The Soviet Union holds first place in the world in the publication of translated literature. According to U.N.E.S.C.O. figures, the U.S.S.R. puts out five times as many translated editions as the United States. (For figures on the publication of works by foreign authors—see answer No. 73.)

73

Which foreign authors are most popular in the U.S.S.R.

SOVIET people sincerely appreciate and respect the cultural achievements of other nations, large or small.

The Soviet Government spares no effort to make the best productions of the human mind available to all the people. Works by Democritus, Aristotle, Voltaire, Diderot, Helvetius, Holbach, Spinoza, Feuerbach, Darwin, Newton, Einstein and many others are published in the U.S.S.R. in editions running into tens of thousands.

Foreign works of fiction, which help the reader to gain a better understanding of the history, life and customs of other nations, are highly popular in the U.S.S.R. and are published on a large scale. In 1957 alone their total printing was 78 million. During the Soviet period (between 1918 and 1957) 16,685 books

by 1,942 foreign authors were put out in a total of 535,500,000 copies in seventy-six languages of the U.S.S.R.

The total print of works by the main French authors between 1918 and 1957 were: Victor Hugo, 13,300,000 copies in forty-five languages of the U.S.S.R.; Balzac, 11 million; Guy de Maupassant, 8,500,000; Zola, 10,500,000; Jules Verne, 14,800,000; Romain Rolland, 6 million; Stendhal, 4,900,000; Flaubert, 3,500,000; Anatole France, 3,400,000.

The print figures for works by English authors have been: Dickens, 8,900,000; H. G. Wells, 6,900,000; Kipling, 4,400,000; Swift, 3,700,000; Defoe, 3,500,000; Shakespeare, 3 million copies in twenty-seven languages.

Soviet publishing houses issue American literary productions in large editions. Jack London's works have been published in thirty-two languages of the U.S.S.R. in editions totalling 19,200,000 copies and Mark Twain's works in twenty-five languages, with a total of 9,800,000 copies. The works of Theodore Dreiser have come out in 8,700,000 copies in twelve languages; O. Henry and Upton Sinclair in 4 million copies each.

German writers are also published in big editions: Heine, a total of 2,500,000 copies; Goethe, 1,900,000; Feuchtwanger, 2,500,000; Schiller, 1,600,000.

Here are some other outstanding authors of different countries whose books have been published in editions totalling hundreds of thousands, and even millions, of copies: Shaw, Byron, Burns, Scott, Galsworthy, Cronin, Priestley, O'Casey, Merimée, Rabelais, Aragon, Georges Sand, J. Fenimore Cooper, Seton-Thompson, Longfellow, Hemingway, Bret Harte, Washington Irving, Walt Whitman, Steinbeck, Bredel, Heinrich Mann, Thomas Mann, Anna Seghers, Cervantes, Blasco Ibanez, Amado, Neruda, Guillen, Ibsen, Boccaccio, Giovagnoli, Moravia, Amicis, Stefan Zweig, Charles de Coster, Multatuli.

Soviet readers take a keen interest in the literature of the Eastern countries. In forty years more than 1,000 books by 168 Eastern authors have been published in a total of 47 million copies in thirty-two languages of the U.S.S.R. Books by Lu Hsun have appeared in 2 million copies in eighteen languages; San Shan-fei, 1,700,000; Chu Pao-hua, 1,200,000; Rabindranath Tagore, 2,400,000; M. R. Anand, 1 million. Writings by Kuo Mo-jo, K. Chandra, C. A. Abbas, P. Chandra, Omar Khayyam, Firdousi, Kobayashi, Sepuko, Takakura, Li Ji Yen and others have gone through editions of hundreds of thousands of copies.

Recent years have seen a particular increase in the publication of works of Eastern fiction. In 1957 there appeared 177 books by Eastern writers, in a total of nearly 10 million copies, including twenty books by authors of Arab countries in 1,500,000 copies, forty-six books by Indian authors in a total print of 2,700,000, and sixty-six by Chinese writers in 4,100,000 copies. Works by writers of Burma, Korea, Japan, Indonesia, and other Eastern countries are also published extensively.

74 | *What theatres are there? What do they produce?*

THERE are more than 500 professional theatres and opera houses in the Soviet Union. All have permanent companies; as a rule, they have their own buildings. In addition there are touring companies which perform in district centres and small industrial towns, and at railway stations and construction projects.

Like Soviet socialist culture as a whole, the Soviet theatre has assimilated the best and most progressive traditions of the Soviet and other peoples. Fidelity to principle and the depiction of real people are distinguishing features of the theatre. It adheres to the principles of socialist realism, the fundamental method of all Soviet art.

The traditional centres of Russian stage art are Moscow and Leningrad. Among their most famous theatres are the Bolshoi Opera and Ballet Theatre, the Moscow Art Theatre and the Maly Theatre in Moscow and the Pushkin Theatre and the Kirov Opera and Ballet Theatre in Leningrad.

Theatres in the capitals of the Union Republics and many regional centres have also won renown and widespread popularity.

Widely known beyond their own towns and Republics are such theatres in the Russian Federation as the Volkov Theatre of Yaroslavl and the Kachalov Theatre of Kazan; in the Ukraine, the Shevchenko Opera and Ballet Theatre and the Ivan Franko Theatre, both of Kiev; in Byelorussia, the Opera House and the Yanka Kupala Theatre, both of Minsk; in Georgia, the Rustaveli Theatre of Tbilisi; in Latvia, the Academic Theatre of Drama in Riga; in Estonia, the Kingisepp Theatre of

Tallinn; in Uzbekistan, the Navoi Opera and Ballet Theatre and the Khamza Theatre, both of Tashkent, and so on.

One of the historical gains of the Soviet system is the bringing of culture within the reach of all the peoples inhabiting the U.S.S.R.

In particular, dramatic art is developing among peoples to whom it was completely unknown before 1917, for instance, the Uzbeks, Kazakhs, Kirghiz, Tajiks and Turkmenians of Central Asia, who never had any professional theatre.

Before the Revolution the inhabitants of the present-day Kazakh Republic, whose area is equal to nearly one-third of Europe, were familiar only with folk bards. Today the Kazakhs have their own opera and ballet theatre, a republican theatre of drama, a children's theatre, and fifteen drama theatres in regional and district centres. They have symphony orchestras and smaller bands, song and dance companies, circus troupes and other permanent concert groups.

The same holds true for all the other Union Republics and also for the Autonomous Republics. Stage performances are given in forty languages in the U.S.S.R.

The repertoires are broad and varied. Works by Soviet dramatists and composers cover diverse themes, subjects and genres, from the heroic and the epic to the comic, from psychological drama to fairy-tales.

The heroic and epic theme is most richly represented in opera. Glorious pages from Russian history and the people's heroic struggle for freedom and happiness are described in Prokofiev's opera *War and Peace*, after the novel by Tolstoy; Dankevich's *Bogdan Khmel'nitsky*, about the reunion of the Ukraine and Russia 300 years ago; Khrennikov's *Mother*, after the novel by Gorky; Kabalevsky's *Nikita Vershinin*, about Siberian partisans during the Civil War; Molchanov's *Dawn*, about sailors who fought in the Revolution of 1917.

Soviet ballet is also varied in theme. It includes interpretations of well-known literary works, such as Asafiev's *Fountain of Bakhchisarai*, after the poem by Pushkin; Glière's *The Bronze Horseman*, based on Pushkin's poem of the same name; or Prokofiev's *Romeo and Juliet* and Machavariani's *Othello*, after Shakespeare; fairy-tales, such as Prokofiev's *Cinderella* and *Stone Flower* or F. Yarullin's *Shurale*, based on Tatar legends; and works on contemporary subjects, such as Glière's *Red Poppy*, devoted to China's struggle for independence, Khacha-

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The repertoires are broad and varied. Works by Soviet dramatists and composers cover diverse themes, subjects and genres, from the heroic and the epic to the comic, from psychological drama to fairy-tales.

The heroic and epic theme is most richly represented in opera. Glorious pages from Russian history and the people's heroic struggle for freedom and happiness are described in Prokofiev's opera *War and Peace*, after the novel by Tolstoy; Dankevich's *Bogdan Khmel'nitsky*, about the reunion of the Ukraine and Russia 300 years ago; Khrennikov's *Mother*, after the novel by Gorky; Kabalevsky's *Nikita Verzhinin*, about Siberian partisans during the Civil War; Molchanov's *Dawn*, about sailors who fought in the Revolution of 1917.

Soviet ballet is also varied in theme. It includes interpretations of well-known literary works, such as Asafiev's *Fountain of Bakhchisarai*, after the poem by Pushkin; Glière's *The Bronze Horseman*, based on Pushkin's poem of the same name; or Prokofiev's *Romeo and Juliet* and Machavariani's *Othello*, after Shakespeare; fairy-tales, such as Prokofiev's *Cinderella* and *Stone Flower* or F. Yarullin's *Shurale*, based on Tatar legends; and works on contemporary subjects, such as Glière's *Red Poppy*, devoted to China's struggle for independence, Khacha-

turian's *Gayane*, Spadavekkia's *Shore of Happiness* and J Juzeliunos' *By the Seaside*.

An important place in the opera and ballet repertoire is occupied by Russian and world classics: Glinka's *Ivan Susanin* and *Ruslan and Ludmila*, Tchaikovsky's *Eugene Onegin*, *Queen of Spades*, *Swan Lake* and *Sleeping Beauty*, Mussorgsky's *Boris Godunov*, Rimsky-Korsakov's *Sadko*, Borodin's *Prince Igor*, operas by Rossini, Verdi, Gounod and Bizet, and ballets by Adam, Mincus and Pugni.

The repertoire of the drama theatres includes such gems of Russian and world drama as Griboyedov's *Wit Works Woe*, Alexander Ostrovsky's *Storm* and *Bride Without Dowry*, Chekhov's *Three Sisters*, *Cherry Orchard* and *Uncle Vanya*, Gorky's *The Lower Depths* and *Yegor Bullychev* and others, Shakespeare's *Othello* and *King Lear*, Lope de Vega's *Dog in the Manger*, and Shaw's *Pygmalion*. Soviet audiences are drawn to these plays by their truthful character delineation and lofty humanism.

Soviet dramatists have brought a new hero to the stage—the fighter for social progress and against the exploitation of man by man, the fighter for justice and peace on earth. It is characters of this type that the Soviet theatre-goer has seen and come to love in Trenev's *Lyubov Yarovaya*, V. Ivanov's *Armoured Train 14-69*, Bil-Belotserkovsky's *Storm*, and Vishnevsky's *Optimistic Tragedy*, which deal with the time of the Revolution and the establishment of the Soviet system.

This tradition was carried on by such plays as L. Leonov's *Invasion*, Korneichuk's *Front*, and Movzon's *Konstantin Zaslou-nov*, describing the heroism of Soviet men and women in the Second World War.

The workaday life of the Soviet people is the subject of plays like Kron's *Deep Reconnaissance*, Katayev's *Time, Forward!* Korneichuk's *Makar Dubrava* and *Wings, Happiness*, after the novel by Pavlenko, Dovzhenko's *Life in Flower*, Pistolenko's *The Love of Anna Beryozko* and a great many others.

Soviet theatres also present satires, for instance, Mayakovsky's *The Bed Bug* and *The Bathhouse*, which scourge bureaucrats, and such gay comedies as Dyakonov's *Marriage With a Dowry*, about life in a collective farm village, Volodin's *Factory Girl*, about young workers, and *The Wheel of Happiness*, by the Tur brothers.

Plays by contemporary foreign authors have won a firm place in the Soviet repertoire.

The Soviet theatre is expanding and developing. It spreads the progressive culture of all times and nations and advocates internationalism, socialist progress and peace.

What orchestras, dance companies, choirs are there?

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IN each Union and Autonomous Republic and in the territorial and regional centres there are philharmonic societies that maintain orchestras, song and dance companies, variety troupes and other entertainment companies. The U.S.S.R. Ministry of Culture alone (not counting the radio broadcasting networks, which have a large number of concert groups) has thirty-six symphony orchestras, fifty-two variety orchestras and folk instrument ensembles, forty-eight choirs and fifty-five song and dance companies.

Wide popularity is enjoyed by the State Symphony Orchestra of the U.S.S.R. and the symphony orchestras of the Moscow Regional, Leningrad and Sverdlovsk philharmonic societies. They are led by such distinguished conductors as K. Ivanov, E. Mravinsky, A. Gauk, N. Rakhlin, S. Samosud, K. Kondrashin and M. Paverman.

The Russian, Ukrainian, Byelorussian, Georgian, Estonian and other peoples inhabiting the U.S.S.R. have long been known for the high level of their choral and dance art. In Soviet times these centuries-old traditions have received substantial development. Basing themselves on national motifs, Soviet composers, choir-masters and choreographers have created a folk song and dance art that has become world famous.

The State Folk Dance Company of the U.S.S.R. under Igor Moiseyev, the Pyatnitsky Russian Folk Choir, the Beryozka (Silver Birch) Dance Company of Moscow, the Red Banner Song and Dance Company of the Soviet Army, the folk dance companies of the Ukraine and Georgia, and the Omsk Folk Choir have all enjoyed triumphal success in their appearances abroad.

The Turkmenian dance company, the Uzbek folk instruments ensemble, the song and dance company of Yakutia and others in the non-Russian republics, where before the Revolution there were no professional music groups at all, likewise win acclaim.

People in the Soviet Union love the circus. There are sixty-nine permanent circuses in which the most diverse types of circus skill are represented. The high level of professional skill, based not on outward effect but on agility, boldness, grace and beauty, has made the Soviet circus famous in many countries.

Well known abroad, as well as at home, are the Russian circus artists V. Durov, animal trainer, Oleg Popov, clown, P. Chernega and S. Razumov, trapeze artists, and V. Filatov, bear trainer, the group of Ossetian horsemen under Ali-Bek Kantemirov, the Gineik group of Lithuanian equilibrists, V. Herts, the Latvian strong man and juggler, A. Yusupov, Uzbek comic, and the Oskal-Ool group of jugglers of the Tuva Autonomous Region.

Variety entertainment is widely developed in the Soviet Union. Gay songs, clever parodies that are sometimes biting satirical, eccentric dancing and comic acts draw hundreds of thousands of spectators.

All variety artists in the Soviet Union have regular work, performing at parks and public gardens in summer and at Palaces of Culture, concert halls of philharmonic societies and recreation centres in winter.

Some groups belong to permanent companies and have their own theatre premises, like the Moscow Variety Theatre and the Miniature Theatre of Leningrad under Arkadi Raikin.

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What films are most popular?

THE cinema is the most widespread and popular form of art among the Soviet people, part and parcel of their living.

The number of cinema units has increased from 1,414 (133 of them in the rural localities) in pre-revolutionary times to 65,000 (50,000 of them in the rural areas) today. Nine million people view feature films daily.

Films are produced in the U.S.S.R. by thirty-four studios, located in Moscow, Kiev, Minsk, Tashkent, Tbilisi, Riga, Vilnius, Kishinev and other capitals of Union Republics, and in a number of other large cities.

More and more motion pictures are being produced all the time to meet the steadily growing demands of the Soviet population. While in 1955 the country's studios made eighty-two full-

length films, in 1957 the number was 143. Besides this, up to 500 popular science films, newsreels and documentaries are released annually.

A large number of foreign films are shown in the Soviet Union. In 1957 alone Soviet cinema-goers saw seventy full-length motion pictures from twenty-three countries, among them China, Czechoslovakia, France, Italy, Japan and Mexico.

What films are the most popular?

Briefly, pictures about men and women who work to make life better for their people, who are engaged on constructive jobs, and who feel that working for the good of their country, in the name of progress and peace, is the highest purpose of life. To this category of pictures belong classics of world film art like Sergei Eisenstein's *The Battleship Potemkin*, *Mother*, the picture Vsevolod Pudovkin made from Maxim Gorky's novel of that name, and Alexander Dovzhenko's *Land*. Made at the dawn of Soviet cinematography, they are still being shown both at home and abroad.

Also famous outside the Soviet Union are *Chapayev* and *Shchors*, films about two great army leaders of the Civil War. The lofty humanity that permeates these pictures from beginning to end has assured them their success. The same criterion is applicable to a number of pictures about the immortal deeds of the Soviet people during the Second World War, among them *She Defends Her Country*, *The Russian People*, *The Rainbow* and *The Young Guard*.

The most popular of the films dealing with the country's glorious history and its outstanding personages are *Alexander Nevsky*, *Suvorov*, *Georgi Saakadze*, *Academician Ivan Pavlov*, *Mussorgsky*, *Allisher Navoi*, *Taras Shevchenko* and *Yakov Sverdlov*.

The Soviet people particularly love films about Lenin. *Lenin in October*, *Lenin in 1918*, *The Man With the Gun*, and *Stories about Lenin* portray with historical fidelity and great artistic skill the splendid qualities of that great leader of the Revolution, the founder of the Soviet Socialist State.

Screen adaptations of famous works of literature hold a fairly large place among films produced in the Soviet Union. Among the best have been screen versions of Ostrovsky's plays *The Storm* and *Guilty Though Guiltless*, *Othello*, *Don Quixote*, Dostoevsky's novel *The Idiot*, *Road to Calvary*, a trilogy by the outstanding Soviet novelist Alexei Tolstoy from which two

pictures. *The Sisters* and *The Year 1918*, have been made, and Mikhail Sholokhov's *And Quiet Flows the Don*. Adults as well as children have delighted in the fairy tale films *Sadko*, *Snow Queen* and *Ilya Muromets*.

But history and its great figures, and fairy tale characters are secondary to the main theme of Soviet cinema art—Soviet man and his deeds, concerns and joys. Here we find the story of members of a wintering party in the Arctic in the picture *Seven Bold Men*, and the young people who built a new town in *Komsomolsk*.

Then there are the miners, so energetic about their work and so slow to arrange their personal affairs, in *A Big Life*, and the enthusiastic, gay lovers of music and singing in the comedies *Volga-Volga*, *Bright Path*, *Tale of Siberia* and *Carnival Night*. The problems of Soviet morals and ethics and woman's position in society are treated in *The Large Family*, *Lesson of Life*, *The Rumyantsev Case*, *The Cranes Are Flying* and many other motion pictures.

The practice of producing pictures jointly with foreign filmmakers is becoming more and more common in the Soviet Union. Pictures like the Soviet-Albanian *Skanderbeg*, *Great Warrior of Albania*, the Soviet-Bulgarian *Heroes of Shipka*, the Soviet-Indian *Travels Beyond Three Seas*, and the Soviet-Korean *Brothers* help Soviet audiences gain a better understanding of the history, way of life and customs of other nations and contribute to friendship and world peace.

77

How do musicians, dancers, artists, get their training?

THE system of art education in the Soviet Union is designed in such a way as to discover children possessing ability in some field of art and give them the opportunity to develop their talent. Children are taught singing, drawing and modelling at kindergarten and later at elementary school. Often singing in the school choir or participation in an exhibition of children's drawings shows that the child has a gift for music or painting.

Conservatoires and art institutes maintain schools for children who show special talent. There, in addition to music or art training, the child obtains a regular ten-year secondary school educa-

tion, enabling him to enter any higher educational establishment upon finishing the school if he does not wish to continue his education at a conservatoire or art institute. These schools provide board and lodging for out-of-town pupils.

Similar to these music or art schools are schools of choreography which are, as a rule, attached to theatres of opera and ballet. Here, too, the child is given a complete secondary education in addition to his dance training. Graduates become members of the ballet companies of the theatres.

Although there are music and art schools in many cities there are not enough of them to accommodate all who wish to enter. The majority of those wanting to study music, art or dancing attend lessons at children's music or art schools after their regular school hours.

There are over 700 music and art schools of this type in the Soviet Union, attended by more than 100,000 children. At these schools the children get adequate training for admission to the special music or art schools, of which there are about 200.

Art and music schools admit children from the age of fourteen who have completed seven years at a general secondary school and have passed the entrance examinations in music or art. The term of study is four to five years.

Graduates become members or directors of choirs, musicians, painters or sculptors, workers in the applied arts, or teachers of drawing or singing at secondary schools. The more gifted graduates usually go on to study at conservatoires, or art and architectural institutes.

The Soviet Union has twenty-two conservatoires. The oldest are those of Moscow and Leningrad, founded in the middle of the last century. Many have been established in recent years, in Alma-Ata, capital of Kazakhstan, Sverdlovsk, in the Urals, and Tashkent, capital of Uzbekistan, and elsewhere. The youngest is the Novosibirsk Conservatoire, opened in the autumn of 1956. Departments in the conservatoires include piano, vocal music, conducting, composition, symphony orchestra, and musicology. Many conservatoires have evening departments at which gifted people may obtain a higher education in music without giving up their main work.

There are twelve colleges teaching art and architecture. They train architects, painters of stage-settings, artists in easel or monumental painting, sculptors, graphic artists, book designers, poster artists and specialists in applied and decorative

art. Graduates of these colleges have the right to teach in art schools.

There are twelve theatrical institutes in the Soviet Union, as well as a cinematography institute training film actors, film directors, script-writers, cameramen and stage designers.

Instruction in all these colleges is in the native language, and tuition in both secondary and higher education is free. All students making normal progress receive allowances from the state.

Many actors, musicians and artists obtain their start as members of amateur talent groups (see answer No. 78). An example is People's Artist of the U.S.S.R. Nikolai Bogolyubov of the Moscow Art Theatre, who began acting with an amateur group. Another is People's Artist of the U.S.S.R. Sergei Lemeshev, a star tenor at the Bolshoi Theatre in Moscow.

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How popular are amateur art, music, drama, dancing etc.?

AMATEUR dramatics, music, choral singing, dancing, painting, sculpturing and decorative and applied art really began to develop on a broad scale only after the Revolution.

Material well-being and confidence in the future have led to an unprecedented thirst for culture and a desire to engage in art activities.

The Soviet Union has 300,000 amateur drama, choral and dance groups, orchestras and studios of the fine arts with a total membership of more than three million factory and office workers, collective farmers, and members of their families.

These groups are found at all recreation centres and Palaces of Culture. In 1914 Russia had 222 clubs for workers, known as Folk Houses. Today the trade unions alone maintain about 130,000 Palaces of Culture and other recreation centres.

In the towns amateur talent groups are financed by the trade unions, which provide them, free of charge, with premises, properties, costumes, musical instruments and instructors. In the rural localities money to finance amateur talent comes from the collective farms.

In 1957 the trade unions spent 2,000 million roubles on cul-

tural undertakings and the development of physical culture. A considerable part of this sum went to promote amateur talent activities.

Soviet men and women of the arts, including the most prominent, consider it their duty to help develop and improve amateur talent activities among the people. Almost every professional theatre acts as patron for some recreation centre and its amateur talent groups.

The Bolshoi Theatre in Moscow, for example, helps with amateur activities at the club of the Moscow brake works and the rural amateur talent groups in Talovaya District, Voronezh Region. Famous Bolshoi Theatre stars like Sergei Lemeshev and Maxim Mikhailov, both People's Artists of the U.S.S.R., have made trips to the Talovaya collective farms many times to give help and advice to amateur choirs and singers.

Another important Moscow theatre, the Art Theatre, has close ties with workers at the Krasny Proletari machine tool factory in Moscow. A council made up of Art Theatre actors and directors gives regular assistance to the amateur talent groups at the factory club. Members of the groups often attend Art Theatre performances and rehearsals. There are hundreds of similar examples.

Constant assistance from the state and help from leading people in the arts have had such a favourable influence on the development of popular talent that many amateur groups have achieved a level of performance in no way inferior to that of professional theatres and companies, and individual amateur performers are in some cases as good as professionals.

There are amateur groups which stage entire operas and ballets, plays by Chekhov, Gorky, Shakespeare and Molière, and the finest Soviet plays; amateur orchestras perform Tchaikovsky, Beethoven, Rachmaninov and Chopin. In 1957 alone amateur talent groups in the Soviet Union gave about 600,000 performances and concerts attended by almost 127 million people.

Many prominent Soviet stage artists such as the outstanding Ukrainian singer Mikhail Grishko, a People's Artist of the U.S.S.R., People's Artist of the Russian Federation Irina Maslennikova, soloist with the Bolshoi Theatre, and the popular film stars Marina Ladynina, Boris Andreyev and Nikolai Kryuchkov, among others, began their careers on the stages of factory and village clubs.

Amateur talent activities among children are also highly developed in the Soviet Union. There are thousands of amateur talent groups at schools and Houses of Young Pioneers where children have an opportunity to develop their natural gifts for music, dancing, acting or painting.

Taking part in amateur talent activities gives interest and meaning to the leisure of Soviet people. Such activities enable millions of people in town and countryside to enjoy real art.

79

*How are radio and television
organised in the U.S.S.R.?*

THE Soviet Union has a highly-developed radio industry, a large network of radio broadcasting stations, and all the radio engineering facilities essential for economic, scientific and cultural progress, and for defence needs.

As regards the power of its radio broadcasting stations, the Soviet Union now holds first place in Europe and second in the world.

Radio broadcasting in the U.S.S.R. does not pursue any commercial aims. It is an important factor in the cultural and political education of the people, and also contributes to technical progress and development in all branches of industry. In the socialist state radio is the property of the people and serves the people.

That is why so much attention is paid in the Soviet Union to the expansion of radio relay systems in urban and rural localities.

By 1957 there was one radio receiver for every four urban dwellers and every nine or ten rural inhabitants. In addition to radio sets Soviet citizens have the benefit of the radio relay service maintained in towns and rural areas. Under this system broadcasts may be heard by plugging in a loudspeaker.

The radio relay service takes in practically every house in the towns and the villages. The low cost, simplicity and universality of the radio relay service have led to its becoming as commonplace as electric lighting. Loudspeaker outlets are installed in streets, public places, hostels and flats.

There are now many districts in the U.S.S.R. where all the houses are wired for radio. An example is the North Kazakhstan

region, where radio has been brought to all the collective farms, state farms and villages.

The radio relay service by no means excludes radio sets. Many citizens have both.

Besides the central radio broadcasting station in Moscow there are stations in the capitals of the Union Republics and in the administrative centres of the territories and regions. Programmes are also broadcast regularly by tens of thousands of small stations at factories and offices, schools, colleges, collective farms and state farms.

The central radio station in Moscow broadcasts three programmes simultaneously for home listeners over different wavelengths twenty-four hours a day. The programmes include home and world news and commentaries, talks about industry and agriculture, classical and modern literature, music and drama. Hundreds of concerts of all kinds are presented. Broadcasts are conducted in fifty-seven languages of the U.S.S.R.

A distinguishing feature of Soviet radio broadcasting is its close ties with the people. Radio Moscow receives more than 300,000 letters annually from Soviet listeners. Question and answer programmes, request concerts and other broadcasts are arranged in response to letters.

People of different trades and professions, from factory workers and collective farmers to Party and Government leaders, from schoolchildren to Academicians, frequently appear before the microphone.

Radio Moscow daily presents a broad variety of programmes in thirty-eight languages for Europe, Asia, Africa, Australia and America. The subjects include the life of the peoples of the U.S.S.R., science, engineering, culture, sports, music, and commentaries on world affairs.

The Soviet radio speaks persistently for world peace, for the peaceful co-existence of states with different social systems; it exposes the forces that want to instigate another war. That is why the programmes meet with such a wide response from listeners abroad. Radio Moscow gets some 70,000 letters from 120 countries every year.

Television has made rapid progress in the Soviet Union in recent years. The number of TV stations has increased from only three five years ago to forty-one today, and upwards of thirty more are to go into operation by the end of 1958.

TV is becoming a regular part of Soviet life. You will now

find sets in the homes of Lithuanian farmers and Karaganda coal miners, Baku oil workers and factory workers in the small town of Karpinsk in the North Urals.

Much attention is being paid to the installation of relay lines for an exchange of programmes between studios in the capitals of the Union Republics and other large towns, and also for assuring good reception in towns that do not have their own studios.

Moscow TV programmes are now viewed in Kalinin, Vladimir, Kaluga, Yaroslavl, Ivanovo and Kostroma. In a few years from now they will be relayed and cabled much longer distances, to Kiev, Kharkov, Dnepropetrovsk and Orel, among other cities. Muscovites, in turn, will be able to view programmes from those cities.

The first experimental colour TV station will soon start working. The colour system to be used will enable programmes to be received on ordinary black-and-white sets, and black-and-white programmes to be received on colour sets.

There are now about 2 million TV sets in the big cities of the U.S.S.R. By 1965 there are to be more than 300 TV studios and enough sets in use to bring programmes to some 100 million persons.

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What libraries are there?

THERE are more than 390,000 libraries of all kinds in the U.S.S.R., 120,000 of which are in rural localities. The total number of volumes on their shelves is approximately 1,500 million, of which 335 million are in the rural libraries.

The number of library books per 100 inhabitants has increased from six in 1914 to 332 today.

The Lenin State Library in Moscow, with about 20 million volumes and bound sets of newspapers and magazines, and the Saltykov-Shchedrin State Public Library in Leningrad, with about 12 million volumes, are among the biggest in the world. More than 1,600,000 persons annually use the Lenin Library.

These and other big libraries (in Tashkent, Tbilisi, Yerevan and elsewhere) have rich collections of manuscripts and other written records of different ages and peoples.

Tens of thousands of Muscovites avail themselves of the facilities of the U.S.S.R. State Library of Foreign Literature, the country's main depository of foreign publications. Its subscribers include 1,200 libraries and institutions in nearly 250 towns of the Soviet Union and in twelve other countries.

A new building with a depository for 4 million volumes is to be erected for the U.S.S.R. State Library of Foreign Literature under the current Five-Year Plan. The building will have exhibition halls, twelve reading rooms with a total of 850 places, a number of smaller reading rooms for one, two and three persons, a lecture hall seating 500 and a conference hall seating 100. The library will have its own printshop, bookbindery, book hygiene department and microphotography department.

More than forty big libraries by law receive a free copy of every book, magazine and newspaper printed in the U.S.S.R.

To give people living in the smaller towns and rural areas access to the cultural treasures assembled in the major libraries there is an inter-library subscription service through which local libraries may borrow rare books from the large libraries.

City and district libraries are maintained and stocked on funds provided by the state budget. They include children's libraries, with pre-school departments, and specialised scientific and technical libraries.

Besides these, there are many libraries maintained by the trade unions at recreation centres and at factories and offices. The number of collective farm libraries is steadily growing.

Tremendous progress has been made in expanding and enlarging the network of libraries. For instance, the trade union library at the motor works in Gorky has more than 155,000 volumes and thousands of subscribers, whereas before the Revolution all the libraries of the whole region in which the city of Gorky is situated had only 103,000 books altogether.

All the libraries in the Soviet Union are free.

THERE are 849 museums in the U.S.S.R. devoted to art, history, literature, science, regional history, the theatre, engineering, famous persons, and so on.

The most famous art museums, known the world over, are the Tretyakov Gallery in Moscow and the Hermitage in Leningrad.

The Tretyakov Gallery, founded in 1856 by Pavel Tretyakov, a distinguished patron of the arts and well-known figure in the field of culture, has the world's largest collection of Russian painting, sculpture and drawing.

The collections in the Hermitage trace the culture of many countries and peoples over the centuries (the most ancient items relate to the Stone Age). Many of the exhibits were supplied by the archaeological expeditions which the museum arranges regularly. The Hermitage paintings include works by Leonardo da Vinci, Raphael, Titian, Rubens, Rembrandt and many other great masters.

Another prominent museum is the Pushkin Museum of Fine Arts in Moscow, whose collections include art memorials of the world of antiquity, the ancient East, and Western Europe. This museum grew out of a small art gallery founded at Moscow University in the middle of last century.

The Historical Museum in Moscow presents the history of Russia from ancient times. It has rich archaeological collections, clothing and fabrics, furniture, household articles, ornaments, weapons, documents and books. Rare collections of decorative and applied art and old weapons are on display in the Armoury in the Moscow Kremlin. Branches of the Historical Museum are St. Basil's Cathedral on Red Square, the Novo-Devichy Nunnery in Moscow, and monuments of old Russian architecture in the village of Kolomenskoye, situated not far from Moscow.

Many country estates of the Russian tsars and nobles have been turned into museums. Among them are Petrodvorets, near Leningrad, with its famous fountains, and the estates of Ostanino, Kuskovo and Arkhangelskoye, all of them near Moscow, where the architecture, sculptures, canvases and applied art make magnificent displays.

The Museum of the Revolution, founded in Moscow in 1924, has large collections reflecting the main stages in the revolu-

tionary struggle against tsarism waged by the peoples of Russia under the leadership of the Communist Party, the October Socialist Revolution, and the Soviet Union's political, economic and cultural achievements.

Many museums have been set up in places associated with the life and work of famous people.

Thousands of people daily visit the Lenin Museum in Moscow in which documents and relics reflecting the life and work of the founder of the Soviet State are collected. The museum has branches in a number of cities. Lenin's flat in the Kremlin, and the estate at Gorki, near Moscow, where he died have also been turned into museums.

There are also memorial museums dedicated to other distinguished Soviet leaders.

Leo Tolstoy's estate in Yasnaya Polyana and his house in Moscow, Tchaikovsky's house in Klin, Chekhov's house in Yalta, Pushkin's flat in Leningrad, and the flats of Dostoyevsky, Mayakovsky, Stanislavsky, Scriabin and others are also museums now.

One of the country's oldest institutions for the dissemination of scientific knowledge is the Polytechnical Museum, founded in 1872 by the Society of Lovers of Natural Sciences, Anthropology and Ethnography at Moscow University. It is a huge museum which arranges excursions, lectures, expositions, and so on.

Soviet museums have their exhibits arranged in chronological order, which makes it easy to examine them. Qualified guides and consultants are available. Admission to museums is for a nominal fee or free of charge. They attract many visitors. The Tretyakov Gallery, for instance, is annually visited by more than one million persons.

Museums have their own archives, photography laboratories, libraries, and restoration and other workshops. They conduct extensive research, publish studies and guide-books, and arrange archaeological and other expeditions.

MILLIONS of people go in for physical culture and sport in the U.S.S.R. These include factory and office workers, collective farmers, students, scientists and writers. There are about 200,000 sports groups with 19 million members who are active in one or several of the more than forty sports cultivated in the U.S.S.R.

The state annually spends large sums to develop the health services and physical culture (the 1958 appropriations are 40,100 million roubles).

Sports facilities at the disposal of the population include more than 1,500 large stadiums, upwards of 7,000 gyms, 5,000 sports grounds, 25,000 football pitches, about 200,000 volleyball and basketball courts, thousands of ski lodges, hundreds of rowing centres, swimming pools, and so on. All these are well attended.

There is a public governing body in each sport. Sporting activities as a whole are co-ordinated and guided by the Physical Culture and Sports Committee of the U.S.S.R. Council of Ministers.

The physical culture groups belong to sports societies, the oldest and most popular of which are Dynamo and Spartak. There is a trade union sports society in each Union Republic: Trud in the Russian Federation, Vanguard in the Ukraine, Enbek in Kazakhstan etc. College and university students are members of the Burevestnik (Stormy Petrel) society.

Railwaymen, Soviet Army men and rural sportsmen also have societies of their own.

There are some 50,000 qualified instructors and coaches who have been trained in the thirty-two secondary and fifteen higher schools of physical culture and sports and the 106 physical education departments at teachers' training colleges. In addition, there is a large number of amateur instructors who have gone through a short-term course of studies and train beginners.

Three research institutes in the Soviet Union specialise in problems of physical training and sports.

Physical education is based on the set of norms fixed for the Ready for Labour and Defence Badge and the U.S.S.R. sporting classification system. After a sportsman fulfils the requirements for the Ready for Labour and Defence Badge, First and Second Degree, he can qualify for one of the three sporting categories

if he improves his prowess. Next come the ratings of Master of Sport and Honoured Master of Sport. Outstanding coaches are given the title of Honoured Coach of the U.S.S.R.

In the past four years Soviet sportsmen have set up 1,230 new U.S.S.R. records, 405 of them world records. They hold seventy-four of the 170 registered world records.

Soviet sportsmen have won world championships in wrestling, gymnastics, shooting, modern pentathlon, speed skating, volleyball, women's fencing and weight-lifting. They are European champions in boxing, track and field, basketball, ice hockey and several other sports.

When Soviet sportsmen made their debut in the Olympic Games at Helsinki in 1952 they chalked up the same number of points as the United States team. At the Melbourne Olympics of 1956 they captured the largest number of gold, silver and bronze medals and outstripped the teams of the other countries.

The attention being given to promoting sports in the Union Republics is bearing rich fruit. For instance, at the Melbourne Olympics sportsmen from the Ukraine registered more points than the teams of such countries as Britain, France, Italy and Japan. The sportsmen of Georgia and Armenia proved stronger than the teams of Norway, Belgium, Denmark, Argentina and other countries.

Soviet sportsmen have established ties with organisations in fifty-seven countries. Hundreds of foreign sportsmen visit the U.S.S.R. every year, and in turn hundreds of Soviet sportsmen make foreign tours, competing in all the major contests. The Soviet Union is a member of thirty-one international sports federations.

V. PEOPLE'S WELFARE

83

How does the Soviet people's living standard rise?

UNDER the Soviet socialist system the national income belongs to those who produce it—the working people—and is distributed so as to improve the well-being of society as a whole and each of its members.

Compared with pre-revolutionary Russia, the national income in 1957 was more than twenty times higher, and more than thirteen times higher per head of population. This growth in the country's social wealth has enabled the Soviet Government to carry out measures resulting in a considerable rise in the material welfare and cultural standard of the Soviet people.

The first index of the rising material security of the Soviet people is the absence of unemployment and the steady increase in the number of people employed in the national economy. The number of workers and office employees working in the national economy in 1957 averaged 52,600,000, or four times as many as in 1913.

Another index of the living standard is the length of the working day. Before the October Revolution, the working day in the coal, iron and steel, papermaking, food and other industries, as a rule was more than ten hours, not counting overtime; in 1957 the working day in industry was less than eight hours, on the average.

Since the latter part of 1956, by decision of the Twentieth Congress of the C.P.S.U., the working day for all workers and office employees is being gradually reduced to seven or six hours, depending on the nature of the industry, and in a number of industries, to a five-day week (with an eight-hour day and two days off), without a reduction in wages. The task is to be completed in 1960.

A major index of the steadily rising standard of living is the higher real income of the population. Compared with pre-revolutionary times (1913) the real income of workers and office employees in 1957 was roughly five times higher, and the real income of peasants, six times.

How did this substantial rise come about?

First, money wages have gone up during this period much more than has the price of goods and services.

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Second, rent and communal services, which before the Revolution took more than a 20 per cent slice out of the worker's pay, and sometimes even more than a third, are more than 80 per cent lower.

Third, in addition to wages, working people in the U.S.S.R. receive considerable sums or free services from the state in the shape of social insurance benefits, pensions, stipends, paid holidays, free tuition, free medical service, and so on.

State allotments to meet social and cultural needs are a constant factor of higher income for the population.

In 1957, for instance, the state spent more than 201,000 million roubles to satisfy the everyday social and cultural requirements of the people, or an average of 2,300 roubles extra income for every worker, office employee and working peasant for the year.

In 1958 the extra income will be still higher, as the state budget appropriation for these purposes is more than 212,000 million roubles.

Since the Second World War, due to measures carried out by the Communist Party and the Soviet Government, living standards have not only been brought up to the pre-war level, but have been considerably exceeded.

It is the result of the expansion of social production and higher national income, and it has enabled the Government repeatedly to cut retail prices, to pay the peasants higher procurement prices for the main farm products sold by the collective farms to the state, to raise money wages of a number of categories of workers, to reduce or repeal certain taxes and lift the minimum tax-exemption wage, and to repeal obligatory deliveries of produce to the state from the personal husbandries of collective farmers, workers and office employees.

In 1956 a new state pensions law was passed, as a result of which more than 17,000,000 people are now getting higher pensions. Monthly pensions have gone up 80 per cent on the average, and for a number of categories of workers, 100 per cent or more.

Tuition fees for students in senior forms of secondary schools and higher educational establishments have been abolished, and a number of other measures have been carried out.

All of this has resulted in a substantial rise of people's real income. Thus, between 1950 and 1957 real wages and salaries went up more than 50 per cent, and compared with the pre-war year 1940, almost 100 per cent.

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This, in its turn, meant a higher purchasing power, which is reflected in the enormous increase in retail trade.

In the last four years (1953-7) the volume of retail trade went up more than 52 per cent, and, compared with pre-war, more than 150 per cent. The sale of chief food products, clothing, shoes, fabrics and household articles has increased several times over.

Owing to the vast scale of housing construction the housing conditions of the working people have improved considerably. Compared with pre-revolutionary times, urban housing has nearly quadrupled in Soviet times. The housing construction plan for the five-year period of 1956-60 envisages building almost twice as many flats as there had been in all towns in Russia before the Revolution.

The seven-year plan of development (1959-65) outlines a new advance of the Soviet economy and a new rise in living standards. This will be reflected in a further increase in employment, higher cash and real incomes, a greater trade turnover, a sharp improvement in housing conditions, and a further rise in cultural standards.

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What, apart from his wages, does the Soviet worker get from the State?

A SOVIET worker's income is not confined to the wages he gets. He receives from the state a number of additional cash allowances and other benefits, which swell every family's real income by more than a third. These additions include:

- Allowances and benefits from state social insurance funds.
- Pensions under social security legislation;
- Pay for holidays, which all workers receive;
- Free or reduced-rate accommodation at health and holiday centres;
- Accommodation of workers' children at nurseries and kindergartens, children's sanatoria and other health resorts (*see answer No. 88*);
- Money grants to mothers of large families and unmarried mothers (*see answer No. 88*);

Free tuition in all educational establishments, including institutions of higher learning, and advanced training courses for workers;

Allowances paid to students at specialised secondary schools and higher educational establishments;

Free medical service;

Premiums and bonuses of many kinds.

All of these, paid for by the state, are forms of extra income for the working people, and they are increasing from year to year.

In 1940 they came to 42,000 million roubles, in 1950 to 122,000 million roubles, in 1957 to more than 201,000 million roubles and in 1958 they are to reach 212,000 million roubles.

These figures do not include the huge amounts spent by the state each year on housing construction.

How do Soviet citizens exercise their right to rest and leisure?

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THE right to rest and leisure is guaranteed by the U.S.S.R. Constitution to all working people.

This right is reinforced by a system of social and economic guarantees, namely, an extensively developed system of social insurance of wage and salaried workers at state expense; free medical service to all Soviet citizens; a wide network of health resorts; and a working day that is growing shorter.

An important requisite for making the right to rest and leisure a reality is a short working day.

In 1956 the working day in industry was 7.6 hours on the average. For young people between the ages of sixteen and eighteen a six-hour working day was established and they are paid the same wages workers of the same categories receive for a full working day.

Today the average working day in the U.S.S.R. has been lowered again, as since the latter part of 1956, by decision of the Twentieth Congress of the C.P.S.U., all workers and office employees are gradually being put on a seven-hour day, and workers of the leading trades employed underground in the coal and ore-mining industries on a six-hour day.

Those put on the shorter working day in 1956-57 were miners working underground in the Donets and Lvov-Volhynia coal basins in the Ukraine and in many enterprises of other industries in the country. The switch-over to the shorter working day in the coal and shale, iron and steel, coke-chemical, cement and several other industries is to be completed in 1958.

By the end of 1958, 8 million workers and office employees will have been transferred to a seven- or six-hour day, and before the end of 1959 it is planned to transfer all workers employed in heavy industry to a seven- or six-hour day.

By 1960 no wage and salaried workers will do more than forty hours a week. This will be without reduction in pay, as was provided for by the Twentieth C.P.S.U. Congress. In fact, owing to the extensive introduction of new machinery and progressive technology, mechanisation of production processes and automation, and improvement of the organisation of work, the trend to higher wages will continue even under the shorter working day.

The right of Soviet working people to rest and leisure is ensured also by granting all workers and office employees annual holidays with full pay.

The minimum holiday period is two weeks, but many workers receive a month's holiday.

These include workers under eighteen, miners, workers employed in iron and steel, textiles, chemicals and a number of other industries, railwaymen, workers employed on waterways and motor transport.

Workers of research, educational and other cultural institutions get a holiday of from one to two months.

Many workers and office employees in branches of the national economy where special conditions obtain, or because of the nature of their jobs, receive extra paid holidays of from six to thirty-six working days a year. This applies, among others, to people engaged in hazardous occupations or those working in the Far North or similar areas, crews of ships plying in the Arctic, and workers in a number of other trades.

Workers studying after working hours receive extra leave.

All health resorts in the U.S.S.R. belong to the state and are at the disposal of the working people for health or rest cures. Every year millions of workers spend their holidays at sanatoria or holiday homes in the Crimea, the Caucasus, or resorts in other areas.

Nearly 4,000 sanatoria and holiday homes are functioning in

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the U.S.S.R. and accommodation at them is distributed by the trade unions and health-service boards.

The cost of accommodation does not exceed the average monthly wage of a skilled worker. Many working people receive their accommodation at a 70 per cent discount or free, the difference coming out of social insurance funds, which enterprises and institutions have to provide.

Health or rest cures at special sanatoria (for those suffering from tuberculosis, and so on) are provided free, at state expense.

How does the medical service work?

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MEDICAL service of every kind is free of charge for every citizen of the U.S.S.R. One of the principles on which the Soviet health service is based is to have medical institutions within close reach of the population.

There are 160,000 medical institutions, therapeutic and preventive, in towns and villages fully maintained by the state. Any citizen may obtain medical consultation and treatment at his district dispensary or clinic, which have all facilities for diagnosing and treating diseases.

Where necessary, dispensaries send a specialist to the patient's home. Clinics have emergency service departments which send a doctor to the patient's home immediately.

Towns and industrial settlements also have first aid stations to take care of accident cases, calamities, and so on. Medical service by air has been considerably developed in the U.S.S.R.

Factories have their own clinics and big factories have medical centres. The latter include a number of institutions (a clinic, a hospital and shop medical stations). There were approximately 1,000 of them in 1957, besides tens of thousands of first aid stations headed by a doctor or feldsher at mills, factories, mines, and so on.

The country has an extensive network of hospitals, with more being opened all the time. Compared with 1913 the number of hospital beds has increased nearly seven-fold, reaching 1,432,000 in 1957, with another 80,000 to be added in 1958. Hospitals now under construction will have 360,000 beds.

The Soviet State gives much attention to mother and child care (*see answer No. 88*). Pre-revolutionary Russia had practically

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no mother-and-child care service by the state.

In 1913 Russia's hospitals had altogether 7,000 beds for maternity cases, nine women's consultation centres, nineteen nurseries with accommodation for 550 infants in all.

In 1957 maternity homes and maternity wards in hospitals had accommodation for 140,000 women, and there were 14,200 women's and children's consultation centres, children's hospitals with accommodation for 183,000 and nurseries accommodating 856,000.

The year 1958 will see room for another 82,000 in nurseries, and 1960 another 400,000.

The number of people working in the health service in 1957 was more than 2,800,000, of whom 346,000 were doctors and over 1 million trained medical personnel.

While in 1913 the country had, on the average, one doctor for every 6,879 of population, in 1957 it had, according to data published by the Secretariat of the United Nations, one doctor for every 600 of population.

There are 79 colleges and 603 secondary schools training medical personnel. The number of doctors graduated by them annually is around 25,000, or more than Russia had altogether in 1913.

With the Soviet health service based on the principle of prevention, medical examinations of the population are carried out regularly. The country has 350 hygienic education centres, 5,230 health and epidemiological stations, and 16,400 special dispensaries and offices.

Books, booklets and magazines are issued in large editions to popularise medical knowledge and special films are produced for the same purpose.

Medical research is conducted by 350 research institutes, laboratories and higher educational establishments, and this activity is co-ordinated by the U.S.S.R. Academy of Medical Sciences.

The Soviet State annually allocates huge amounts of money for the protection of the people's health. Against 91 kopeks per person spent by tsarist Russia in 1913 on the health service, the U.S.S.R. in 1956 spent 177 roubles 40 kopeks. The budgetary appropriation for 1947 was 18,900 million roubles, and for 1958 it was 40,100 million.

As a result of the steadily rising material and cultural standards of the people, of improved working and living conditions

and the progress of the health service, there has been a sharp decline in the sickness and death rate and an increase in the life-span.

It is a long time since the country last had cases of such dangerous epidemic diseases as the plague, cholera, smallpox and relapsing fever, and there has been a sharp drop also in malaria, typhoid fever and other infectious diseases.

In 1934, for instance, there were 9 million cases of malaria, while in 1956 there were only 15,000. Compared with 1913 the general death rate declined by 75 per cent, and children's mortality rate by 84 per cent.

According to data published by the United Nations Secretariat the U.S.S.R. in 1956 had a death rate of 8 per 1,000 of population (the United States had 9.4 and Britain 11.5). The average life-span, which was thirty-two years in 1896-97 and forty-four in 1926-27, reached sixty-seven in 1955-56.

The annual net increase in population in the U.S.S.R. exceeds 3 million and is one of the highest in the world.

How is social insurance organised?

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SOcial insurance is financed completely by the state. The state social insurance fund is made up of a fixed percentage of the wage bill paid regularly by all enterprises and institutions for this purpose. The workers make no payment into this fund.

The state social insurance budget increases in proportion to the growth of the socialist economy.

In the first Five-Year Plan period (1928-29 to 1932-33), the social insurance funds amounted to 10,400 million roubles. In the second Five-Year Plan period (1933-37) they reached 32,500 million roubles. In the first post-war Five-Year Plan period (1946-50) they amounted to 80,100 million roubles.

Expenditure on social insurance and social maintenance in 1956 was 71,000 million roubles, and the appropriation for 1958 is 88,200 million.

Benefits paid out of the social insurance fund include temporary disability benefits paid to industrial, office and other workers, and maternity grants.

Social insurance funds go to pay the cost of construction and maintenance of trade union health and holiday resorts, for accommodation of workers in them, and for the upkeep of workers' children at summer camps and children's sanatoria.

The cost of dietetic meals served in special dining rooms and of accommodation and treatment at overnight sanatoria or one-day rest homes maintained by the factories also comes out of these funds.

During illness, a worker receives sick benefit from the first day of his disability until his doctor permits him to go back to work. A worker is also paid out of this fund if he or she has to stay at home to take care of a sick member of the family.

The benefits paid range from 50 per cent to 90 per cent of the worker's earnings, depending on the length of service at the enterprise.

Maternity leave benefits are paid to women who have worked at a given enterprise or institution not less than three months and those who have worked more than two years receive 100 per cent of their earnings.

At the birth of a child a lump sum is paid as a special allowance for feeding the baby and for the purchase of a layette.

The trade unions have complete charge of these state social insurance funds.

State old-age and disability pensions, and pensions to families which have lost their breadwinner are paid out of annual allotments under the state budget of the U.S.S.R. and funds under the state social insurance budget. Workers do not contribute to this fund (see answer No. 89).

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What concern does the Soviet State show for mothers?

IN the Soviet Union mothers are surrounded with universal honour and respect. Special laws regulate conditions of work for pregnant women. They receive maternity leave with full pay for 112 days, fifty-six days before and fifty-six days after confinement. This leave is extended if their health requires it.

An extensive network of free maternity homes and children's consultation centres has been set up in both the towns and villages throughout the country.

Some 6,000 maternity homes and a large number of maternity wards in hospitals are maintained by the state. Maternity homes are also maintained by collective farms. Ninety-five per cent of all confinements in the Soviet Union take place in maternity homes or hospitals, where the women receive expert medical and other care free of charge.

Childbirth in maternity homes and hospitals has largely been made painless. Death in childbirth is disappearing in both urban and rural communities in the Soviet Union.

Expectant mothers are registered at special state consultation centres, which keep them and, subsequently, their infants also, under constant medical observation.

The state system of mother and child care provides many privileges and advantages for mothers.

Mothers with large families receive state allowances. Upon the birth of her third child a woman receives a lump sum of 200 roubles and on the birth of her fourth child 650 roubles and a monthly allowance of 40 roubles. On the birth of her fifth child, 850 and 60 roubles respectively; her sixth child, 1,000 roubles and 70 roubles; the seventh and eighth child, 1,250 and 100 roubles; the ninth and tenth child, 1,750 and 125 roubles.

Mothers of ten children receive on the birth of each additional child a sum of 2,500 roubles and 150 roubles monthly.

In 1956 a total of 5,100 million roubles was paid out by the state in such allowances.

State allowances are paid also to unmarried mothers.

Appropriations made for allowances to mothers of large families and unmarried mothers and on the birth of a child totalled 9,000 million roubles in 1957, or 700 million roubles more than in 1956.

Soviet scientists are constantly seeking new and better ways of caring for mothers and children. More than twenty special scientific research institutes are working in this field.

To enable women to work in industry and agriculture, to study and to take part in public activity a network of nurseries and kindergartens has been set up and it is being expanded all the time.

Children under three are cared for at nurseries and those between three and seven in kindergartens, usually during the day while their mothers are at work. In both nurseries and kindergartens experienced nurses with teachers' training take care of the children, and doctors take care of their health and

physical development. The food provided is in strict accordance with the children's age.

Fees in both types of institutions are low, the greater part of the expense being borne by the state.

In the five-year period 1951-55 the number of nurseries and kindergartens increased by roughly 20 per cent, and under the current Five-Year Plan (1956-60) permanent nurseries will provide 44 per cent more accommodation than in 1955 and kindergartens 45 per cent more.

It is entirely up to parents whether or not they send their children to nurseries or kindergartens. And if they do, they are not relieved of the responsibility for the children's upbringing, which in the main is done at home.

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*Who gets a state pension in the U.S.S.R.
and how much?*

WAGE and salaried workers, servicemen, students of higher, secondary and specialised schools, and those attending special training schools or courses, and members of their families are entitled to a state pension.

All wage and salaried workers are entitled to an *old-age pension*. men on reaching the age of sixty after twenty-five years of service, and women on reaching fifty-five after twenty years of service.

The pension amounts to 100, 85, 75, 65, 55, or 50 per cent of the monthly earnings, with those receiving low wages getting 100 per cent and those earning 1,000 roubles a month or more receiving 50 per cent.

More favourable conditions have been fixed for wage and salaried workers employed underground, those engaged in unhealthy trades or working in hot shops. These are given a pension at an earlier age: men on reaching fifty after twenty years of service and women on reaching forty-five after sixteen years of service. The pension for this category is also higher, being 100, 90, 80, 70, 60, and 55 per cent of the monthly earnings.

The minimum old-age pension is set at 300 roubles a month and maximum at 1,200, the latter amount being the equivalent of the wage of a skilled worker.

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There are also supplementary payments (within the limits of the maximum amount): 10 per cent of the amount of the pension for those who have worked steadily for more than 15 years; 10 per cent extra for non-working pensioners who have dependent on them a non-able-bodied member of the family, and 15 per cent extra for two or more non-able-bodied dependents.

Wage and salaried workers are entitled to a *disability pension* in case of permanent disablement or incapacity for a long period where the disability started during or after work. These pensions are granted irrespective of the length of service where the disability is due to injury or occupational disease, and after a certain period of service where the disability is due to general sickness.

The disabled are divided into three groups, depending on the degree of their incapacity to work, and the greater the degree of incapacity the greater the pension. Here, too, the scale has been fixed on the basis of a percentage of the monthly earnings. And the cause of disablement is also taken into account. The government provides more for the maintenance of those whose disability is due to an injury at work or to occupational disease. This type of pension also has supplements. For instance, first category disabled (irrespective of cause of disability) will receive an additional 15 per cent of the amount of the pension to pay for their care.

The principle underlying the fixing of the *pension on the loss of a breadwinner* is similar to that applying to the other two. It is fixed at a certain percentage of the earnings, taking into account the number of dependents, the cause of the breadwinner's death, and the more favourable conditions applying to those who worked underground, at unhealthy trades, and so on.

All these pensions are based on average monthly earnings, the basis being the last twelve months of work. If the applicant for a pension so desires any five years in a row out of the last ten years may be taken as a basis.

Pensions are paid out of funds appropriated for the purpose under the State Budget of the U.S.S.R., including the state social insurance funds, without any deductions from workers' wages. Pensions are not taxable.

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Housing construction developing in the U.S.S.R., and what rent is paid

FROM the moment the Soviet Union has done everything possible to improve housing conditions since the October Revolution, in November 1917 the Soviet Government has taken all-possible measures to improve the housing conditions of the workers. Since after defeating the imperialists and the bourgeoisie at home, the country has had no more pressing housing construction tasks than to build new flats and houses all the time as the Soviet economy develops.

During the first Five-Year Plan period (1928-40) practically all old towns were reconstructed, adding new districts and suburbs and about 500 new towns, large industrial and cultural centres were built. Among them are Magnitogorsk, Gorky, Lenin, Leningrad, the Ukraine, Kirovsk (Karelo-Fennoscandia), Kuznetsk, and others. In the East and Kazakhstan, Kazakhstan.

In the twentieth anniversary of Soviet power approximately as many large modern residential buildings had been built as during all of its pre-revolutionary history.

The war not only hindered the further improvement of housing conditions, it made the situation much worse. More than 700 towns and industrial settlements, and tens of thousands of villages were destroyed, leaving some 25 million people without roofs over their heads.

Spending much effort, Soviet society repaired the ravage in a very brief time. Ten years after the defeat of the fascist aggressor, housing facilities in towns and villages had reached 640 million square metres, or 50 per cent more than before the war.

Nevertheless, housing remained short because of the unprecedented rise in the urban population (87 million in 1957 against 26,300,000 in 1926). The rise was due to the continuous and powerful expansion of industry.

Another factor in the housing shortage was the regular rise, natural increase in population and finally the war consequence, which had not been fully overcome.

In 1957 the Communist Party of the Soviet Union and the Soviet Government worked out a new housing construction programme designed to eliminate the housing shortage completely within the next ten or twelve years, and the programme is being successfully carried out. The scale and rate of housing construction is increasing year by year.

As against seven flats per 1,000 of population built in 1954, 10.2 flats were built in 1957. In the latter year alone considerably more flats were built than during the whole of the Second Five-Year Plan period (1933-37)—more than 48 million square metres of housing in towns and industrial settlements and 770,000 individual homes built by peasants and professional people working in the countryside.

In 1958 housing construction increased in scale, and it will keep on increasing from year to year, making use of the latest achievements of building construction technology and science.

Almost all money for housing construction comes from the state treasury. Budgetary appropriations for this purpose are regularly going up, reaching 36,800 million roubles in 1958, against 29,000 million in 1957 and 25,000 million in 1956.

These immense investments in housing construction do not yield the state any income. Rent for flats is fixed at a uniform rate, set in 1926. Even in those years rent was low, and today with earnings considerably higher it takes an insignificant portion of the working people's budget. As a rule, rent does not exceed 3 to 5 per cent of a worker's earnings.

Ninety-eight per cent of the rent received goes for current repairs and maintenance of the buildings, and 2 per cent for insurance. The rent does not yield enough to pay for capital repairs of the buildings, and this expense also is paid by the state, for which purpose the budget provides large allocations.

Flats in houses built on state money are assigned in the first place to people whose housing conditions are bad, families with many children, newly-weds, and so on. Flats are distributed by the local Soviets with participation of the trade unions and other public organisations.

Among the 287,300 persons who received flats in new buildings in Moscow in 1957, 52 per cent were workers and their families, 37 per cent scientists, specialists, office employees and their families, and the rest families of disabled, families of deceased war veterans, pensioners, and so on.

The Soviet State assists those who wish to build their own homes, granting them long-term loans. In 1958 the total amount of such loans considerably exceeded 3,000 million roubles.

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How is town-planning developing in the Soviet Union?

A CHARACTERISTIC feature of life in the Soviet Union is the rapid growth of the urban population, a result of the vast scale of industrial construction. Living in towns now are roughly 90 million people (approximately 45 per cent of the population), against a population of barely above 25 million as late as thirty years ago.

This, naturally, compelled an expansion of old towns and the rapid construction of new. Large industrial and cultural centres appeared in every part of the country, particularly in the East and North, frequently in places where people had seldom set foot.

Between 1926 and 1956 the number of towns increased by 860, and 1,200 new industrial settlements appeared during the same period.

Most of the new towns sprang up in connection with the construction of industrial enterprises. Magnitogorsk, an important town with a population of close to 300,000 today, arose and developed in an uninhabited steppe in the Southern Urals around the big iron and steel works built in 1929-32. It has a dozen or so industrial enterprises, two higher educational establishments (a mining and metallurgical and a teachers' training institute), scores of schools, clubs and libraries, a theatre, a museum, a circus, a recreation park and many other public buildings and other structures.

Another large city is Komsomolsk-on-Amur, built twenty-five years ago in the remote taiga in the Far East. Other new towns that might be mentioned are Kirovsk on Kola Peninsula, where apatites, a valuable mineral, is mined; Sumgait in Transcaucasia with its tubing mill and aluminium plant; Karaganda in Kazakstan, a coal-mining centre; Stalinsk in Western Siberia, a steel and coal-mining town, and Norilsk in the Far North with its non-ferrous metals industry.

A good many towns came into being in connection with the construction of hydro-electric stations, which is proceeding on a large scale. Among these towns are Zaporozhye and Novaya Kakhovka in the Ukraine, Zhigulyovsk and Volzhsk on the Volga, and a number of towns in Siberia.

New towns are built according to a single plan and the landscape and climate are taken into consideration. This ensures the proper allocation of residential blocks, industrial enterprises, public buildings and service establishments. The towns are designed by special institutes, and they are provided with up-to-date public services and amenities.

As far as old towns are concerned, it would be hard to find one which has not changed in appearance in Soviet years. In many cases the name of the town is the only old thing left.

For instance, the town of Kemerovo (Western Siberia), which had a population of 22,000 in 1926 now has some 250,000 inhabitants, and Yerevan has increased its housing space six-fold in thirty years.

In Moscow, Leningrad, Kiev, Tbilisi, Gorky (the former Nizhni Novgorod) and other historic centres, many new buildings have gone up, new thoroughfares and even extensive districts have been built. The following table shows the population increase in a number of the bigger cities between 1926 and 1956:

City	1926	1956
Moscow	2,000,000	4,800,000
Leningrad	1,700,000	3,200,000
Kiev	513,000	990,000
Gorky	222,000	876,000
Tashkent	323,000	778,000
Tbilisi	294,000	635,000
Stalingrad	151,000	525,000

In 1926 the U.S.S.R. had altogether thirty towns with a population of over 100,000 and today it has 130-odd. In 1926, only three towns had a population of more than 500,000 each, while today there are about twenty.

New construction in the old towns, as a rule, takes the shape of massive blocks of buildings. Good illustrations of these are the Peshchanaya Street and South-Western districts in Moscow, the blocks of residential buildings put up by the automobile factory in Gorky, and by the Ural heavy machinery works in Sverdlovsk. Radical changes have taken place in the municipal economy

of the old towns. In pre-revolutionary Russia only the larger cities had bus services, telephones, water mains, sewerage systems, gas, and paved streets. Many towns did not even have electric lighting. Today all these services and amenities are to be found everywhere.

Moscow and Leningrad have underground railways and Kiev has one under construction. Thousands of miles of gas mains have been laid in towns, and electricity is used for domestic purposes on an ever increasing scale.

A lot of greenery has appeared in towns; with millions of trees and shrubs planted and new public gardens and parks laid out every year. Large artificial lakes have been built in many towns, particularly in the south, among them Tashkent and Kislovodsk.

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What Government decorations are there?

FOR outstanding services in the sphere of socialist construction, or defence of the Soviet State, individual citizens, collective bodies and military units are awarded Orders or Medals of the U.S.S.R. These awards are made by decrees of the Presidium of the U.S.S.R. Supreme Soviet.

In the first years of the Soviet State, two Orders were instituted the Order of the Red Banner, for outstanding military feats, and the Order of the Red Banner of Labour for notable labour achievements. Subsequently the Order of Lenin, the Soviet Union's highest Order, was introduced, followed by the Orders of the Red Star and of the Badge of Honour.

During the Great Patriotic War of 1941-45, the Presidium of the U.S.S.R. Supreme Soviet established a number of new Orders, to be awarded for distinguished service in the struggle for the honour, freedom and independence of the Soviet Union.

Among these are the Order of Victory, awarded to the High Command; the Order of Suvorov, First, Second and Third Class; the Order of Ushakov, First and Second Class; the Order of Kutuzov, First, Second and Third Class; the Order of Nakhimov, First and Second Class; the Order of Bogdan Khmel'nitsky, First, Second and Third Class; the Order of Alexander Nevsky; the Order of the Patriotic War, First and Second Class, and the Order of Glory, First, Second and Third Class, awarded to rank and file soldiers only.

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Each Soviet Order has its special statute.

In addition to the Orders, the U.S.S.R. has established twenty-seven different Medals. Among them are the "For Distinguished Labour", the "For Labour Valour", the "For Merit in Battle", and the "For Bravery" Medals. Special Medals were awarded to those who took part in the defence of Moscow and the Hero Cities of Leningrad, Stalingrad, Sevastopol and Odessa.

Awards of Medals of the U.S.S.R. are also made by decrees of the Presidium of the U.S.S.R. Supreme Soviet.

In 1944 the Presidium of the U.S.S.R. Supreme Soviet instituted Orders and Medals for mothers of large families: the "Mother Heroine Order"; the "Order of Motherhood Glory", First, Second and Third Class, and the "Motherhood Medal", First and Second Class.

For heroic deeds, the title of Hero of the Soviet Union is conferred upon Soviet citizens. Persons on whom this title is conferred receive the Order of Lenin and the "Gold Star" Medal.

For distinguished achievements in their work, citizens of the U.S.S.R. receive the title of Hero of Socialist Labour. Those awarded this high title receive the Order of Lenin and a gold "Sickle and Hammer" Medal, in addition to the title award certificate.

In the last twenty-five years approximately 2 million people in industry, transport, agriculture, construction, science and culture have been awarded Orders or Medals, and close to 7,000 innovators have had conferred upon them the high title of Hero of Socialist Labour.

What are Lenin Prizes for outstanding works in science, engineering, literature and art?

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BACK in 1925 the Soviet Government established the V. I. Lenin prizes for the purpose of encouraging outstanding work in the spheres of science, engineering, agriculture, medicine and the social sciences.

Among those who received these prizes were Academician A. N. Bach, one of the founders of modern biochemistry; Academician K. K. Gedroits, one of the founders of modern agrochemistry; V. F. Mitkevich, an electrical engineer, who

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later was elected a Member of the Academy of Sciences; Professor N. Y. Tsinger, eminent botanist; Professor L. A. Chugayev, famous chemist and metallurgist; and Professor V. P. Vorobyov, well-known anatomist whose work made it possible to preserve the body of Vladimir Ilyich Lenin for humanity. After 1935, however, no Lenin prizes were awarded.

On September 8th, 1956, the Central Committee of the C.P.S.U. and the Council of Ministers of the U.S.S.R. passed a decision to re-establish the Lenin Prizes for the more outstanding scientific works, architectural designs and buildings, inventions, designs of machines and new materials introduced into the national economy, and improvements in production methods. Lenin Prizes have been instituted for the best works of literature and art which have received wide public recognition.

The prizes are to be awarded annually on April 22nd, Lenin's birthday.

Two committees have been set up under the U.S.S.R. Council of Ministers, the Committee for Lenin Prizes in the Spheres of Science and Engineering, and the Committee for Lenin Prizes in the Spheres of Literature and Art, to examine works submitted in competition for a prize and to award prizes for the best of them.

Works are to be presented to the Lenin Prize Committees by the Presidiums of the Academies of Sciences, scientific or engineering-technical societies, research institutes, higher institutions of learning, the Presidium of the All-Union Central Council of Trade Unions, Collegiums of Ministries of the U.S.S.R. or of the Union Republics, plants, the Board of the Union of Soviet Writers, of the artists', composers', and architects' unions, and editorial boards of magazines, publishing houses, public organisations and public figures in science, engineering, literature or in the arts.

In 1957, seventeen works in the sphere of science and engineering were awarded Lenin Prizes.

Among the recipients of the prizes were the outstanding representatives of Soviet science and engineering, Academician K. I. Scriabin, Academician D. V. Nalivkin, Academician A. N. Tupolev, D. I. Blokhintsev, Director of the International Nuclear Research Institute, and A. N. Bakulev, Member of the Academy of Medical Sciences.

Those who received Lenin Prizes for outstanding achievements in the field of literature and art were the sculptor S. I. Konenkov,

the prose writer L. M. Leonov, the poet Musa Jalil, the composer S. S. Prokofiev (the latter two posthumously) and the ballerina Galina Ulanova.

Among those who were awarded Lenin Prizes in the field of science and engineering in 1958 were Academician P. G. Betekhtin, Academician N. S. Shatsky, Academician S. G. Strumilin, Academician I. P. Bardin, F. M. Gerasimov, chief of the laboratory of the S. I. Vavilov Optical Institute, and engineers Y. Y. Gumennik and E. A. Ignatchenko.

In the field of art Lenin Prizes were awarded to the sculptor M. K. Anikushin, the stage director G. A. Tovstonogov, the artist Y. V. Tolubeyev, the ballet master V. M. Chabukiani, and the composer D. D. Shostakovich.

VI FOREIGN POLICY OF THE SOVIET UNION

94 | *What are the principles of Soviet foreign policy?*

THE principles of Soviet foreign policy were formulated and substantiated theoretically by V. I. Lenin, founder of the Soviet Socialist State, and in pursuing its foreign policy the U.S.S.R. Government is always guided by Leninist principles.

The principles are as follows: peaceful co-existence of states with different social systems, vigorous struggle for peace, recognition of and respect for the sovereignty of all nations—large and small, non-interference in the internal affairs of other countries, and proletarian internationalism.

The general aim of Soviet foreign policy has always been and continues to be the Leninist principle of peaceful co-existence of states with different social systems, in other words, peaceful co-existence of the socialist and capitalist systems (*see answer No 96*).

Another principle of Soviet foreign policy is vigorous struggle for peace and against the aggressive plans of the imperialist powers.

The U.S.S.R.'s pacific foreign policy follows from the very nature of the socialist system. The Soviet Union neither has nor can have any motives for attacking other countries, for the seizure of foreign lands. It possesses vast expanses of territory and countless natural resources. It has no groups or sections of the population interested in war, nor can such appear.

The Soviet Union has carried on a struggle for peace from the dawn of its existence. On the day following the October Socialist Revolution—November 8th, 1917—the Second All-Russian Congress of Soviets adopted a Decree on Peace, drafted by Lenin, which expressed the demand for universal peace that is in accord with the vital interests of all peoples.

In the first days of its existence the Soviet State put an end forever to the policy of national oppression pursued by tsarist Russia and renounced all unequal treaties concluded by the tsarist government with a number of states.

The chief content of Soviet foreign policy in the period between the two world wars was the struggle for consolidating peace

In the Second World War, unleashed by the fascist aggressors, the Soviet Union greatly contributed to the defeat of Hitlerite fascism and Japanese militarism, and since the end of the war it has waged a tireless struggle for the prevention of another slaughter of the peoples, for lasting peace and international security.

In force in the Soviet Union is the Peace Defence Act, which declares war propaganda a grave crime.

The Soviet Union has repeatedly introduced concrete proposals in the United Nations and its agencies for banning atomic and hydrogen weapons, for a reduction of arms and armed forces up to complete disarmament, and for prohibition of war propaganda.

The Soviet Government has made a good many important proposals for peaceful relations in its messages to the heads of the United States, British, French and other governments. Along with introducing proposals aimed at consolidating peace and eliminating international tension, the Soviet Union has set a good example by reducing its armed forces and cutting its military appropriations from year to year. Proceeding from the interests of peace and the striving to rid mankind from the baneful effect of nuclear radiation, the Soviet Union in March 1958 unilaterally discontinued all nuclear weapon tests and called on the governments of the powers possessing such weapons to follow its example.

In its relations with other countries, the Soviet Union is always guided by the principle of recognition of and respect for the sovereignty of all nations, large or small, and non-interference in the internal affairs of other states.

Recognition of and respect for the sovereignty of all nations follows from the principles underlying the Soviet social and state systems, from Lenin's teaching on the national question and from the multi-national nature of the Soviet State.

This principle underlies the Soviet policy of friendship with all peoples throughout the world, support of the national-liberation movement and the struggle of the peoples against colonialism and for the freedom and independent development of all nations.

The Soviet Government has declared its full support of the well-known five principles of peaceful co-existence set forth in 1954 in the statements of the Prime Ministers of the People's Republic of China and the Republic of India

In the joint declaration issued by the governments of the Soviet Union and the People's Republic of China on October 12th, 1954, the two governments stated that they would continue to build their relations with the countries of Asia and the Pacific, as well as with other countries, on the basis of strict adherence to the principles of respect for sovereignty and territorial integrity, non-aggression, non-interference in the internal affairs of the other, equality and mutual advantage and peaceful co-existence, which opens up wide possibilities for the development of fruitful international co-operation.

The five principles have received official recognition from most of the countries in Asia and Africa and a number of countries in Europe. In the present international situation these principles stand opposed to the "cold war" and, in place of a world split into antagonistic alignments, they proclaim the co-operation of all nations to strengthen peace and settle outstanding issues through negotiation.

Implementation of the five principles of peaceful co-existence leads to a wider zone of peace, or in other words, to whole areas of the globe made up of countries resolutely opposing war and standing for co-operation of all states on an equal footing for their mutual advantage.

In his report to the Twentieth Congress of the C.P.S.U. N. S. Khrushchov said: "The establishment of firm friendly relations between the two biggest powers of the world, the Soviet Union and the United States of America, would be of great significance for the strengthening of world peace. We think that if the well-known Five Principles of peaceful co-existence were to underlie the relations between the U.S.S.R. and the United States, that would be of truly great importance for all mankind and would, of course, benefit the people of the United States no less than the Soviet peoples and all other peoples. . . ."

"Why not make these principles the foundation of peaceful relations among all countries in all parts of the world? It would meet the vital interests and demands of the peoples if all countries subscribed to these Five Principles."

In its foreign policy the Soviet Union invariably proceeds from the principles of proletarian internationalism. In the struggle against imperialist aggression and for peace and friendship among the nations, the Soviet Union relies on the unity of the working people of all countries and their solidarity with the working

people of the U.S.S.R., for in defending the interests of the Soviet people, Soviet foreign policy also defends the vital interests of working people all over the world.

What gives the foreign policy of the U.S.S.R. its international character is that it expresses the aspirations of all nations inhabiting the Soviet Union, united in a friendly fraternal family. The patriotism of the Soviet people is in fully harmony with deep respect for the rights and interests of the peoples all over the globe.

In unswervingly pursuing the policy of relaxation of international tension and consolidation of peace, the Soviet Union proceeds from the fact that wars are not fatalistically inevitable in the present epoch, that there are powerful social and political forces possessing formidable means to prevent the imperialists from unleashing war.

What is the world socialist system?

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THE socialist system, which has become firmly established in Russia, is fundamentally different from all social and economic systems which preceded it, primarily owing to the fact that it eliminated exploitation of man by man, abolished private ownership of the means of production and turned them into public property belonging to the whole people. The people, complete masters of this property, having taken state power into their hands, use it for the extensive development of the productive forces on the basis of advanced techniques, for the fullest and all-round satisfaction of the requirements of the whole population, for building a classless communist society, the basic principle of which is: "From each according to his ability, to each according to his needs."

As a result of the socialist revolution in Russia in October 1917, the chain of the capitalist system, which until then was the only system in the world, was broken and there emerged a qualitatively new socialist state of workers and peasants, which paved the way for the formation of a world socialist system.

For almost three decades, from 1917 to the end of the Second World War, the Soviet Union, which was the first socialist state in the world, stood alone, all the rest of the countries being capitalist.

The victory of the freedom-loving peoples over the fascist aggressors changed the world situation radically. In a number of countries in Europe and Asia, the peoples, after overthrowing the old, reactionary and pro-fascist governments, chose a new road of people's democracy, of socialist construction.

A history-making event was the victory of the people's revolution in China in 1949, and the shift of that country with the largest population in the world to the path of socialist development.

Thus, after the Second World War socialism emerged from within the bounds of a single country and there took shape the world system of socialist states, with an aggregate population of some 1,000 million.

The socialist countries are united in one community by all of them taking the path of socialism, by the common class nature of their social and economic systems and state power, by the need of mutual support and assistance, by the community of interests and aims in the struggle against imperialism and for the victory of socialism and communism, and by their common Marxist-Leninist ideology.

The socialist countries build their relations on the principles of complete equality and non-interference in the internal affairs of one another.

These principles, however, are not all there is to the substance of relations between socialist countries. An integral part of their relations is mutual fraternal assistance, co-ordination of national economic plans and all-sided mutually advantageous co-operation; the latter plays an important part in strengthening the economic and political independence of each and of the socialist community as a whole.

The socialist countries also stand for extending in every way economic and cultural relations with all other countries.

The chief distinguishing feature of the economy of the socialist countries is its planned and all-sided development and its peaceful direction. Production in socialist countries is not carried on for maximum profit; its main aim is a steadily higher standard of living for the whole population. The balanced development of all branches of the socialist national economy envisaged by the state plans precludes crises of over-production.

The socialist countries are considerably ahead of the capitalist countries in the rate of expansion of industrial output. Since

the war the socialist countries have increased industrial production 4½-fold compared with 1937, while the capitalist countries barely managed to double output during this period

A corner-stone of the socialist countries' foreign policy is the struggle for peaceful co-existence with states of a different social system. All socialist countries are tirelessly waging a struggle for relaxing international tension and for peace and friendship among all nations inhabiting the globe. Economic expansion or aggressive designs are alien to the socialist countries.

As the first and most powerful socialist country the Soviet Union, naturally, plays an important role in the relations between the socialist countries. The Soviet people have behind them a rich experience in building socialism, an experience of which the other socialist countries are making wide use, applying it in conformity with the concrete historical and social-economic conditions and specific features of each country.

Nothing is, therefore, further from the truth than to assert that it is all reduced to the "establishment" of socialism everywhere on the Soviet model. Actually the development of the socialist countries is characterised by their complete independence in politics as well as in economics. Each country brings a certain originality in socialist construction.

The countries of the socialist system are carrying on vast peacetime construction and they are vitally interested in a stable and lasting peace. That is why the socialist countries have joined efforts vigorously to uphold the policy of peaceful co-existence with the countries of the capitalist system.

The solidarity of the socialist states is not directed against any other countries; it serves the interests of all peoples, checking the aggressive aspirations of the imperialist circles and supporting the forces of peace and progress, which are growing stronger day by day.

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Is the peaceful co-existence of the socialist and capitalist systems possible?

PEACEFUL co-existence of the socialist and capitalist systems is not merely possible, it is also necessary. In the present international situation, with two diametrically opposed social systems existing on our planet—the socialist and capitalist—the relations between them can develop only along one of two ways: either peaceful co-existence or the most destructive war in history. There is no third way.

In its foreign policy the Soviet Union has proceeded from the premise that countries with different social systems can do more than exist side by side. They should also always improve their relations, strengthen mutual confidence and co-operate. If we keep in mind traditional economic relations between countries and the international division of labour which has taken shape as a result of these relations, it will become perfectly obvious that no country can develop without normal co-operation with other countries. And such co-operation is inconceivable unless there is peaceful co-existence.

The enemies of peaceful co-existence in the West often slander the Soviet Union by alleging that it advances the principle of peaceful co-existence merely out of tactical considerations, considerations of expediency. However, the U.S.S.R. has always, from the very first years of Soviet power, stood with equal firmness for peaceful co-existence.

As far back as 1922 the Soviet delegation at the Genoa Conference proclaimed from the platform: "While adhering to the communist viewpoint, the Russian delegation recognises that in the present historical epoch, which makes possible the parallel existence of the old social system and the new now coming into being, economic co-operation between states representing the two systems of ownership is imperatively necessary."

The U.S.S.R. has pursued the same political line all through the post-war years.

During the Second World War, the Soviet Union, in close alliance with the United States, Britain and other capitalist countries defeated the common enemy, Hitlerism, and that again was graphic proof that socialist and capitalist countries could co-operate in the interests of all nations, and it was advisable to do so.

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Undeviatingly adhering to the principle of peaceful co-existence, the Soviet Union acts in full accord with the United Nations Charter, which envisages co-operation between states with different social systems for the preservation of peace and safeguarding the security of nations.

In the opinion of the Soviet Union the economic foundation and manifestation of the principle of peaceful co-existence of states should be the extensive development of economic, scientific and cultural relations between them, and the political foundation and manifestation of the principle should be non-interference in the internal affairs of the other.

The all-round improvement of relations between states with different social systems and the development of business co-operation between them does not at all mean that struggle between them will cease altogether or lessen. As long as the two differing systems exist a struggle will go on between them all the time, mainly an ideological struggle.

In advancing its proposals for lessening international tension and eliminating the danger of another war, the Soviet Union has always proceeded from the premise that ideological questions are not a matter to be examined by an international forum of representatives of different social systems. Life will show which system is better for the peoples, and the choice of a particular social system is an inalienable sovereign right of the people of every country.

When the Soviet Union says that the socialist system would win in the competition between the two systems—the socialist and the capitalist—this by no means signifies that its victory will be achieved through interference by the socialist countries in the internal affairs of the capitalist countries. The Soviet Union's certainty of the victory of communism is based on the fact that the socialist mode of production possesses decisive advantages over the capitalist.

Guided by the principle of peaceful co-existence of states with different social systems, Soviet foreign policy proceeds from the premise that wars between them can be avoided. The Soviet Government has always proposed that outstanding international issues should be settled through negotiations on the basis of mutual recognition and consideration of the interests of others.

However, despite the Soviet Union's great effort for a relaxation of world tension, the international situation remains fraught

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with grave dangers of another world war. Under these conditions the vital interests of the peoples demand that the governments responsible for the fate of peace should take effective measures radically to improve the international situation.

Experience over many years in relations between states shows convincingly that the easiest and best way to settle major international problems is by leaders of states meeting in person and exchanging views.

The Soviet Government has therefore suggested the idea of calling a conference of the heads of governments of East and West to examine urgent international problems and to take the necessary steps to remove the barriers in the way of peaceful co-existence and fruitful co-operation of the socialist and capitalist systems.

In the opinion of the Soviet Government the problems requiring immediate settlement are:

Immediate ending of tests of atomic and hydrogen weapons.

Renunciation by the U.S.S.R., the United States and Britain of the use of nuclear weapons.

Establishment in Central Europe of a zone free from atomic, hydrogen and rocket weapons.

Conclusion of a non-aggression pact between the countries belonging to the North Atlantic Alliance and the states parties to the Warsaw Treaty.

Reduction of the number of foreign troops on the territory of Germany and within the frontiers of other European states.

A pact to prevent a surprise attack by one state on another.

Measures for developing international trade relations.
Ending of war propaganda.

Ways of easing tension in the Near and Middle East.

Prohibition of the use of outer space for military purposes, the dismantling of foreign military bases on alien territories, and international co-operation in exploring outer space.

Conclusion of a German peace treaty.

Development of contacts between countries.

The Soviet proposals are not designed to give the Soviet Union any benefits or advantages at the expense of the interests of other powers; they equally accord with the interests of all

nations, large and small, and are aimed at the further strengthening and extension of the principle of peaceful co-existence as the foundation of international intercourse of the countries of the socialist and the capitalist systems.

How is Soviet foreign trade organised and conducted?

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SOVIET foreign trade is conducted as a state monopoly, and is directed by the Ministry of Foreign Trade of the U.S.S.R.

The Ministry is charged with regulating foreign trade as a whole and with individual countries, and concluding trade treaties and agreements covering the volume of trade and payments.

Actual foreign trade operations are transacted by All-Union corporations—state export and import organisations each of which, as a rule, handles specific commodities.

This system of commerce is reflected in trade treaties and agreements signed with many countries.

There are today twenty-odd export and import organisations, known as Vsesoyuzniye Obyedinenia, among them Exportles, Soyuzneftexport, Soyuzpromexport, Raznoimport, Avtoexport and Machinoexport. They conduct their operations by concluding contracts with foreign firms or trade associations.

Soviet export and import organisations are vested with the authority to make transactions independently.

Recent years have witnessed a considerable increase in Soviet sales of complete plant for factories and other enterprises and in technical assistance. This has made it necessary to set up a State Committee on Economic Relations, whose functions include the designing and delivery of complete equipment for industrial enterprises and scientific and cultural establishments, technical assistance and technical training.

Trade operations with co-operative organisations of foreign countries are also conducted by Centrosoyuz (see answer No 55).

With the national economy rapidly developing it has become possible to earmark for export more commodities and larger quantities of them, besides providing more goods for the expanding home market. Besides exporting its traditional commodities,

such as timber and sawn timber, cereals, manganese and chrome ores, coal, furs, petroleum and petroleum products, the Soviet Union is one of the biggest exporters of machinery and other equipment, occupying fifth place in the world for the volume of exports of industrial equipment.

Of metal-cutting machine tools alone the Soviet Union exports several hundred types and sizes. It exports various kinds of construction equipment, also equipment for the food and light industries, machines for the printing industry, many kinds of agricultural machines, motor lorries and cars, and tractors.

It is also an important exporter of cotton, ferrous and non-ferrous metals, asbestos and iron ore. Other items exported are ferro-alloys, metals of the platinum group, mineral fertilisers, chemicals, different kinds of animal raw materials, tobacco, caviar, tinned fish and crabs, fabrics, handicrafts, and many other items.

The U.S.S.R. is at the same time a big importer of many raw materials and manufactures. One of its chief import items is machinery and other equipment (it ranks among the world's top importers of industrial equipment). It buys metal-cutting machine tools, forge and press equipment, equipment for the mining industry, metallurgical and hoisting machinery, equipment for the chemical, light, food and printing industries, also power equipment and machinery for making building materials.

Large quantities of raw materials and manufactures and consumer goods are bought by it annually. It also buys rolled metal, certain non-ferrous metals, various chemicals, rubber, synthetic fibre and yarn, wool, hides, also cocoa beans, coffee, spices, fruits and other commodities.

The list of Soviet exports and imports today contains several thousand items, with the number of both import and export items increasing year by year, as the Soviet economy develops.

The U.S.S.R.'s foreign trade volume keeps growing from year to year. In 1957 it came to 33,300 million roubles, or more than six times that of 1938, in comparable prices. As a result of the rapid expansion of its foreign trade, the U.S.S.R. now occupies sixth place in the world for volume of trade, against sixteenth place before the war.

The number of countries with which the U.S.S.R. trades is increasing, too. While in 1946 it traded with forty countries, today it trades with seventy-odd, and with forty-five of them it has trade treaties.

The countries heading the U.S.S.R.'s foreign trade list are the German Democratic Republic, China, Czechoslovakia and Poland.

Besides having close trade ties with the socialist countries, the Soviet Union is rapidly increasing its commerce with many other countries. In 1957 its trade volume with capitalist countries was 8,700 million roubles, an increase of more than 150 per cent over 1946 (in comparable prices).

Countries in Western Europe with which the Soviet Union does considerable trade are Britain, Finland, France, Western Germany, Italy, Belgium, Holland and Sweden, and in Asia and Africa—India, Iran, Afghanistan and the United Arab Republic.

The Soviet Union conducts its trade with all countries on the basis of equality and mutual benefit, without any political strings attached. It holds that ideological differences should not stand in the way of developing mutually advantageous commerce. However, the volume of trade with some countries, the United States among them, remains insignificant; the explanation is that these countries are still pursuing a policy of discrimination, maintaining lists of goods prohibited for export to the Soviet Union and other socialist countries.

The new Seven-Year Plan of national economic development now being drawn up (*see answer No. 33*) provides for the rapid expansion of all branches of industry and agriculture, and in the sphere of foreign trade it envisages a further development of mutually advantageous economic and trade relations with all countries throughout the world.

How does the U.S.S.R. co-operate with economically underdeveloped countries?

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UNDERLYING the U.S.S.R.'s co-operation with economically underdeveloped countries are the principles of full equality and mutual advantage, scrupulous fulfilment of its commitments and respect for the national dignity and sovereignty of other countries (*see answers Nos. 94 and 96*). The Soviet Union firmly adheres to these principles in its relations with any country, large or small.

Co-operation of the Soviet Union with economically underdeveloped countries takes various forms: trade, credits, sale of machines to equip whole plants, technical assistance, and so on.

Among underdeveloped countries doing business with the Soviet Union, South-East Asia and the Near East top the list. The Soviet Union now trades with thirty-two countries in the East, and with sixteen of them on the basis of trade treaties and agreements. Among them are India, Burma, Lebanon, Turkey and Afghanistan.

• Argentina heads the list of Latin American countries for volume of trade with the U.S.S.R.

In concluding trade agreements with underdeveloped countries the Soviet Union offers them the possibility to buy from it goods they need for their economic development and for meeting the pressing needs of their population.

Industrial equipment is the principal export item to those countries; this includes machine tools, equipment and auxiliary materials for the petroleum, coal-mining and power industries, farm machinery, road-building equipment, motor vehicles, rolled steel, fuel, building materials, and so on—in other words, everything without which industrial development and economic independence are inconceivable.

Underdeveloped countries in South-East Asia and the Near East took more than half of the machines and other equipment and rolled steel the U.S.S.R. exported to capitalist countries in 1957. A considerable percentage of its exports is made up of complete plant for enterprises in India, Afghanistan, Burma and other countries.

In exchange for its industrial commodities the Soviet Union gets from those countries their traditional export items. The U.S.S.R. is one of the biggest importers of hides and skins from India, Afghanistan and Iran, of Egypt's cotton and rice, and Turkey's livestock, and is an important buyer of Burma's rice, Morocco's citrus fruits, India's spices, Afghanistan's and Iran's cotton, wool, and so on.

In many cases (where the underdeveloped countries have foreign-exchange difficulties or limited gold reserves) the Soviet Union puts through its deals in the currency of the particular country on the basis of stable prices, which is an important factor for expansion of their foreign trade.

Every year sees the trade volume rise and the number of countries trading with the U.S.S.R. increase.

Total trade with this group of countries in 1957 went up five-fold compared with 1953. In 1957 the Soviet Union's trade volume with South-East Asia and the Near East increased almost 50 per cent compared with 1956, with the export of machinery and other equipment amounting to 344 million roubles, four times as much as in 1956 and twenty times as much as in 1955.

On its part, the Soviet Union bought in 1957 150 per cent more cotton and 100 per cent more hides and skins than in 1956 and from 300 to 400 per cent more than in 1955.

In 1957 and early 1958 the U.S.S.R. signed its first trade agreements with Pakistan, Indonesia, Yemen, Morocco, Tunisia, Cambodia and Ceylon. A number of agreements were also concluded covering economic and technical co-operation with India, the United Arab Republic and Ceylon.

The extension of trade relations is directly bound up with the strengthening of other forms of economic co-operation, such as the financial, scientific and technical assistance the Soviet Union gives to underdeveloped countries.

A typical example of friendly assistance is the agreement covering the construction in the Bhilai district in India of an all-inclusive iron and steel works with a capacity of 1,300,000 tons of steel a year.

The Soviet Government granted the Indian Government a long-term credit to the amount of 500 million roubles, to be repaid in Indian rupees bearing interest at the rate of 2½ per cent per annum. (The rate of interest charged India is not an exception for the Soviet Union; the long-term credit to the amount of 100 million U.S. dollars granted by the Soviet Union to Afghanistan bears 2 per cent interest, the loans to Syria and Egypt of 700 million roubles each, 2½ per cent, and the 100 million dollar loan to Indonesia, also 2½ per cent.)

The Soviet organisations undertook to supply the latest equipment manufactured, with the country's climate taken into account, also to give technical guidance to construct the works, including assembling the equipment and starting operation.

The Soviet organisations hold no shares in the enterprise designed by them and will not participate in its operation. When the construction is completed, the works will become the property of India.

Another important step in the development of friendly relations and co-operation between India and the U.S.S.R. was made late in 1957, when an agreement covering economic co-operation and

the development of other branches of India's industry was signed.

Under the agreement Soviet organisations are preparing projects and will supply equipment and auxiliary materials and give other assistance in building a heavy machinery plant and an optical glass works, a thermal-electric station and enterprises for mining and processing coal.

The Soviet Union granted India a long-term credit of 500 million roubles on highly favourable terms to build these enterprises.

The U.S.S.R. has concluded agreements for co-operation and assistance with other countries on similar terms.

The Soviet Union builds in underdeveloped countries industrial enterprises, electric stations, dams, irrigation canals, higher educational establishments, research centres, and so on.

To illustrate, in recent years we have seen the construction with the aid of Soviet specialists of an asphalt and concrete works in Kabul, Afghanistan, and petroleum bases in different parts of the country, and recently a mechanised bakery was put into operation in Kabul and an elevator in Pul-i-Khumri.

In Burma the Soviet Union is building free of charge a technological institute to accommodate 1,000 students and 100 graduate students, a hospital and clinic, a cultural and sports centre and a theatre.

Having made great progress in the application of atomic energy for peaceful purposes, the Soviet Union gladly passes on its scientific and technical experience and knowledge to countries that are just beginning to develop their atomic science and industry.

For instance, under an agreement with Egypt it is building in Cairo a nuclear physics laboratory with a 3-MEV accelerator. An agreement signed by the Soviet Union and Indonesia provides, among other things, for joint labours in the use of radioactive isotopes in medicine, science and technology, and for training Indonesians to become specialists in peaceful uses of atomic energy.

The Soviet Union actively participates in assistance given to underdeveloped countries under the United Nations programme.

The U.S.S.R. builds its relations with economically underdeveloped countries, as with all other countries, on the basis of mutual benefit, with no political strings attached.

In selling its goods the Soviet Union is not actuated by the

profit motive; it wants to help the peoples of those countries in their noble cause of building up an independent national economy and in raising the standard of living of the people

What are the international Lenin peace prizes?

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BY a decree issued on September 8th, 1956, the Presidium of the U.S.S.R. Supreme Soviet has renamed the International Stalin Prizes for the Promotion of Peace among Nations the International Lenin Prizes for the Promotion of Peace among Nations.

Up to ten of these prizes are to be awarded each year to citizens of any country, irrespective of their political affiliation, faith or race, for distinguished service in the struggle for the preservation and consolidation of peace.

A recipient of an International Lenin Prize receives a diploma conferring the title of International Lenin Prize-winner, a gold medal embossed with a head of V. I. Lenin and a cash prize of 100,000 roubles.

A special committee, composed of representatives of the democratic forces of various countries, was set up to make the awards.

In 1950 International Peace Prizes were awarded to the following outstanding peace champions: Frederic Joliot-Curie (France); Soong Ching-ling (China); Hewlett Johnson (Britain); Eugenie Cotton (France); Arthur Moulton (U.S.A.); Pak Den Ai (Korea); and Heriberto Jara (Mexico).

For 1951 they were awarded to Kuo Mo-jo (China); Pietro Nenni (Italy); Ikuo Oyama (Japan); Monica Felton (Britain); Anna Seghers (Germany); and Jorge Amado (Brazil).

In 1952 awards were made to Yves Farge (France). Dr Saifuddin Kitchlew (India); Elisa Branco (Brazil); Paul Robeson (U.S.A.); Johannes Becher (German Democratic Republic); James Endicott (Canada); Ilya Ehrenburg (U.S.S.R.)

In 1953 Peace Prizes went to Pierre Cot (France), Sahib Singh Sokhey (India); Andrea Gaggero (Italy); Isabelle Blume (Belgium); Howard Fast (U.S.A.); John D. Bernal (Britain); Leon Kruczkowski (Poland); Pablo Neruda (Chile). Andrea Andreen (Sweden); Nina Popova (U.S.S.R.).

In 1954 Prizes were awarded to Denis Nowell Pritt (Britain); Alain Le Leap (France); Thakin Kodaw Hmaing (Burma); Bertold Brecht (Germany); Felix Iversen (Finland); André Bonnard (Switzerland); Baldomero Sanin Cano (Colombia); Prijono (Indonesia); and Nicolas Guillen (Cuba).

In 1955 awards were made to Lazaro Cardenas (Mexico); the Sheikh Mohammed al-Achmar (Syria); Joseph Wirth (German Federal Republic); Ton Duc Thang (Viet Nam); Akiko Seki (Japan); and Ragnar Forbech (Norway).

In 1956 prizes were awarded to Chandrasekhara Venkata Raman (India); Emmanuel d'Astier de la Vigerie (France); Maria Rosa Oliver (Argentina); Nikolai Tikhonov (U.S.S.R.); Udakend-avala Saranankara Thero (Ceylon); Danilo Dolci (Italy); Heinrich Brandweiner (Austria); and Louis Aragon (France).

In 1957 awards were made to Kaoru Yasui (Japan); Arnold Zweig (German Democratic Republic); Louis Saillant (France); Arthur Lundkvist (Sweden); and Josef Hromadka (Czechoslovakia).

The annual award of International Peace Prizes is a vivid testimony to the peaceful foreign policy unflinchingly pursued by the Soviet Union.

100

What are the U.S.S.R.'s cultural relations with foreign countries?

FROM its earliest days, the Soviet Union has striven to establish and extend cultural relations of every kind with other countries, irrespective of their social and political systems, rightly believing that promotion of cultural relations between nations helps them to understand each other better and leads to the strengthening of peace, friendship and co-operation of the peoples.

The Soviet Union's international relations have been particularly broadened in recent years; this applies also to tourism. In 1956, 486,000 foreigners visited the U.S.S.R., and in 1957, 550,000.

The number of Soviet people going abroad is also increasing all the time. In 1956 the number was 561,000, and in 1957 more than 716,000.

Cultural and scientific ties based on international agreements are developing particularly fruitfully. The Soviet Union has some ninety agreements with different countries on particular questions of cultural and scientific exchange.

Of great importance is the agreement on exchanges in the fields of culture, technology and education concluded by the U.S.S.R. and the United States. The signing of this agreement met with the approval of broad sections of the public in both countries, furnishing concrete proof that Soviet - American relations really can improve in the international situation.

The Soviet people want to extend cultural relations with all countries.

In 1957 prominent Soviet cultural figures visited fifty-four countries and were hosts to colleagues from forty-four countries. The same year 3,000 cultural figures visited the Soviet Union on the invitation of the U.S.S.R. Ministry of Culture, which has been widely developing cultural relations with foreign countries and thousands of their Soviet counterparts made trips to foreign countries.

An important event in the cultural life of the whole world was the Tchaikovsky International Contest of Violinists and Pianists held in Moscow in the spring of 1958.

A holiday of people's culture of 131 countries was the Sixth World Youth Festival held in Moscow in 1957, which was attended by 34,000 young people from other countries. The festival participants gave some 800 concerts, plays and other performances to audiences totalling 10 million. During the festival 108 films from thirty-two countries were shown, three international exhibitions were held, and there were friendly meetings of artists, painters, writers, and so on.

The exchange of films, exhibitions, books and periodicals is growing all the time. Soviet radio and television exchange broadcasts with thirty-five countries. In 1957, 102 writers from forty-four countries visited the U.S.S.R.

The exchange of scientists is regularly increasing in scale. On the invitation of the U.S.S.R. Academy of Sciences (not counting the academies in specific fields) 905 foreign scientists visited the Soviet Union in 1957, and more than 1,500 Soviet scientists travelled abroad. With international congresses of astronomers, architects, Slavonic scholars, and others scheduled to be held in the Soviet Union in 1958 it is expected that the number of foreign scientists visiting the Soviet Union will reach 3,500. The U.S.S.R.

Ministry of Higher Education will have received by the end of the year some 600 professors and instructors from foreign colleges and will send some 1,000 of its own specialists abroad.

Studying at Soviet educational establishments are 14,500 foreign students and graduate students, and hundreds of Soviet students are studying abroad. An exchange of students between the United States and the U.S.S.R. has been outlined for the first time.

Relations are rapidly developing in the field of sports. In 1958 Soviet sports organisations have maintained active relations with sixty-three countries in thirty-four fields of sport. In 1957, 5,068 sportsmen from forty-six countries visited the U.S.S.R. and 2,904 Soviet sportsmen travelled abroad.

Direct contacts between the Soviet and other peoples are developing more and more extensively. Soviet trade unions were hosts in 1957 to trade union and workers' delegations from eighty countries.

The recently established Union of Soviet Societies for Friendship and Cultural Relations with Foreign Countries (see answer No. 30), set up on the initiative of the public and acting independently, plays a tremendous and ever-increasing role in promoting mutual understanding and friendship among all peoples.

★ To keep abreast of developments in the Soviet Union, where such great economic and social changes are taking place, read *Soviet Weekly*. Each week *Soviet Weekly* gives you the latest news of the Soviet people at work and play, and of Soviet policy for preserving peace.

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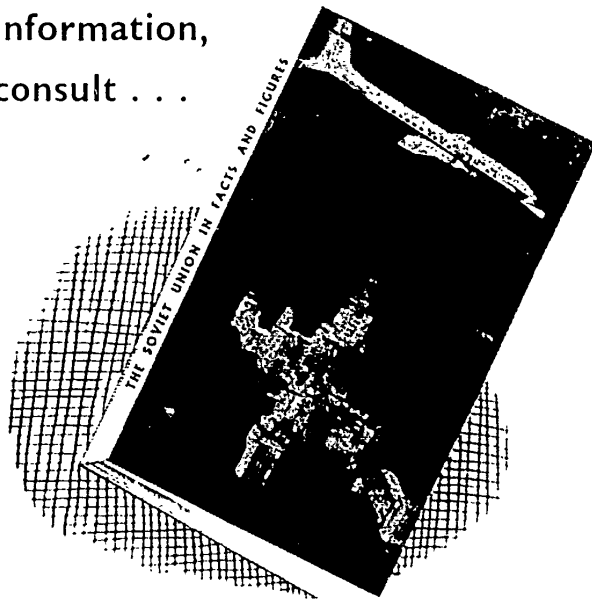
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CO-OPERATIVES
in the
SOVIET UNION

by Israel E. Friedman

SOVIET NEWS BOOKLET No. 36
LONDON
1958

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Published September, 1958
Second Impression, November, 1958

Author's Preface

I HAVE OFTEN NOTICED that co-operative leaders who come to the Soviet Union from the West want more information as to what our consumers' co-operatives are really like, what is their significance and role in Soviet economy and in the life of the people.

They want to know how our co-operative enterprises are managed, whether or not women take part in their work, and if they do, in what capacity. They also ask how the members of the co-operatives exercise control over the activity of the organs of the consumers' co-operatives.

In order to understand the role and activities of consumers' co-operatives in the U.S.S.R. one must bear in mind that they have developed in a socialist society.

In the Soviet Union the relations between the working class, the collective farmers and the Soviet intelligentsia are based on comradely co-operation.

Here the land, its mineral wealth, waters, forests, mills, factories, mines, railways, water and air transport, banks, communications, communal enterprises and the bulk of the dwelling houses in the cities and industrial localities are state property, that is, belong to the whole people.

This public, socialist property forms the foundation of the entire economy of the country.

Another form of public, socialist property in the U.S.S.R. is the co-operative property which belongs to individual co-operative organisations.

The Soviet consumers' co-operative is thus an integral part of the socialist system of economy, and is conducted and developed in accordance with a definite plan.

It is this very fact which determines the favourable conditions under which the Soviet co-operatives conduct their work.

These co-operative societies are not forced to struggle for their existence under conditions of vicious competition, for there are no capitalist monopolies in the Soviet Union. On the

contrary, the socialist state renders all kinds of assistance to the consumers' co-operatives (as it does to all other co-operative forms of organisation).

The co-operative societies and the Soviet Co-operative Union (*Centrosoyuz*) receive credit from the state (for which they pay 2 per cent interest annually) and goods on favourable terms. The co-operatives, in turn, contribute, through their activities, to the growth of socialist economy in the U.S.S.R. and to improving the well-being of the working people.

As with all other public and state organisations in the U.S.S.R. the chief aim of the co-operatives is to satisfy the needs of the people. And like all Soviet people the members of the co-operatives are in favour of peaceful co-existence. They want to trade with other peoples, and not to wage war.

If my remarks help our readers, who are interested in the Soviet co-operative movement, to understand the essence of its work and the principles governing that work, if these remarks of mine contribute to a better mutual understanding between Soviet and British co-operative members and, consequently, to the development, to some extent, of business relations on the basis of mutual benefits, I shall consider I have achieved my goal.

I. E. F.

I. A Bit of History

I SHALL NOT GO INTO DETAIL about the history of the development of the consumers' co-operatives in Russia but I merely wish to refer to certain events in the history of our co-op movement which will help to understand its present-day role and activity.

During the first years of Soviet government the consumers' co-operative societies were the main channel for supplying the population of town and countryside with their needs. In his book, *Ten Days that Shook the World*, the famous American journalist John Reed, who witnessed the heroic days of October 1917 in Petrograd, wrote that it was the co-operatives that fed Russia when the old system of trade collapsed. Indeed, state trade in those days was very poorly developed and the co-operative system was essentially the chief distributive organisation.

When the Civil War and foreign intervention were over the period of the restoration of the national economy, the period of the New Economic Policy, began.

One of the most important tasks facing the consumers' co-operatives was that of organising ties between town and village, and of crowding private capital out of trade.

Cities and towns grew up, industry developed at a tempestuous pace, the number of workers increased and the consumers' co-operatives, naturally, were unable to meet all the demands of the working people in town and countryside.

It became necessary to organise, in large cities and industrial centres, a network of state trading enterprises and, in a number of cases, to turn over to the managing boards at the most important industrial enterprises the task of supplying the workers. These enterprises organised special departments for supplying the workers.

The consumers' co-operatives concentrated their trading and purchasing activity mainly in rural localities, in district centres and in workers' communities.

Today over one-fourth of the trade turnover of the co-

operatives is to be credited to such towns and workers' communities. The co-operative societies also trade with state farms, machine-and-tractor stations* and fisheries.

The victory of socialism in the U.S.S.R., the strengthening of the collective farm system and the subsequent improvement in the material conditions of the collective farmers have served as a tremendous stimulus to develop the trade of the consumers' co-operatives. In the pre-war year of 1940, the retail trade of these co-operatives amounted to 42,200 million roubles.

With the termination of the Great Patriotic War the Soviet people began wiping out the after-effects of the war and further developing all branches of the national economy. The trade of the consumers' co-operatives increased still more.

In 1956 it amounted to 161,700 million roubles, and in 1957 it increased by another 27,800 million roubles. Their total retail trade in 1958 will exceed last year's by 45,000 million roubles.

At the present time the trade of the consumers' co-operatives constitutes almost one-third of the total retail trade of the U.S.S.R.

II. Trade and Purchases

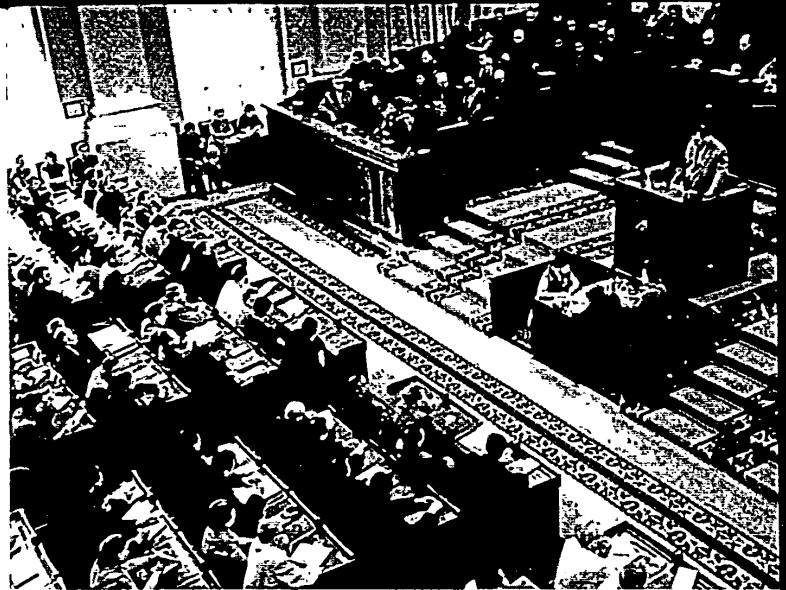
The Financial Basis of the Co-operative Societies

THE CO-OPERATIVE SOCIETIES of the U.S.S.R. are a voluntary form of organisation. All citizens of the Soviet Union who have reached the age of sixteen, regardless of race, nationality, sex, religious faith, social origin and property, may become members of the co-operative societies.

The consumers' society sells goods in the district where it conducts its activities, both to its members and to people who are not members, and also to collective farms and institutions.

These societies receive their funds from admission fees (three roubles) and membership fees (or shares), from short-term credits granted by the State Bank of the U.S.S.R., and from incomes obtained by the societies as a result of their activities.

* Now in process of being changed to repair-and-service stations.



Above, a delegate conference of consumers' co-operatives, attended by 1,300 delegates, meeting in the large hall of the Kremlin, Moscow, June 23, 1958.

The meeting is being addressed by A. P. Khrnov, chairman of the Central Co-operative Union.

The Central Co-operative Union runs a Higher Co-operative School for the training of personnel, in the village of Perlovka, near Moscow. On the left, second year student Nina Lebedeva tests the acidity of bread.



The co-operative shop of Luchnskoye village, Istra District, near Moscow

The agricultural produce shop of the Lyubertsy District, Moscow Region. The signs outside list fruit and vegetables, mushrooms, meat and poultry, milk, eggs, honey, wine etc.



The amounts of the membership fees and the dates of their payment are decided upon at general members' meetings at the time the society's charter is confirmed. In some societies membership fees amount to 300 roubles which, as a rule, can be paid in two or three years. Co-op members do not have to pay dues continually like members of a trade union. Once they have paid off their membership fee total they cease having to pay.

I shall explain, later on, what constitutes the profits of the society (in 1957 they amounted to 7,650 million roubles) and how they are distributed.

Purchase of Goods from the State

The consumers' co-operatives acquire goods from state industry and also produce them in their own enterprises.

They acquire most of their goods from state enterprises—and on the same conditions as state trading organisations.

Industry gives these co-operatives a trading discount which enables them to cover all transport and sales expenses and still make a normal profit. The co-operatives sell almost all their goods at retail prices fixed by the state.

As regards goods obtained from the state at wholesale prices (such as coal) the co-operative societies fix their own prices by adding an extra charge the size of which is determined by the distance to the place where these goods will be sold.

The consumers' co-ops also acquire goods from producers' co-operative enterprises* and produce many general consumers' goods themselves at their own enterprises.

Productive Enterprises of the Co-operative Societies

The co-operative societies have about 29,000 different industrial enterprises. They produce sausages and confectionery, wines and non-alcoholic drinks, tinned foods, dried fruit, ice-cream, furniture, carts, pottery, clothing, linen goods, building materials and other articles.

* In addition to collective farms there are a number of producers' co-operatives in light manufacturing, watchmaking, handicrafts etc.

In 1957 these enterprises produced goods amounting to 12,000 million roubles.

Furthermore, the co-operatives go in for fishing, breeding of fur animals (the co-operatives have over 150 farms for the breeding of silver fox, mink, and other animals), and have a large number of auxiliary agricultural enterprises which have considerable herds of cattle, sheeps and pigs.

The output of these farms is sent to co-op stores for general sale.

Growth of Co-op Trade

Year by year co-op trade experiences a steady expansion. In 1957 total co-op sales showed an increase of 28,000 million roubles over 1956. This is an increase of 17.2 per cent and represents the biggest annual increase ever recorded.

In the past four years alone co-op sales in the countryside have gone up by 75 per cent.

In 1957 the co-ops sold 83 per cent more boots and shoes, 33 per cent more fabrics, and 103 per cent more knitted goods.

Here is another indication of the people's growing standards. Last year co-op shops received 1,900,000 cycles, 1,274,000 radio sets, 300,000 cameras, 1,142,000 sewing machines—more than were sold in the countryside during the entire 1951-1953 period.

Commission Trade

In their trading activities consumers' co-ops do not restrict themselves to just the selling of the goods they get from state-owned enterprises and producers' co-operatives or what they make themselves.

Selling of agricultural produce on a commission basis for collective farms and their members occupies a prominent place in the trade of consumers' co-ops. They initiated this new form of trading in 1953.

The idea behind it is to save collective farmers' time in bringing their produce to town. For a small commission (usually 8-9 per cent, depending on the place of purchase and likewise of sale), the co-ops take over the job. In addition, they see to it

that collective farmers get the average market price for their goods.

Farmers find it profitable and willingly pay commission for their goods to be sold via the co-ops.

In Moscow, Leningrad, Kiev, Sverdlovsk, Novosibirsk and other such cities and towns and also in factory settlements there are already more than 12,000 co-op shops and stalls doing a lively trade in farm produce on a commission basis. This trading network now sells annually thousands of millions of roubles worth of flour, potatoes, vegetables, fruit, meat, milk, honey, wines, sugar and other products.

Procurement

Aside from trading, the Soviet consumers' co-ops also do much in the way of procurement* of agricultural products. They enjoy literally boundless opportunities in this field.

One glance at the geographical map of the Soviet Union is enough to see the wealth of food and raw materials our country possesses.

Who is best able in the Soviet Union to do the complicated and economically important job of purchasing farm produce and raw materials?

Obviously, organisations with enough authority, appropriate funds and a ramified network of buying stations. In the U.S.S.R. the consumers' co-op is precisely such an organisation.

Suffice it to cite the following figures: rural procurements are carried on by more than 17,000 village consumers' societies and by 4,000 district consumers' unions. They have their own shops, stalls, and warehouses in the farthest outposts of the country and enjoy the services of qualified and experienced staff.

The consumers' co-ops purchase potatoes and other vegetables, fruit, berries, mushrooms and wild plants, and also eggs.

In early 1956 they began to buy everything in the way of raw materials from animal husbandry, including fur, hides, wool, and astrakhan skins.

* This relates to the purchase of that proportion of agricultural produce which is for compulsory delivery to the State.

Relations with Collective Farms

The consumer co-ops organise their relations with the collective farms in the following way: the collective farm accepts from the consumer's co-op a monetary advance on the items which it produces for sale, such as potatoes, fruit, vegetables, and so on.

These funds are used for general farm expenses, to buy machinery and other equipment.

The farm undertakes to pay off this advance by a definite date by selling to the co-ops its produce in an amount provided for in the plan for deliveries.

That done, the co-op then completes the sale.

The co-op also buys some produce directly from the collective farm.

All purchases are based on State prices.

Thus you now have the answer as to what the consumers' co-ops in the U.S.S.R. do in the way of trading and procurement.

To this we need only add that in selling the products of state-owned enterprises and in increasing procurement in the countryside of food for the urban population and of raw materials for industry, the consumers' co-ops help to forge stronger links between town and countryside, promote domestic trade and raise the population's material standards.

For an assessment of the activities of consumers' co-ops in the countryside I would like to quote Nikolai Sidorov, vice-chairman of the Soviet Co-operative Union board:

"Co-operative trade in the countryside is a sort of mirror of the economic and cultural transformation taking place in the Soviet village," he told a correspondent of *Gudok*, the railwaymen's journal. "In the N.E.P.* years the village co-ops primarily traded in a narrow range of commodities, mostly tea, sugar, calico and kerosene. Now the village shops sell many radio sets, gramophones, musical instruments, bicycles and articles of furniture. Last year collective farmers bought some 100,000 TV sets alone."

* I.e., in the period of the New Economic Policy, 1921-1925, when a limited revival of small-scale capitalism was temporarily permitted, before the First Five-Year Plan was launched.

III. Public Role

AFTER THE VICTORY of the October Revolution Soviet consumers' co-ops became an important factor in the country's life, and a means of making widely known the ideas of V. I. Lenin, founder of the Soviet state, as regards co-operative forms of farming among the peasantry.

This helped to establish collective farms, the producers' co-operatives of the peasants, who saw for themselves, through the example afforded by consumers' co-ops, the huge advantages of collective over individual farming.

Consumers' co-ops facilitated the extension of economic links between town and countryside at all stages of development of the Soviet state.

It is important to note the work consumers' co-ops do to extend the network of public catering and of bakeries in the countryside. Co-ops regard it as one of their main tasks to ease the work of peasant women and help them to participate more actively in social and political life.

Some 36,000 village dining and tea rooms and more than 17,000 bakeries are part and parcel of the fundamental changes socialism has brought about in the countryside.

The important job done by the consumers' co-ops in the U.S.S.R. has been noted by foreign guests. Thus in a *Soviet Weekly* interview, Lord Williams, president of the Co-operative Wholesale Society, who, together with Lady Williams, visited the Soviet Union for a fortnight as guests of the Soviet Co-operative Union September, 1957, remarked that though he had not had the time to acquaint himself in detail with all aspects of the activity of Soviet co-operators, from what he had seen he had gathered that they were doing tremendous work to develop the co-operative movement in the country and were drawing ordinary people into it.

Book-Selling

Consumers' co-ops are today the main sellers of articles meeting cultural needs, especially of books, in the countryside, whereas before the Revolution this branch of their activity was

negligible. By using their extensive trading network, co-operators are doing fine work in bringing books into the homes of villagers and, in general, in meeting their growing cultural requirements.

Consumers' co-ops have different categories of shops. In district centres they have district general shops and special shops selling articles meeting cultural needs, including books. All the last-named shops have special book counters.

Now the village general and other shops with the proper facilities also trade in books. The consumers' co-op network has also a large number of special bookstalls. Co-op shops at state farms also sell books and there are special book-vans to cater for smaller inhabited localities.

In June last year arrangements were made with Knigotorg (the state's Central Book Trading Organisation) for 3,000 of the latter's bookshops and stalls to be turned over to the co-ops.

Wide use is also made of book bazaars and book weeks and months to popularise printed material.

Last year co-op book sales jumped from 430 million to 600 million roubles. The books are obtained by the co-ops from the state book trading organisations, including Knigotorg.

The growth in book sales throughout the country, including villages, is due above all to the conditions created by the victory of the October Revolution for raising educational standards. An idea of the Soviet Union's educational facilities may be derived from the fact that in the 1956-57 school year there was an attendance of 30,122,000 at elementary, seven-year and secondary general schools, schools for factory and village youth and for adults, a student body of 2,011,000 at the technical and specialised secondary educational establishments, and a student body of 2,001,000 at the institutions of higher learning. The country boasted of 213,000 schools and 767 higher educational establishments.

Co-ops Aid Housebuilding

Every year more and more houses are going up in the Soviet Union. Nevertheless the housing problem is not yet solved. And this is quite understandable if we bear in mind not only the legacy of tsarist days but also the Nazi invasion, which left tens

of millions of Soviet citizens without a roof over their heads.

Soviet consumer co-ops are playing a big part in helping to achieve our country's objective of providing everyone with adequate housing within ten to twelve years. Co-op aid in this task is particularly directed to the countryside. It takes the form largely of organising the sale of building materials and prefab houses.

In 1957 alone more cement and slate roofing was sold by the co-ops than during the entire period of 1950-1953. Between 1958 and 1961 it is planned to step up considerably the production and sale of prefab houses and parts.

How do consumer co-ops organise the sale of building materials?

On the basis of an examination of individual householders' requirements they apply to the Economic Councils for the required quantity of building materials. They purchase materials at state-owned cement, slate and glass factories, and from local industry they obtain bricks, tiles, lime and building stone.

Co-ops also have their own enterprises which make bricks, tiles, lime etc. And they purchase timber through co-op societies in forest regions.

The sale of building materials is carried on at over 8,000 special co-op shops and storage centres.

There is one other aspect of co-op initiative in house-building which should not go unmentioned. About 1,400,000 people are employed by the co-ops in shops, canteens, cafeterias, industrial plants, depots, warehouses, and so on.

All co-op personnel are provided with homes, the building of which is financed by co-op funds. The amount set aside for this purpose is decided by the shareholders' meeting, the sum being taken from funds allocated for capital construction and from profits derived from normal co-op trading activities.

Helping to Make Life Easier

This, of course, does not exhaust all the activities of the consumer co-ops. In a variety of other ways, too, they make life easier for people in the countryside.

A recent decision of the Soviet Co-operative Union makes

important recommendations in this respect. It suggests that shops, dining halls, bakeries, purchasing depots and warehouses be built first. At the same time it says that the construction of children's playgrounds, sports grounds and other public service establishments should not be neglected.

The Co-operative Union also recommends an extension of centres for the repair of clothing, boots and shoes, radio and TV sets, cycles, sewing machines and electrical household appliances.

In order to lighten the work of women co-op members it recommends that, wherever possible, co-ops should organise more laundries with washing machines which can be used by co-op members for a small fee fixed by shareholders' meetings. It also suggests the baking of bread in co-op bakeries from flour supplied by collective farmers, and the construction of co-op hotels.

How Personnel is Trained

To train co-op personnel, there are hundreds of special co-operative educational establishments which provide instruction for diverse professions.

These establishments consist of 4 higher schools, 77 technical schools, 10 two-year schools, 115 co-operative-trade schools and dozens of training courses, attended all in all by more than 103,000 people.

Last year the Soviet Co-operative Union earmarked 450 million roubles for this purpose. These funds come from deductions from profits, fixed first by the councils of the republican consumers' co-op unions, with subsequently the entire sum for all the country endorsed by the Co-operative Union.

Consumers' co-ops employ about 1,400,000 people, prominent among whom are those who have received their training in co-operative schools. Between 1955 and 1960 colleges and secondary educational establishments of the Co-operative Union will train respectively 4,000 and over 60,000 specialists.



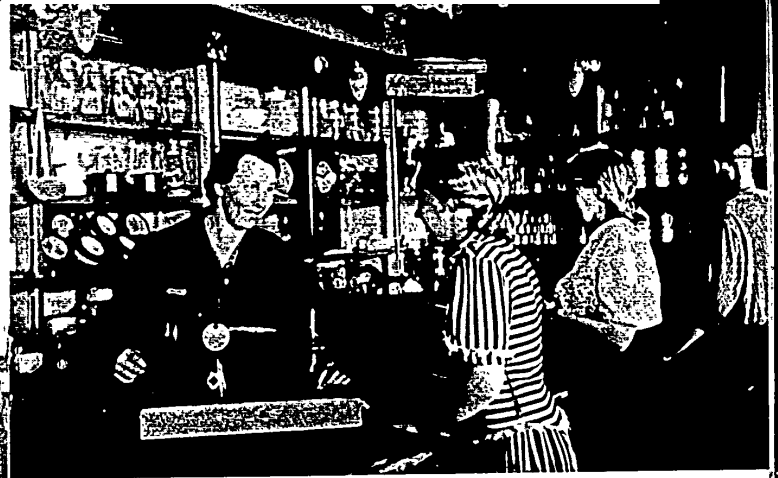
The village co-op of Pavlovskaya Sloboda, Moscow Region.



Trying on shoes in the shoe department of the co-op in Mechetnitsky village, Rostov Region.



A young Soviet citizen tries on a pair of white boots in the co-op shop of Luchinskoye village, Moscow Region.



A hand sewing machine is being demonstrated at the household goods counter of the Pavlovskaya co-op.

INSIDE THE SOVIET VILLAGE CO-OP.

Shopping at the grocery counter in the co-op of Pavlovskaya Sloboda, Moscow Region.

At the haberdashery counter of the Luchinskoye store. The sign announces "Haberdashery, Perfumery and Hosiery".





The girls above are learning accountancy at the Central Institute of Co-operative Trade in Lvov, Ukraine. Note the combination of the abacus and calculating machines.



Left: Learning to wrap crockery for delivery at the Higher Co-operative School, Perlovka

IV. Members are Masters of the Co-operatives

The Meeting is the Highest Authority

THE CONSUMERS' CO-OPERATIVE is a public mass organisation that acts on its own initiative. Over 35 million peasants, workers and employees of state farms, repair and service stations and industrial enterprises, fishermen, village teachers, doctors, agronomists and people of other specialities are members of the consumers' co-operatives of the U.S.S.R. They are united in over 20,000 consumers' societies.

The tremendous expanses of the Soviet Union and the fact that settlements are scattered all over the country and are far from each other often make it difficult to convene a general assembly of co-op members. Such being the case, sectional meetings are held in the villages, which elect authorised representatives for a general meeting of the consumers' society and which give these delegates the necessary instructions.

Once in every two years meetings of the members or their representatives are convened, at which reports are made on the work carried out and new elections held. At these meetings all questions concerning the work of the consumers' societies are decided and the managing board and auditing commission are elected by secret ballot for the coming period.

In addition to these meetings the members assemble at least twice a year to consider current matters. Special unscheduled meetings may be convened upon the demand of at least one-tenth of the members or at the demand of the auditing commission.

The general meeting of the members (or the meeting of their representatives) is the highest organ of management of the affairs of the consumers' society.

This meeting decides all the most important questions touching upon the work of the consumers' society, including the adoption of the charter, admission of members or their exclusion from membership, confirmation of accounts and plans etc.

When questions concerning the activity of the consumers

society are being decided upon, all members, regardless of the amount of dues which they have paid in, have equal rights.

As a rule members take a very active part in the meetings of their co-operative societies.

Decisions taken at a general meeting are only valid if three-quarters of the members of the society attend.

Passing Judgment

In most cases members endorse the reports of the managing board and the auditing commissions. And that is quite understandable. The success achieved in their work speaks for itself. Trade has increased, procurements are greater, there is a profit, and the trade network is being expanded.

Incidentally, co-op retail trade will exceed 200,000 million roubles this year. In the past two years alone the co-op network of stores and shops increased by 10,000, while this year another 4,500 stores, shops and stalls will be opened, as well as 1,500 more dining-rooms, lunch-rooms and other eating places.

But there are cases when people criticise those members of the management who have been remiss in their work; and during the voting by secret ballot these people are not re-elected.

That is what happened, for instance, at a meeting of delegates of the members of the Yavan District Consumers' Society in Tajikistan, where both the former chairman of the managing board, Salikhov, and the head of the society's trading department, Zhivodrov, went down.

Co-op members are very exacting when it comes to appraising the work of store managers. Those who do not handle properly the tasks entrusted to them find themselves outside pretty quick.

Participation in the Distribution of Profits

The role of members as masters of the co-operatives can also be seen when profits are distributed. As a result of its trading and purchasing activity the consumers' co-operative receives profits from which allocations are made every year to the members on the basis of their membership fees or shares.

Strict account is kept of the members of the co-operatives and the fees they have paid.

For instance, the Kolyberov Village Consumers' Co-operative, Moscow Region, has personal accounts for all its 1,500 members. These accounts are kept in special books and entries made of all the fees paid by each member.

The cashier of the society has special membership stamps. Membership fees are collected by collectors approved at a meeting of the managing board. As a rule the members pay their fees when they visit the stores.

What part of the profits is to be used for dividends is decided upon at the general meetings of the members or their delegates. In any case it amounts to at least 20 per cent of the annual profits. It is from 15 to 50 kopecks for each rouble, and sometimes even more.

If one bears in mind that the membership fee in a number of societies amounts to 250-300 roubles, it follows that the dividend which each member receives every year on his shares constitutes a substantial sum.

These payments are made at the end of the trading year, after the managing board has reported to the general assembly. An announcement regarding the payment of dividends to the members is made over the local radio, in the press, at meetings, and in special posters which are hung up in the shops.

Why Members are Interested

Since members of consumers' societies have a share in the profits they are vitally interested in seeing to it that their enterprises work without a loss, that their accumulations increase year by year, and that their societies fulfil and overfulfil their plans for trade and procurement of agricultural products.

The most active members attend board meetings and discuss with the board urgent questions concerning the life of their societies.

The elected members of shop, dining-room and auditing commissions check up on how decisions passed at general meetings of members or their delegates are carried out.

Members demand that the best methods for delivering goods and organising trade be applied, for this lessens expenditure and means a profit.

They also try to expand the trade network and to develop itinerant trade. Co-operative members direct their attention to everything that may improve service to buyers and to patrons of dining-rooms, and that may serve to increase the profitability of co-operative enterprises for their further development.

They also endeavour to achieve greater specialisation of stores, for this creates better conditions for extending the assortment of goods. And they try to organise more self-service stores, shops and dining-rooms.

Village Co-op's Special Fund

As I have already pointed out co-op members take a very active part in the distribution of profits when they endorse the annual report and accounts. At these meetings they also discuss how best to use these profits.

Every village consumers' co-operative distributes the profits in accordance with the wishes of the members. Besides the dividends which are paid out to the members every year in cash for every rouble of membership fees, part of the profits is set aside for special funds.

Part of these funds goes to expand the industrial enterprises of the co-operative, to build new trading premises and repair old ones.

By decision of the co-op members funds are also set aside from profits for cultural and educational work. The co-ops have many club houses which have been built with these funds, where lectures are given, films shown, and amateur art circles held.

Part of the income of the co-operatives is used to organise playgrounds, nurseries and kindergartens for the children of both co-op members and employees. A certain proportion of the profits is used to acquire accommodation at holiday centres and rest homes.

One must not overlook the fact that members of co-operatives are people of various professions and qualifications. Many of them are members of their particular trade unions at their places of work, and these unions also are concerned with improving the cultural and living conditions of their members.

It therefore follows that those workers and office employees

who are members of a co-operative have these additional opportunities for organising their vacations, for arranging to have their children taken care of in kindergartens and nurseries and to visit the co-op cultural and educational institutions in addition to their trade union clubs, libraries and sports organisations.

When distributing profits, members allocate part of the funds to reward the staff of the stores, dining-rooms and industrial enterprises. The best are given money rewards, free accommodation at sanatoriums and rest homes and free excursions. Part of the profits also goes to organise various courses and schools where co-operative employees can improve their qualifications. At least 50 per cent of profits, as a rule, goes to the basic fund of the consumers' society.

Participation of Members in Management

As masters of their organisation co-op members take part in its management. The managing boards of the co-operatives include 150,000 collective farmers and state farm workers.

Over 100,000 members serve on auditing commissions and about 600,000 are members of shop and dining-room commissions, which are vested with broad powers. For example, they have the right at any time to check up on the work of a store or dining-room, and to see how the instructions of the members are being carried out.

Still More Powers to Co-op Members

Following on the nationwide discussion in 1957 which led to the setting up of economic councils in the Soviet Union in place of a number of industrial ministries, the Central Council of the Co-operative Union discussed how to improve its work.

In particular, the consumer co-ops were faced with a request from the economic councils to expand their rural trading network, put out a wider range of goods for sale and to speed up their delivery.

To meet these demands, steps were taken to give wider powers to local co-operative organisations, so that they could take decisions on matters involving allocation of funds for new

shops, warehouses and storage facilities, the placing of orders with industrial enterprises to produce consumer goods and the buying of farm produce and raw materials.

Even before this, decisions to give more power to local co-ops had been taken.

For example, trade plans are now framed by the consumer co-operatives in each republic, and local societies are empowered to open new trading enterprises and set up new buying depots.

Local co-ops now decide on the number of pigs to be left for fattening and the percentage of fish to go to processing plants.

Streamlined Structure

The giving of these wider powers to local organisations required an overhauling of the co-op structure as a whole, in order to eliminate unnecessary administrative machinery.

During 1954 and 1955 a large number of depots, food and other enterprises were transferred from central control to the different republics, territories and regions.

Some 200 departments, divisions and boards of managements were abolished in the overall administration.

Still, even this was not sufficient. The four buying departments which handle vegetables, fruit, medicinal raw materials, livestock and scrap materials were cut down to two. And the two existing trading departments which handle separately manufactured goods and foodstuffs were replaced by a single department.

Where, What and When

In the spring of this year 25 million shareholders—out of 35 million members—took part in their society meetings, to hear the reports of the outgoing boards and to elect new ones.

The meetings were attended by 85 per cent of the sitting board members.

At these meetings many members advocated a further extension of the rights of consumer co-operatives, especially in deciding on the construction of new co-op establishments.

The final decision as to what trading, buying or production establishment should be built in a definite locality, the size of

the investment to be made, hitherto rested not with the shareholders' meeting but with higher elected bodies—regional, republican co-operative councils, or even with the central managing body itself.

The result of this was that co-ops with the necessary funds were often deprived of the opportunity of building shops, dining halls, bakeries or warehouses only because the necessary expenditure was not approved by the higher body.

On the other hand, co-ops which were poorly managed often received loans for construction from the higher body—and it was the funds of the well-run societies that were used for this.

Many shareholders objected to this practice.

The result? Shareholders' general meetings will now decide themselves where, when and what establishments are to be built to meet the needs of the shareholders. And the boards of the regional co-op societies will no longer have the right to use the funds of the local society nor of the district co-op.

Loans can be granted to economically weak co-operatives in the form of mutual assistance only on the decision of a general meeting of shareholders, and only on the conditions laid down by such a meeting.

Leaders of consumer co-ops which need funds will now have to appeal to a shareholders' meeting of another society, and persuade them to grant them a loan as an act of comradely assistance.

Shop Manager

Other rights, too, have been extended to co-operators which, as A. Klimov, chairman of the Soviet Co-operative Union points out in a recent article, are aimed at the decentralisation and further democratisation of co-op management.

General membership and sectional meetings of the shareholders now have the right to take the final decision on the nomination of shop managers or their removal from office.

Co-operators have not been slow to make use of these new rights.

At a membership meeting of the Perkhushkovo co-op, at the Uspenskoye village in the Moscow region, dissatisfaction was registered against the manager of the food shop. He was dismissed and a new board elected.

Democratisation Continues

The same spirit of democratic criticism has been evidenced in the recent co-op elections. Board members who have worked in isolation from their members and disregarded their needs have been flung off.

In dealing with these developments, Klimov points out that this progress would not be possible "without the participation of the shareholders in the management of the co-ops, without them taking part in the daily work of all co-op enterprises".

He therefore calls for a still further extension of the rights of local organisations and shareholders, in order that the initiative of co-operators be still further stimulated.

V. Women in Consumers' Co-operatives

Opportunities

THE MEMBERSHIP of the consumers' co-operatives includes some 18 million women. Women take a most active part in all spheres of co-op work on a par with men. They are to be found on management boards and on the various commissions, on many of which they form a majority.

The Co-operative Union has a women's committee which co-ordinates women's work in the co-operatives and represents women in the International Co-operative Women's Guild. Many women hold responsible positions in shops, dining-rooms and other co-op enterprises.

Last summer I chanced to meet Ogul Gozel Durdiyeva in Moscow. She is a Turkmenian woman and president of the board of the Ashkhabad Rural Consumers' Co-operative of Turkmenia.

Her biography is typical of many women born before the October Revolution. Her parents were farm hands and hardly



The dress fabrics department of the co-op of Starominsk, near Krasnodar, North Caucasus



A lesson in a model provision shop for pupils of the Higher Co-operative School.



On the left, second-year students of the Higher Co-operative School studying "Meat and Meat Products".

earned enough to support their seven children. Ogul Durdiyeva never went to school but had to help her mother around the house.

At the age of 24 she started work and since 1934 has been working in the co-operative movement, first as employee and later as a leading member.

It is interesting to note that before the Revolution the statutes of the co-operatives approved by the Governor-General of Turkestan not only prohibited women from being elected to boards of management and control but also forbade them attending members' general meetings.

At first Durdiyeva was a saleswoman. In 1938 she was elected president of the board of the rural co-operative. Today she is a member of the Council of the Turkmenian Republican Consumers' Union and the Ashkhabad Regional Consumers' Union. Like her mother, Durdiyeva has seven children.

Women in Responsible Positions

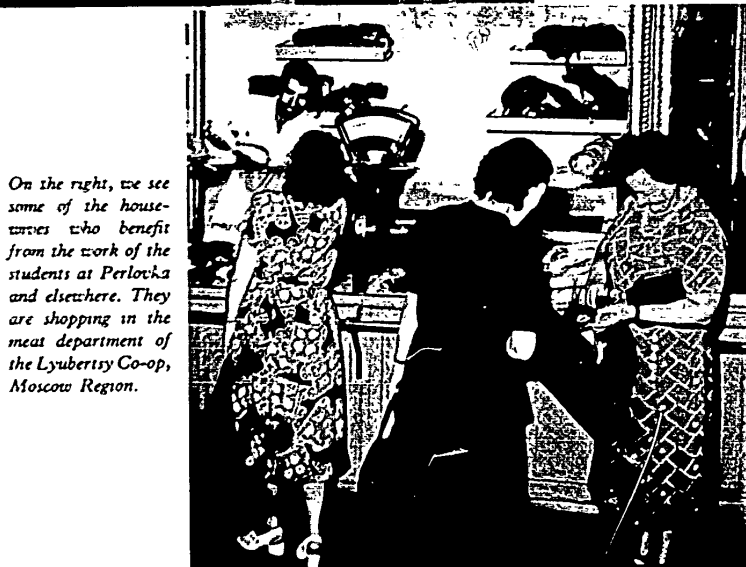
The majority of board members of the Ashkhabad Rural Consumers' Co-operative are women. Shop managers Anna Niyazklycheva, Eva Janorazova and Eva Palvanova enjoy great authority there, the last-named being elected member of the Central Council of the Co-operative Union.

The Ashkhabad Rural Consumers' Society is not the only one in which women play a leading role. In the Odintsovo Rural Consumers' Co-operative of Moscow Region, where Yekaterina Vetrova was elected board president, and in many other societies women manage dining-rooms, tea-rooms, shops, storehouses and other co-op enterprises.

Many women have been elected to co-op managing boards. Thus of the 120 members and candidate members of the Central Council of the Co-operative Union twenty-three are women.

Working Conditions

More than half of the 1,400,000 people employed by consumers' co-operatives are women. Their pay is exactly the same as that of the men doing the same work.



On the right, we see some of the housewives who benefit from the work of the students at Perlovka and elsewhere. They are shopping in the meat department of the Lyubertsy Co-op, Moscow Region.

Like all working women in our country women co-operators enjoy greater pension privileges than men. They begin receiving a state pension five years earlier than men, at the age of fifty-five (with a working period of twenty years).

Women workers and employees at enterprises with heavy or difficult working conditions have a right to a pension at the age of fifty. Women who have five or more children and have reared them to the age of eight are entitled to a pension at the age of fifty (with a record of no less than fifteen years of work).

Women receive the same pensions as men, depending on their length of service. Minimum pensions are 300 roubles and the maximum 1,200.

According to our laws women receive maternity leave with full pay for 112 days, besides their regular annual leave. Single mothers and mothers with large families are given state allowances.

Pregnant women and nursing mothers are not allowed to work at night or do overtime. Nursing mothers have additional rest periods during working time and retain their average earnings. Special privileges are accorded to families in which two or more children are born simultaneously; they are given special consulting physicians and nursing assistance.

VI. The 1958 Co-op Congress

THE CO-OP CONGRESS was held in Moscow at the end of June, 1958. According to the Co-operative Union regulations, congresses are held every four years, and the last one was held in 1954.

The Congress discusses the reports of the managing board and the auditors, takes policy decisions for the following period, elects a new board, a new executive, and new auditors.

Having been present at the 1954 congress, I was able this year to note the marked increase in the number of delegates.

This was not only because the membership had gone up from 32½ million to 35 million. The main reason was the changed scale of representation.

Whereas in 1954 there was one delegate for every 60,000

members, this year it was for every 25,000 delegates. And the result was 1,393 delegates as against 552 last time.

In all, thirty-six nationalities were represented. The delegates included 398 women. Over a quarter of the delegates had higher education or were engaged in such studies. About a third had secondary education.

By contrast, in 1954 the bulk of the delegates had only primary education.

The four-day congress gave striking proof of the great advances made by the co-ops.

—Total trade turnover, since 1954, in comparable prices—up by 82 per cent.

—Co-op purchases doubled, making the co-ops the country's main purchasing organisation

—While four years ago the co-operatives did not have a single self-service establishment, now they have 10,000 kiosks without shop assistants.

—Over 32,000 consumer co-ops and retail enterprises now receive goods by mail from co-op storehouses under the new mail order system. (Congress decided to step this up to 20,000 parcels a day.)

—Co-ops own some 5,000 tailoring, shoe-making and repair establishments. (These, too, will be extended, and will include repair shops for radios, bicycles, sewing machines and household electric appliances.)

—In 1955 the Soviet Co-operative Union had trade contracts with two countries. In 1956, with nine. In 1957, with seventeen. For this year contracts have been signed with an additional ten countries. The volume of such trade last year was five times as much as in 1956.

In the light of these striking all-round advances, the delegates took bold decisions to step up their activity on all fronts in the coming period.

VII. International Relations

A REVIEW OF THE ACTIVITIES of consumers' co-operatives in the U.S.S.R. would not be complete if we did not say something about their relations with co-operative organisations in other countries.

During 1957 alone the Soviet Co-operative Union received forty-five delegations of foreign co-operatives, including those of Britain, India, the Chinese People's Republic, and Poland. Delegations of Soviet co-operatives travelled to Sweden, Poland, Britain, China, Finland, Czechoslovakia, Yugoslavia and other countries.

It should be recalled that, on the initiative of the Soviet Co-operative Union, the Twentieth Congress of the International Co-operative Alliance in August 1957 adopted a resolution: "International co-operative trade, its difficulties and possibilities for extending contacts to exchange experiences in co-operative activities", on the basis of a report delivered by Klimov, chairman of the Soviet Co-operative Union.

Long before this resolution was discussed and adopted the Soviet co-operatives had already done much to develop trade with foreign co-operative organisations. The beginning of such contacts was made three years ago when the Soviet Co-operative Union concluded mutually beneficial agreements with co-operative organisations of a number of countries, including three separate agreements with the Scottish Co-operative Society. It also concluded a contract with the British Co-operative Wholesale Society. One cannot but agree with the comments made by Mr. Buckley, General Secretary of the Co-operative Wholesale Society:

"My committee," he wrote in his letter to the Soviet co-ops, "notes with great satisfaction that international co-operative ties have grown stronger, thanks to the mutually beneficial trade contracts we have concluded, and which we hope will open up the way for extensive co-operation between our two societies." (Retranslated from the Russian.)

The recent past confirms Mr. Buckley's words. On the basis of these agreements the Soviet Co-operative Union purchases in

Britain knitted goods, fabrics, footwear and other commodities. The British co-operatives, on their side, acquire from the Soviet Co-operative Union grain, cameras, watches and other manufactured goods.

The Soviet Co-operative Union now has trade agreements with co-operative organisations in eighteen countries. Soviet co-operatives sell timber to the co-ops of the Federal Republic of Germany, Japan and Czechoslovakia; oil products to Norway; grain to England, Scotland, Denmark, Norway, Sweden and Bulgaria; radio appliances, watches and fountain pens to Albania, Rumania, Hungary, Poland and other countries.

The Soviet co-ops, on the other hand, obtain a variety of consumer goods from co-operative organisations in Italy, England, Denmark, Scotland, Sweden, France, Japan and others. These commodities include footwear, fabrics, knitted goods, razor blades, crockery, sheepskin-lined articles, cigarettes, and tinned goods.

Compared with 1956 the foreign trade conducted by the Soviet co-ops in 1957 increased considerably. Twenty-three trade contracts were concluded with foreign co-operatives totalling more than 1,000 million roubles. The range of export and import commodities increased to 300 items.

Soviet co-op trade operations with foreign co-operatives further extended this year, the Soviet Co-operative Union establishing new trade connections with co-operative organisations in Western Europe, Asia and Africa.

In addition to normal trading the Soviet Co-operative Union has recognised the expediency of selling commodities produced by U.S.S.R. consumer co-operatives by sending them to foreign co-operatives on a commission basis. This will certainly considerably extend the foreign trade connections of Soviet co-operatives.

It should be added that many Soviet consumer co-operatives, for example, those of Moldavia, Kirghizia, Lithuania, Latvia, and Georgia, are building up their own foreign trade connections. They export furs, medicines, leather goods, dried mushrooms, berries, fresh and pickled vegetables, fruit, honey, carpets, handicraft goods and other commodities.

Soviet women co-operators, too, are busy extending friendly relations with co-operators in other countries. The Women's Committee of the Soviet Co-operative Union is taking an active part in the work of the International Co-operative Women's Guild.

At the invitation of national co-operative organisations representatives of the Soviet Co-op Women's Committee visited Britain, Belgium, the German Democratic Republic, Finland, Poland, Rumania and the Chinese People's Republic during 1954-1957. During the same period the Soviet Union was visited by representatives of women's co-operative organisations from a number of countries, including the British Women's Co-operative Guild delegation headed by its President, M. Schofield.

In September 1956 the U.S.S.R. was visited by Marcel Brot, President of the International Co-operative Alliance, who took part in the sittings of this Alliance in Moscow. Upon his return he wrote in the newspaper *Co-operator*, published in France, that the co-operators of the West would never forget the warm reception they had been given by the Soviet people.

In the same spirit, Lord Williams observed that "Soviet co-operators undoubtedly help in developing the co-operative movement and in cementing friendship not only between the co-operators of both our countries but also between our peoples."

Soviet co-operators stand for the greatest possible development of economic and cultural collaboration between national co-operative organisations. In this they rightly discern a path towards a fuller satisfaction of people's material and cultural needs, and towards better mutual understanding, friendship and world peace.

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AGREEMENT WITH BRITISH CO-OPERATIVES As a result of talks between the representatives of the Central Co-operative Union of the Soviet Union and of the British C.W.S. an advantageous agreement on co-operatives was signed in Moscow in February 1958. The agreements were signed on the occasion of the visit to Moscow of Mr. J. Wind, a director of the C.W.S., and on the part of Mr. P. A. Kuznetsov, the chairman of Centrsoyuz.

If the Arms Race Were Stopped...

STAT

Professor M. Rubinstein, D.Sc.(Econ.)

Soviet News
Booklet No. 32



If the Arms Race Were Stopped . . .

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London,
July, 1958

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Cover picture: The awful cost of war is well-understood by the Russian people, as can be seen from the top half of the cover which shows Stalingrad at the end of 1943. The River Volga can be seen at the top of the picture.

Below is a model of the new Stalingrad which was to arise from the ruins of the old, and no Soviet citizen wishes to see all this labour erased again in an atom war.

ERRATA

Page 9, line 11, should read "4,100 railway stations."
Page 9, line 21, should read "679,000 million roubles or approximately £60,000 million"

Foreword

THE ARMS RACE, stockpiling of atomic, hydrogen and rocket weapons, and the development of new, more destructive types of these weapons have created in the last few years a grave and growing threat of nuclear war.

Even now, in peacetime, the atmosphere, the soil, rivers, lakes and seas are being poisoned by radioactive substances as a result of nuclear test explosions which imperil the life of existing and future generations.

By suspending these tests unilaterally, the Soviet Union was the first to indicate the way to spare mankind the danger of nuclear war.

But this noble move was not taken up by the other Great Powers, and the Sword of Damocles still hangs over mankind.

The arms race and the stockpiling of new types of weapons is already causing grave damage to mankind. Owing to colossal outlays on the production of armaments, living conditions are going from bad to worse.

Furthermore, the arms race and the cold war sow distrust and hostility among nations, depriving them of the great benefits of friendship and co-operation.

Giving a brief analysis of the fatal consequences of two world wars and the current arms race on the economy and living conditions in all countries, the author of this booklet affords to the reader a glimpse into the future of a world without the arms race.

He thus indicates a way out of the impasse, the way suggested by common sense and the common interests of the people.

1. VICTIMS AND DESTRUCTION OF TWO WORLD WARS

IN THE FIRST HALF of the twentieth century the peoples of the world suffered the calamity of two world wars.

The countries which directly took part in the First World War of 1914 to 1918 had a population of 800 million. It seems incredible that 70 million were mobilised for military service.

There were many countries where almost all the adult men were torn away from productive labour for many years.

Even elderly men, striplings and those suffering from chronic ailments were called up for service in the last period of the war.

Almost 10 million killed, 8 million missing and prisoners, more than 20 million wounded, including over 6 million seriously wounded people crippled for life, thousands of European cities and villages reduced to debris, millions of ruined peasant households, hunger and poverty—those were some of the main consequences of the First World War.

The war shook the world to its very foundations. In the scope of its operations and the number of its victims the First World War was without precedent in the history of mankind.

Its toll of human lives was as great as the total carried off in Europe by all the wars fought in the previous 1,000 years.

Rationing was introduced in the European countries for the first time. Public consumption dropped radically. It required years of strenuous work by millions of people to repair the damage.

Only the big firms connected with war industry profited from the war.

Great as were the ravages of the First World War they were surpassed by the Second World War in the technical means of dealing death and destruction, the scope of operations and size of the belligerent armies, the number of victims, and the human suffering.

Hitler Germany, which unleashed the Second World War, did not hesitate to resort to any crimes in order to force its rule upon Europe and to pave the way to the world supremacy of German imperialism.

Wholesale murder of children, women and aged people, annihilation of entire nationalities, total destruction of civilians undesirable to the fascists, barbarous destruction of culture and of thousands of cities and villages, economic paralysis of entire countries and incalculable losses—these were the consequences of the Nazi brigandage.

States with about 50 per cent of the world's population were drawn into the First World War. States with more than 95 per cent were involved in the Second World War.

Moreover, military operations were not confined to Europe; they were carried to Asia, North Africa and to some of the Pacific islands. Altogether 110 million people were mobilised into the armies.

According to statistics published by the Vatican in 1945 on the basis of the estimates supplied by international organisations, 22 million soldiers and civilians were killed in the Second World War, and 34.4 million more were wounded!

These figures do not include the millions who perished in the Nazi concentration camps, who died of hunger and epidemics caused by the war.

According to the estimates of West German statisticians, 55 million perished in the Second World War, civilians included. There is no doubt that the loss of human life in the Second World War was more than five times the losses suffered in the First World War.

A characteristic feature of the Second World War was the greater number of victims among civilians, and, especially, the great number of civilians killed in air raids and in Nazi concentration camps. Tens of millions of people were crippled at the front and in the rear, and millions of children were orphaned.

According to the estimates of American economists, direct military expenses of the belligerent states covered by their budgets in the war years amounted to \$925,000 million, i.e. almost five times greater than the military costs of the First World War.*

Moreover, those outlays did not include the military costs of the U.S.S.R. which amounted to \$357,000 million, and the military costs of China.

Still greater damage was caused by military operations.

Especially great was the damage suffered by the Soviet Union

* *World Almanac*, New York, 1947, page 523.

Several million soldiers of Hitler Germany and her satellites who invaded the U.S.S.R. laid waste to 1,710 flourishing cities and 70,000 villages, reducing more than 6 million buildings to ashes and rubble and leaving about 25 million people homeless.

Stalingrad, Sevastopol, Leningrad, Kiev, Minsk, Odessa, Smolensk, Novgorod, Pskov, Orel, Kharkov, Voronezh, Rostov-on-Don and many other big industrial and cultural centres were utterly ruined or sadly battered.

Military operations conducted on the territory of the U.S.S.R. caused the destruction of 31,850 industrial enterprises, over 40,000 miles of railway track, 4,1000 railway stations, 40,000 hospitals and other medical establishments, 184,000 general schools, specialised secondary schools, higher schools and research institutes.

Ninety-eight thousand collective farms, 1,876 state farms and 2,890 machine and tractor stations were ruined and plundered, and several dozen million head of livestock were destroyed.

According to the estimates of the Extraordinary State Commission of the Soviet Union, the damage caused by the war to the national economy of the U.S.S.R. and to individual citizens in town and country amounted to 60,000 million roubles, or £43,000 million.

Badly disrupting international economic relations throughout the world, the war completely unbalanced the economy of the belligerent countries.

There was a drastic drop in production for civilian needs and a dangerous decline in public consumption.

In many countries the war brought about the militarisation of labour, longer working hours, abolition or drastic limitation of social insurance and labour protection.

More than 10 million workers were forcibly removed to Germany from the occupied countries. Together with war prisoners they were sold into slavery to factory owners and landlords.

They perished in large numbers as a result of brutal treatment, hunger, unendurable labour, violence and torture practised by Hitler's executioners.

The war ruined numerous peasant households, small and medium manufacturers, shopkeepers and intellectuals.

Even in the United States of America, notwithstanding the fact that military operations did not take place on its territory, thousands of small manufacturers and tradesmen were ruined

during the war years, swallowed up by the monopolies which were making profits from the war.

In the belligerent countries of Europe and the Far East, the ruination of the middle classes assumed still greater proportions. Only a handful of arms kings made enormous profits. The profits of American monopolies grew almost four-fold during the Second World War.

Oceans of human blood, ruined cities and villages, the tears of tens of millions of widows and orphans mourning their breadwinners—those were the consequences of the Second World War.

With these facts in mind any honest person can form an objective view of the value of arguments about alleged benefits which war brings to the national economy and to living standards.

However heavy the loss of human life and destruction in the two world wars, the possible consequences of a third world war would be incomparably greater and more far-reaching.

The threatening disaster is especially terrifying since it could be brought on by the military use of the latest scientific discoveries.

The use of atom bombs in Hiroshima and Nagasaki, in August 1945, which caused the death of more than 300,000 people, has shown in practice the great threat to mankind emanating from the abuse of science and engineering.

Outstanding discoveries of atomic physics are used for the production of the most terrible weapon of all times, a weapon with an entirely unparalleled destructive power.

The modern H-bomb may be compared to ten or more million tons of T.N.T., the most widely used explosive in the First and Second World Wars. The blast of *one* H-bomb possesses a greater destructive power than all the explosives produced in the whole world in four years of the Second World War.

American, Soviet and British scientists have warned that an H-bomb blast would devastate territory for dozens of miles, i.e. a territory greater than the biggest cities and concentrated industrial regions of the world.

Radioactive fall-out would extend this death zone. Consequently the blast of one H-bomb in a densely populated urban or industrial district would kill millions—not hundreds of thousands—of people.

In some of the small densely populated West European countries, with a high concentration of material resources, a

blast like that would mean utter devastation.

Countries beyond the ocean, and the U.S.A. primarily, could hope in the past that they would be spared this fate owing to the difficulties connected with the delivery of A- and H-bombs over long distances.

But these calculations have been nullified by the latest achievements of science and engineering. The construction and further improvement of intercontinental ballistic missiles has made it possible to dispatch A and H warheads almost instantaneously to any point of the globe.

Distance has therefore ceased to be a protection! The development of military technique has made it impossible for an aggressor to act with impunity by making others pull the chestnuts out of the fire for him and compelling other peoples to shoulder the brunt of war in losses and hardship.

Even today, every nuclear test explosion throws up considerable amounts of radioactive substances which spread to all parts of the world. Increasing radiation injures human health in all countries and holds out the threat of degeneration to future generations.

Some scientists believe that an explosion of all the available A- and H-bombs could endanger the existence of almost all life on earth.

This does not exhaust all the applications of modern science for purposes of unleashing and conducting a devastating war which would be directed not only against the armed forces, but against the population as a whole, including women, old people and children. It is enough to note that the American military press and scientific and technical magazines speak frankly of the growing preparations by the U.S.A. for chemical and bacteriological warfare.

Militarist ideologists are doing everything to boost the "cheapness" and other advantages of such a war.

They are planning to convert some of the food and pharmaceutical industries to the mass production of deadly germs and poisons for the wholesale destruction of people, domestic animals and plants. Their purpose is to convert the flourishing country of an adversary into a desert.

People should be told the complete truth about the dangers of another world war, the truth about the nature and specific features of the modern arms race, in order that they should be able to save themselves and all mankind from this madness.

2. THE COST OF THE ARMS RACE

THE ARMS RACE STARTED after the Second World War has been growing year by year. Military outlays in most Western states are many times greater than their corresponding expenditures before the Second World War.

According to statistics of the press and information service of the Government of the Federal Republic of Germany and of *France Presse*, direct military expenditure of fourteen N.A.T.O. countries has grown from \$18,700 million in 1949 to \$59,500 million in 1957.

That includes the military expenditure of the U.S.A. which has grown from \$13,500 million in 1949 to \$44,200 million in 1957, and the military expenditures of the West European countries, from \$4,700 million in 1949 to \$13,400 million in 1957.

Altogether, the direct military expenditures of the N.A.T.O. countries amounted to \$486,000 million in ten postwar years (1948 to 1957).

But this figure is disputed: Paul Hoffman has calculated that the U.S.A. alone has spent \$443,000 million on armaments and the armed forces since the end of the Second World War.*

Annual military expenditures throughout the world have reached \$120,000 million in the last few years. Translated into the concrete language of urgent human requirements, it can be shown how much mankind loses by this wasteful use of its resources for the arms race.

The general expenditures of all states on armaments and armed forces in ten postwar years amounted to at least \$800,000 million, enough to build 80 million houses and thus relieve the very acute housing crisis in all the big cities of the world.

And here is another example. According to United Nations statistics, the per capita national income in the economically underdeveloped countries averages about \$60 to \$100 a year. It follows that the annual military expenditures in the advanced industrial countries are equal to the annual income of approximately 1,500 million inhabitants of the underdeveloped countries.

Some economists and the press of the cold war devotees claim that, although the arms race is costly, military orders act as a safeguard against economic disaster and bolster up business.

Let us look into these arguments

* *Look*, January 1958.

It is true that in some countries the distribution of big military orders may create for a time the illusion of economic prosperity. Increases in the production of armaments create a greater demand for various raw materials, semi-finished products, fuel and electric power.

Scarcities of definite goods caused thereby, as well as the threat of various limitations and control of consumption lead to the accumulation of stocks, higher prices and greater profiteering.

This rise in production, price increases and orgy of profiteering were observed in many countries after the outbreak of the war in Korea and became known as the "Korean boom".

However, the growth of production characteristic of the first stage of the arms race is extremely unstable and fundamentally unsound. The use of the arms race for bolstering up capitalist economy may be likened to the effect of drugs upon a sick organism; they create the misleading and brief illusion of recovery, while in reality they undermine the health and aggravate the disease they were expected to cure.

They are administered in increasing doses and the duration of their action becomes shorter and shorter.

Growing military expenditures ruin the national economy and leave constantly smaller possibilities for improving the national economy and state finances.

The resultant inflation, great increases in taxation, skyrocketing prices and wage-freezing reduce drastically the purchasing capacity of the people.

As a result, the growing arms race reduces the demand for consumer goods to a level which cannot be compensated by the expansion in production brought about by military orders.

The theory that the arms race enables capitalist countries to evade overproduction crises and to ensure full employment must inevitably fail because it is fundamentally wrong.

A vivid illustration to this is afforded by the existing economic situation in a number of capitalist countries, and in the U.S.A. especially.

Notwithstanding the huge military outlays which amount to more than \$40,000 million annually, the general level of production in that country has been frozen at the same level for a number of years, and beginning with the autumn of 1957 it has been falling off. The number of totally jobless workers surpassed 5 million in March 1958.

Consequently, far from averting an economic slump in the

U.S.A., the growing arms drive has aggravated the economic difficulties in that country and, as a result, worsened living standards.

Socialist countries, which are compelled to sustain their defence capacities at the required level owing to the existing world tension, are also handicapped economically by the armaments burden.

The proportion of the social product diverted for armaments must inevitably slow up improvements in people's lives.

Both people and government in these countries, which base their development on economic planning, can see most clearly the unfavourable effects of the arms race.

They are energetically working for peace and friendship among nations, for peaceful co-existence, for switching over the colossal allocations consumed by armaments to peaceful uses, for improving living standards in every country.

3. HOW WOULD THE PEOPLES BENEFIT IF THE ARMS RACE WERE STOPPED?

It is BEYOND DOUBT that colossal possibilities for increasing productive forces and living standards in all countries would be opened up if the arms race were stopped.

These potential possibilities are extremely varied. Let us dwell on some aspects of this question.

Termination of the arms race would release for peaceful purposes great production capacities as well as substantial amounts of raw materials and labour power now used for military production.

That applies equally to industry and agriculture.

For example, conversion of the nitrate industry from the production of explosives to the production of fertilisers would make it possible to raise considerably within a few years the yields of all food and industrial crops.

The use of the available stocks of fissionable materials (uranium-235, plutonium etc.) for the production of electric power rather than for the production of atom bombs would make it possible to provide within a short space of time an abundance of power, especially in those countries where fuel and

electric power are scarce today. Many more examples could be given.

However, some readers may ask: would not an increase in the output of industrial and farm goods lead to greater overproduction, curtailment of production and unemployment?

Naturally, termination of the arms race would not, nor could it, do away with the fundamental economic contradictions of capitalism which lead to cyclical ups and downs in production, to crises and unemployment.

Nevertheless, cessation of the insane expenditure on the production of weapons of death and destruction would tend to raise effective demand, reduce taxation, especially indirect taxes on consumer goods, and put a halt to rising prices.

Furthermore, termination of the arms race would afford the possibility for increased state and municipal allocations for health services, public education, housing construction and social insurance.

Some of the resources released by reducing military outlays could be used for raising pensions for aged people, invalids etc.

Inasmuch as a cut in military production would drastically reduce taxation and non-productive expenditures, it would substantially raise the demand for peaceful production.

It follows that far from causing an economic slump and unemployment, the termination of the arms race would, on the contrary, tend to bring about the recovery of the national economy, increase employment and improve the possibilities of foreign and domestic trade.

* * *

Termination of the arms race could stimulate the growth of productive forces, especially by encouraging construction.

Thousands of peaceful construction projects, which are very essential to mankind's progress, are still awaiting realisation owing to wars, military preparations and the arms race.

The French *La Terre* calculated in the spring of 1951 that with the money spent by France on the arms race that year it would be possible to extend electrification to all the rural districts of that country where kerosene lamps are still used, build water mains in the villages, pave 100,000 km. (62,500 miles) of country roads, build 200,000 modern dwellings for the peasants, pay allowances for household equipment to 200,000

young people and provide adequate pensions to 700,000 aged peasants.

About 700,000 houses were destroyed in France by air raids during the Second World War. Many houses are still awaiting restoration, but the funds and materials are used mainly for military construction.

According to the United Nations Economic Commission for Europe the war in Algeria costs as much as 700,000 million francs a year. The war has caused tremendous economic damage not only to Algeria where the hostilities are conducted, but also to France.

By ending the war in Algeria on the basis of recognition of the complete independence of the Algerian people, France would be able to release colossal economic resources to be used for satisfying many urgent requirements.

Even in the U.S.A., the richest country in the capitalist world, the arms race interferes with satisfying the most elementary needs.

Speaking at the emergency convention of the American trade unions on questions relating to the economic situation in the U.S.A., in March 1958, George Meany, President of the A.F.L.-C.I.O., emphasised that there was an extreme need in the U.S.A. for housing, schools, hospitals, roads etc.

It would be necessary to build for a long period of time at the rate of 2 million houses a year, said Meany.

According to the latest census, taken in December 1956, 13 million American families lived in dilapidated houses. The investments needed for repairing or replacing those houses were estimated at \$67,000 million.

Far from improving, the situation has become worse since then, inasmuch as the population has been growing, while the houses have been deteriorating, the housing construction has been extremely slow.

Most cities in the U.S.A. require radical replanning. Thirty million townsmen live in slums today. Housing projects have been prepared in some cities, but their realisation has been postponed to an indefinite date owing to lack of funds.

There is an equally great need for improvements in the U.S. health services.

According to the corresponding commission of the United States Congress, 8 million Americans suffered from various

nervous and psychic disorders and 9 million from heart diseases in 1950. Victims of tuberculosis, cancer and other maladies comprise millions. But public hospitals and dispensaries are insufficient.

According to Meany's estimates, it would be necessary to build in the U.S.A. in the next five years schools with more than 500,000 classrooms. This construction could not be accomplished without substantial assistance from the federal authorities.

Yet allocations for building construction, just as for the health services, are being cut every year, since the bulk of the state budget is used for financing the arms race.

Naturally, socialist countries would also benefit from the termination of the arms race.

A further cut in military expenditures would enable the Soviet Union to expand with greater speed all branches of peaceful production, light industry included, to step up house building and thus solve within the shortest time the housing problem to make improvements in cities and villages, and build more and better roads.

The means and human resources thus released could be used with great effect for the industrial development of the eastern regions.

Disarmament and the easing of international tension would open up very favourable prospects also before the economically under-developed countries.

According to United Nations statistics, the per capita annual income in these countries is smaller by 90 per cent than in the advanced industrial countries. The countries of Asia and Africa are vitally interested in a stop to the arms race, which is essential for their independent political and economic development.

Millions of people suffer hunger and want in some of the African and South-East Asian countries.

One of the factors responsible for this hunger is the deterioration during colonial rule of the ancient irrigation systems. If some of the sums now used for armaments were diverted to the development of irrigation, for combating soil erosion and preventing floods, for the supply of cheap fertilisers and machines to the peasants, agriculture in the whole world would soon become so efficient as to banish hunger for all times.

4. MODERN SCIENCE IN MANKIND'S PEACEFUL PROGRESS

MODERN SCIENCE AND ENGINEERING are now developing faster than ever. Mankind is on the threshold of a new scientific and technical revolution associated with the use of atomic energy for peaceful purposes, the conquest of space, automation, electronics, synthetic chemistry, new discoveries in biochemistry, biology, genetics etc.

Depending upon their use, the greatest discoveries of science and technology may exert entirely different influences upon the destinies of all mankind.

Placed at the service of war many discoveries may threaten disaster.

But the use of scientific and technical discoveries for peaceful purposes will pave the way for an unprecedentedly faster development of productive forces, of material and spiritual resources, for new methods of combating disease and premature old age.

Control of the energy of the atomic nucleus furnished splendid proof of man's triumph over the forces of nature.

The peaceful uses of atomic energy have just been started. The possibilities thus opened are truly limitless.

One of them is the use of nuclear reactors for the generation of electric power. The world's first atomic power plant with a 5,000 kw. capacity has been in operation in the U.S.S.R. for four years now.

Construction of atomic power plants with capacities totalling 2 million to 2.5 million kw. has been launched in the Soviet Union under the Sixth Five-Year Plan (1956-1960).

Atomic power plants are working successfully in Britain, and atomic power industry is steadily battering its way in the U.S.A.

The first American atomic power plant was started in Pennsylvania at the end of 1957. Other countries, Italy, Japan and India among them, are contemplating the construction of their first atomic power plants.

Prohibition of the use of atomic energy for war purposes and the conversion of available stocks of fissionable materials to peaceful uses would make it possible to quicken the rate of

progress in this field many times over and to develop atomic energy in the very near future into an important source of economic advance.

The operation of atomic power plants today is based on the fission of heavy nuclei of uranium, or plutonium. Theoretically, it is, however, possible to use for electric power production the fusion of nuclei of the lightest chemical elements, hydrogen in the first place.

This fusion (similar to processes at work in the suns and stars) has already been produced in practice in the H-bomb. The problem before science is to find ways of controlling this process and make it available for peaceful purposes.

Mankind will then have an inexhaustible source of energy.

In his report at the British atomic centre of Harwell in 1956, Academician I. V. Kurchatov of the U.S.S.R. showed that Soviet scientists had already advanced a long way towards the discovery of the secret of controlled thermonuclear reactions.

Achievements in this field have lately been made also by British scientists who built the Zeta unit wherein a temperature of 5 million degrees was obtained. Similar investigations are conducted also in the U.S.A.

Although the technological difficulties are still great, prohibition of atomic and thermonuclear weapons would clear the way for extensive co-operation of scientists and engineers of different countries and thus bring nearer the welcome hour of peaceful uses of new, thermonuclear sources of energy which have practically unlimited reserves of raw materials and other advantages.

It is quite probable that further improvement of *semi-conductors* will lead to discoveries which will make the direct conversion of solar energy into electric power economically expedient. That would lead to the complete transformation of the tropical regions and deserts which would then become the biggest producers and consumers of electric power.

A great promise of still faster scientific and technical progress is held out by the development of new methods of automatic control of production processes.

An increasingly important part is played by the *electronic computing machines* which are used among other things for regulating complex technological processes in chemical production and in atomic technology. These machines afford pos-

sibilities for the automatic regulation of entire shops, plants, or electric power systems.

A valuable service is rendered in various fields of intellectual endeavour by automatic information and statistical machines based on the principle of the electronic computing machines. With the aid of these machines it is possible to analyse almost instantaneously and to compile at once the necessary materials for planning and directing production.

Automatic information and bibliographical machines, the electronic "memory" of which contains a wealth of information, are of great value for scientific work and for planning. Machines are being built for the automatic translation of scientific and technical literature from one language into another.

All this holds out the promise of a colossal increase in the productivity of both manual and intellectual labour. The very first electronic machines have enabled scientists and designers to solve many problems which were formerly considered insoluble owing to the extreme complexity and duration of the required mathematical operations.

The third field in which very important scientific and technological progress has been made in recent years is synthetic chemistry.

The forecast that with the development of science and technology mechanical methods of work will be gradually replaced by chemical methods is borne out at present in all branches of production.

A real revolution was ushered in by the discovery of the chemical method of production of artificial and synthetic products which are well on a par with and in some cases even superior to the natural materials. That applies to various synthetic resins and plastics, synthetic rubber, fibres, and many other materials used for technical and other purposes.

The properties of polymer materials may be altered to suit the needed requirements, and thus create materials which do not exist in nature.

All this lies behind the fast increase in the production of polymer materials. About 8 million tons of plastics, synthetic rubber and synthetic fibre were produced in the world in 1956.

An eight-fold increase in capacities for the production of plastics and a 4.6-fold increase for the production of synthetic fibre is contemplated in the next few years in the U.S.S.R. alone.

Production of polymer materials is being increased also in other countries.

I shall not dwell in detail on the uses of chemical achievements in other fields, as, for example, the development of new fertilisers, new means of combating plant pests and weeds, or chemical stimulators of the growth of plants, which provide great potentialities for boosting crop yields and increasing food resources.

Bertrand Russell, the well-known British philosopher, wrote the following in the *Observer*: "We have it in our power, through the resources of science, which are now in large part so sadly misused, to create a world far better and far happier than any which has existed in the past. Poverty could be abolished; the dread of disaster, which now paralyses thoughtful men, could be ended; and creative abilities could be freed for human achievement and not for destruction." (*January 5th, 1958*)

Peace, peaceful co-existence of states—these are the needed guarantees which can ensure that the latest scientific and technical discoveries are used in all countries for purposes of progress and not for purposes which could lead mankind to a nuclear disaster.

There will then no longer be a cause of competition between general staffs. All the more successful will be the peaceful competition for the best and fastest uses of the discoveries of science and engineering for creating the most favourable living conditions and comforts for all.

The years 1957-1958 witnessed a splendid illustration of the benefits of international scientific co-operation and scientific and technical competition. I have in mind the artificial satellites of the Earth launched under the International Geophysical Year (I.G.Y.) programme by the scientists of the Soviet Union, and later also by the scientists of the U.S.A.

It is, as yet, too early to foresee the technical and scientific results of these outstanding achievements; but it is already clear that the observations of these satellites conducted in the scientific centres of many countries should make a valuable contribution to our knowledge of the cosmic radiation, the ionosphere, the structure of the Earth and in other fields.

The success of these experiments makes it possible to anticipate a constantly growing pace of scientific and technical development. And it is the greatest task of our time to use these discoveries for the good of mankind.

5. POSSIBILITIES FOR ECONOMIC CO-OPERATION OF THE TWO SYSTEMS

WHEN THE ARMS RACE and the cold war are ended, favourable conditions will have been created or a thorough improvement in relations between all countries, irrespective of their political and social systems, for the development of greater confidence and co-operation between them.

International Trade

Co-operation between the two world systems, socialist and capitalist, could develop chiefly along the lines of international trade. This development would tend to strengthen peace and it would be economically advantageous to both trading partners.

To this day some Western economists claim that trade between countries with different social systems is impossible and unprofitable. It is also alleged that the industrialisation of the Soviet Union has changed its economy so much as to make the possibilities for the development of trade with the U.S.S.R. extremely limited.

These arguments are completely refuted by the entire history of international trade. Industrial progress in the capitalist countries (nineteenth-century Britain and twentieth-century U.S.A., for example) has always tended to increase rather than diminish their foreign trade volume and the variety of their imports and exports.

There is no sound reason for making an exception from this rule for the trade between countries with different social and economic systems. Facts show that quite the contrary is true.

The industrial development of the U.S.S.R., the People's Democracies and the underdeveloped countries of Asia and Africa has greatly widened rather than limited trading possibilities.

Naturally, the industrialisation of the former agrarian countries is gradually removing the economic basis of one-sided trade which allows one country to sell industrial goods only and to make superprofits on it, leaving to the other countries possibilities for marketing only farm products and some mineral raw materials at a great loss owing to the wide gap between prices (the so-called unequal exchange).

Industrialisation tends to quicken rather than to arrest the development of trade.

It will not be amiss to recall here the successful development of trade between the U.S.S.R. and the capitalist countries before the Second World War. At the time of the world economic crisis in 1929-1933, the Soviet Union was the only state which did not reduce its imports; on the contrary, it made far greater purchases abroad.

In 1931 the U.S.S.R. was the biggest buyer of machines and other equipment in the U.S.A. Senator Borah declared in March 1931 that the greatest potential and growing market for American goods lay in the U.S.S.R. Soviet purchases were extremely important at that time since they kept industry busy and helped to sustain employment in Germany, Britain, Belgium and other countries.

It is regrettable that a different situation has developed since the Second World War. Some Western powers believed that by pursuing a policy of discrimination in trade and credits, down to an outright embargo, they would be able to retard the economic development of the socialist countries and interfere with their industrialisation.

This policy is responsible for the drastic drop in the volume of trade between capitalist and socialist countries in the post-war decade.

Trade between West and East European countries has contracted to one-third, or even to a quarter of the pre-war volume. Trade between the leading capitalist countries and China has dwindled to a negligible volume.

However, this policy has clearly failed to check or even delay the rate of economic progress in the socialist countries. Obligated to rely on their own resources more than ever, they have laid greater stress on mutual co-operation within the socialist world, with the result that there has been a great increase in the volume and share of trade between socialist states.

Furthermore, the economic cold war policy hit back like a boomerang at many capitalist countries, especially in Western Europe.

Economic, commercial and cultural relations between European nations have taken shape in the course of centuries, and their disruption was a hard blow to the West European states whose economy depended to a greater degree on foreign trade.

Severed (by their own hands, to be exact) from their traditional markets in Eastern Europe, they landed in the stranglehold of one-sided dependence upon the United States of America. "Dollar hunger" became a characteristic feature of their economy. Japan, which, under pressure from the U.S.A., broke away from her traditional Chinese market, found herself in the same position.

Disappointed by the economic cold war, some Western states have lately been lifting some of their trade restrictions. We can only wish for faster and greater progress in this direction.

In 1956 the Soviet Union took the initiative in proposing an increase in British-Soviet trade.

If there were no trade restrictions or discrimination, the Soviet Union would be in a position to increase its purchases in Britain within five years to the value of approximately 9,000 million to 11,000 million roubles, i.e. £800 million to £1,000 million.

This would include orders for various equipment and ships to the value of 4,000 million to 5,000 million roubles and purchases of various manufactured goods and raw materials to the value of 5,000 million to 6,000 million roubles.

The volume of trade between the Soviet Union and the U.S.A. could have been still greater if all the artificial barriers had been abolished. A policy of peaceful co-existence and business-like co-operation would open to the U.S.A. vast markets in the U.S.S.R., as well as in People's China and in many other countries.

It should, moreover, be emphasised that now that the symptoms of an impending or threatening economic crisis are growing in some capitalist countries, long-term trade agreements with socialist countries would provide reliable markets which are immune to the economic ups and downs of the capitalist world.

Unhindered development of international trade would furnish the best basis for greater confidence and better relations between states, for greater friendship and understanding between nations.

Assistance to Economically Underdeveloped Countries

A favourable soil for economic competition and political co-operation between capitalist and socialist countries could be provided by assistance to economically underdeveloped countries.

These countries are inhabited by more than 50 per cent of the world's population, but their share in world industrial production is negligible (no more than 4 per cent to 7 per cent in the output of the most important products).

Their industrial backwardness is characterised by an extreme lack of mechanisation and low productivity of labour. Mechanical power per worker in industry, agriculture and transport in these countries is only 5 per cent of the corresponding standards attained in economically advanced countries.

Their industrial backwardness and the predominance in their economy of agricultural production and the production of raw materials are also reflected in their foreign trade. They are greatly dependent upon exports of several raw materials and farm products, and upon imports of manufactured goods, especially industrial equipment.

Countries which have won political independence since the Second World War are eager to overcome the lag in their economy as quickly as possible and to discard for ever the fetters of colonialism.

Adlai Stevenson, former Democratic candidate for the presidency of the U.S.A., wrote that the main problem facing the majority of underdeveloped countries which had recently acquired independence is how to carry out a belated industrial revolution and improve the life of the people. This is a task, moreover, that has to be accomplished rapidly though resources of native capital are small.

Adlai Stevenson emphasised in this connection the admiring interest of the peoples of the underdeveloped countries in the remarkable achievements of the Soviet Union and China.

It stands to reason that the economic progress of underdeveloped countries can and should be achieved primarily through the efforts of their own peoples.

But the magnitude of this task, which presupposes an increase in the production potential and improvements in the life of more than half the population of the globe within a relatively short space of time, is so great as to require organised assistance from the advanced industrial countries which possess the necessary equipment and technical experience.

Some assistance of this kind is provided through U.N.O. channels. It is, however, necessary to increase substantially the technical assistance rendered to the underdeveloped countries from the United Nations Fund.

Much could be accomplished through bilateral and multilateral co-operation.

But it would be naive to close one's eyes to the fact that in the advanced capitalist countries, and especially in the countries which had or have extensive colonial possessions, there are influential circles which exploit the economic backwardness of the underdeveloped countries and which are interested in the preservation of this backwardness.

At the same time, many public figures in the capitalist countries emphasise, with good reason, that such a retrograde policy has no chance of success at a time when two social and economic systems exist in the world, and when capitalism has lost its monopoly of the production and export of machines and equipment, of technical experience and scientific knowledge.

Competition with socialist states has prompted the industrially advanced capitalist countries of the West to co-operate on an increasing scale in the deliveries of equipment and in the construction of industrial enterprises in underdeveloped countries.

The simultaneous construction of steel mills in India by the Soviet Union, Britain and West Germany may be mentioned as an illustration.

The Soviet Union and other socialist countries, which know from their own experience the great role played by heavy industry in ensuring their independence and in advancing the people's welfare, treat with great sympathy the efforts of peoples in the underdeveloped countries to develop their national economy, and especially their national industry.

Countries which have recently extricated themselves from colonial rule are receiving Soviet economic assistance on a growing scale.

The Soviet Union assists in the industrialisation and general economic advance of these countries by granting credits and loans on favourable terms, by delivering equipment, preparing designs for industrial construction, rendering technical and scientific assistance, training skilled specialists, and so on.

All this assistance is rendered on the basis of full equality and mutual benefit, without any interference in the internal affairs of the countries concerned.

Soviet assistance has been instrumental in China's epoch-making industrialisation.

The Soviet Union is assisting India in the construction of a big iron and steel plant. It has granted credits for financing the

construction of other enterprises (heavy machinery, optic glass, coal mining and processing, and a thermal station) and has offered to share its experience in the construction of electric power plants, hydro systems, in geological prospecting, the peaceful uses of atomic energy and in other fields of science and engineering.

Burma, Indonesia, the United Arab Republic, Afghanistan and other countries have been successfully building up their economy with Soviet assistance.

It is hard to overestimate the historic significance of these initial steps in systematically assisting the industrialisation of underdeveloped countries.

They represent new forms of peaceful economic competition between the two systems, not only as regards the rate and scale of industrial development in socialist and capitalist states respectively, but also as regards the solution of the greatest economic problem of our time—the rapid industrialisation of the underdeveloped countries which are inhabited by the majority of mankind.

The Soviet Union considers competition in this field far more worthy and necessary than competition in the armaments race. When the arms race is ended, it will be possible to quicken radically the progress of the underdeveloped countries.

The economic progress and industrialisation of China, India, the South-East Asian countries, the countries of Africa, the Middle East and Latin America will lead to the complete eradication of colonialism.

It will undermine one of the mainstays of modern militarism, and set mankind moving faster than ever along the course of peace and progress.

Wider International Contacts in Science and Engineering

As mentioned above, the wide use of the latest scientific achievements for peaceful purposes would open to mankind unprecedented possibilities for increasing the productive forces, raising the productivity of labour, increasing food reserves and finding new ways to combat disease and prolong human life.

However, in order to make scientific resources available for practical purposes, it would be necessary to stop the unprecedented concentration of all the resources of science and engineer-

ing for military purposes which is taking place in a number of countries today.

Such a situation leads to the creation of more and more means of mass destruction, diverting scientists and engineers from their true mission. Only when this perversion of science is abolished will the way be cleared for mankind's real progress.

Another essential condition for the rapid progress of modern science and for the extensive use of its achievements for peaceful purposes is the all-round development of international contacts and co-operation in all spheres of scientific research, cessation of undue secrecy, exchanges of experience and information, regular convocation of international scientific congresses and conferences, extensive translation of scientific literature, and so on.

When countries are not obliged to conduct scientific and technical investigations already carried out in other countries, when a rational division of labour and co-operation is established between scientists of all continents, it will be possible to quicken the scientific and technical revolution which has already begun and to direct it into organised channels, so as to concentrate the efforts of scientists on satisfying at the earliest man's most urgent needs.

Scientific and technical co-operation between states with different social and economic systems in the peaceful use of atomic energy could be promoted through the regular convocation of international conferences, broad exchange of experience and information, organisation of international and regional research institutes etc.

Such co-operation would be particularly valuable in preparing projects to develop productive forces in specific regions of the world, undertakings which could not be carried into effect by a single country, especially small or underdeveloped countries.

The following could be mentioned as examples of undertakings of this kind:

(a) Elaboration of projects and preliminary scientific and technical measures for the creation of a unified electric power system for the whole of Europe (including problems of interdependence between hydro-electric stations, thermal stations and atomic power plants).

(b) Overall development and use of big river systems which pass through a number of countries, and of border rivers, for the production of electric power, for irrigation, navigation etc.

Modern technique makes it possible to transmit electricity over long distances. This creates new possibilities for co-operation between different states with the object of raising power production in underdeveloped regions.

It would be easier to create hydro systems and to make the best use of rivers if efforts were combined internationally.

A characteristic example of this co-operation is afforded by the overall use of the Danube (which spreads its basin over the territories of eight states) to promote navigation, hydrotechnical construction, irrigation and fishing.

Many such undertakings could be promoted.

Truly limitless possibilities exist for the fruitful development of peaceful competition and co-operation between socialist and capitalist countries in all fields of science, technology, economy, education, health protection, culture, the arts and sport.

Wide exchanges of knowledge and experience, combined efforts of scientists, engineers, agronomists and doctors, and, most important, of hundreds of millions of ordinary people in all countries of the world could be most instrumental in accelerating scientific, technical and cultural progress.

But it is necessary in the first place to avert the threat of a monstrous nuclear and rocket war.

6. THE STRUGGLE FOR PEACE AND DIS- ARMAMENT IS A STRUGGLE FOR LIFE

THE FACTS MENTIONED ABOVE show how much the arms race and war injure the economy and living standards.

According to the most modest estimates, wars and war preparations swallowed up as much as \$2,500,000 million in the lifetime of one generation (forty years, between 1914 and the end of 1954). This is five times as much as the combined national incomes of seventy countries in 1949.

In the years that followed, the arms race was pushed ahead, attaining unprecedented proportions. Termination of the arms race and prevention of another world war—this is the main problem today; the very existence of the peoples, the destinies of mankind depend upon its solution.

The peoples have not yet recovered from the consequences of the Second World War. In a number of countries there is

hardly a family that did not lose somebody or was left without cripples in the war.

To this day millions of refugees are leading a miserable existence in foreign countries, away from their homes.

In many countries the people are still weighed down by such economic consequences of the war as inflation, high prices, payment of interest on the inordinately swollen state debt, scarcities of food and other prime necessities, the acute housing crisis.

Their own experience is convincing them that death and destruction emanate not only from war; preparations for war doom millions of people to incredible suffering and privation.

The arms race leads inevitably to inflation and sky-rocketing prices, wage and salary cuts, to the ruination of peasants and craftsmen, to the bankruptcy of small and medium manufacturers and businessmen. Even many big manufacturers in the industries which produce for civilian needs cannot escape the fatal consequences of the arms race.

The cold war disrupts world economic contacts; it contracts drastically and perverts international trade, credits and loans.

Possibilities for the normal development of civilian production, for extensive peaceful construction, the reduction of prices of consumer goods and improvements in people's lives, are excluded by the very essence of the arms race.

But worst of all, it inevitably aggravates the threat of another world war.

Under these circumstances it is the fundamental and decisive task of the people to wage an energetic struggle for peace, to prevent another war, for economic co-operation and the peaceful co-existence of states.

We have it from the most authoritative scientists that the modern arms race and the attending tests of thermonuclear weapons are already causing enormous harm to all life on earth.

In January 1958, a petition was laid before the Secretary General of the United Nations; it calls for an immediate termination of nuclear weapon tests since every test increases the amount of radioactive particles which injure the health of the people throughout the world.

The petition was signed by 9,235 scientists of forty-four countries, among them 101 members of the National Academy of Sciences of the United States, 216 Soviet scientists, and many Nobel Prize winners.

The courageous voice of reason, the voice of the peoples and

scientists of many countries was listened to in the Soviet Union.

Desiring to initiate in practice a general termination of atomic and hydrogen weapon tests and thus make the first move towards the complete deliverance of mankind from the threat of a devastating atomic war, the Supreme Soviet of the U.S.S.R. resolved to suspend, beginning with March 31st, 1958, the tests of all types of atomic and hydrogen weapons in the Soviet Union, and urged the parliaments and governments of other states possessing atomic and hydrogen weapons to take similar steps *in order to ensure the termination of atomic and hydrogen weapon tests everywhere and for all time.*

In its appeal to the parliaments of all countries, the Supreme Soviet of the U.S.S.R. notes that the fatal influence of nuclear tests is not limited either by geographical boundaries, or by political distinctions between states.

All states are therefore interested in the immediate termination of nuclear test explosions.

Furthermore, the termination of atomic and hydrogen bomb tests everywhere would advance the world a long way towards ending the drive for atomic armaments; it would guarantee the security of *all* nations and create a healthier international atmosphere.

This move of the Soviet Union has been welcomed by all peace-loving people.

In a statement published in May 1958, the World Federation of Scientific Workers declared its whole-hearted approval of the Soviet Government's decision to stop nuclear test explosions, and urged interested governments to adopt identical decisions to end test explosions and to establish through negotiations an effective control system in order to ensure the implementation of this decision.

This could be the prelude to a general agreement on the prohibition of all nuclear weapons, and it could end so reckless an act as the unlimited arms race.

In the existing international situation mankind can preserve peace and discard the burden of armaments which weighs heavily upon the peoples.

This is dictated by the highest interests of mankind. Peace without the feverish arms race would open up the road to a radiant and happy future for all.

Other sources of information on the Soviet Union . . .

SOVIET NEWS (Daily Bulletin) free on request published by the Soviet Embassy. Contains reports, speeches, documents, and interesting news items.

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New Steps for ^{STAT} Peace by Socialist Countries

Meeting of the Political Consultative
Committee of the Warsaw Treaty
Organisation 24 May 1958

- **Communique**
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**Soviet News
Booklet No. 31**

COMMUNIQUE on the Meeting of the Political Consultative Committee of the Warsaw Treaty Organisation

The following is the text of the communiqué issued after the meeting of the Political Consultative Committee of the states which are parties to the Warsaw Treaty of Friendship, Co-operation and Mutual Assistance :

A MEETING of the Political Consultative Committee of the states, parties to the Warsaw Treaty of Friendship, Co-operation and Mutual Assistance, was held in Moscow on May 24, 1958.

The following representatives attended the meeting of the Political Consultative Committee :

From the People's Republic of Albania—Mehmet Shehu, Chairman of the Council of Ministers, Enver Hodja, first secretary of the central committee of the Albanian Party of Labour, Behar Shtylla, Minister of Foreign Affairs, and Anf Hasko, Chief of the General Staff of the People's Army of the Albanian People's Republic.

From the Bulgarian People's Republic—Anton Yugov, Chairman of the Council of Ministers, Todor Zhivkov, first secretary of the central committee of the Bulgarian Communist Party, Karlo Lukanov, Minister of Foreign Affairs, and Pyotr Panchevski, Minister of National Defence.

From the Hungarian People's Republic—Janos Kadar, Minister of State and first secretary of the central committee of the Hungarian Socialist Workers' Party, Endre Sik, Minister of Foreign Affairs, and Colonel-General Geza Revesz, Minister of Defence.

From the German Democratic Republic—Otto Grotewohl, Chairman of the Council of Ministers, Walter Ulbricht, first secretary of the central committee of the Socialist Unity Party of Germany, Colonel-General Willi Stoph,

Minister of National Defence; Bruno Leuschner, Vice-Chairman of the Council of Ministers, and Otto Winzer, Deputy Minister of Foreign Affairs.

From the Polish People's Republic—Josef Cyrankiewicz, Chairman of the Council of Ministers; Wladislaw Gomulka, first secretary of the central committee of the Polish United Workers' Party; Adam Rapacki, Minister of Foreign Affairs; and Colonel-General Marian Spychalski, Minister of National Defence.

From the Rumanian People's Republic—Chivu Stoica, Chairman of the Council of Ministers, Gheorghe Gheorghiu-Dej, first secretary of the central committee of the Rumanian Workers' Party; Emil Bodnaras, Vice-Chairman of the Council of Ministers, Avram Bunaciu, Minister of Foreign Affairs, and Colonel-General Leon tin Salajan, Minister of the Armed Forces.

From the Union of Soviet Socialist Republics—N. S. Khrushchov, Chairman of the Council of Ministers and first secretary of the central committee of the Communist Party of the Soviet Union, A. A. Gromyko, Minister of Foreign Affairs, Marshal of the Soviet Union R. Y. Malinovsky, Minister of Defence.

From the Czechoslovak Republic—Vilam Siroky, Prime Minister; Vaclav David, Minister of Foreign Affairs, and Colonel-General Bohumir Lomscky, Minister of National Defence.

As observers from the People's Republic of China—Chen Yun, Vice-Premier

of the Government Council; and Li Fuchun, Vice-Premier of the Government Council.

Anton Yugov, Chairman of the Council of Ministers of the People's Republic of Bulgaria, presided over the session.

In conformity with Article 3 of the Warsaw Treaty, envisaging consultations between the states, parties to the treaty, on all major international questions affecting their interests, an exchange of opinion on the present international situation took place at the meeting of the Consultative Committee. The Political Consultative Committee noted with satisfaction the complete unanimity of the socialist countries, parties to the meeting, both in assessing the international situation and their common tasks in the struggle for peace and the security of the peoples. The Political Consultative Committee unanimously adopted a declaration of the states, parties to the Warsaw Treaty, which is published in the press.

The Political Consultative Committee heard a report by Marshal of the Soviet Union I. S. Konev, Commander-in-Chief of the Joint Armed Forces of the states, parties to the Warsaw Treaty, on a further reduction in the armed forces of the Warsaw Treaty countries, and on the withdrawal of the Soviet forces from the territory of the Rumanian People's Republic.

Besides the further cut in the armed forces of the Soviet Union in 1958 by 300,000 men, which was announced earlier, the states, parties to the Warsaw Treaty, resolved to effect in 1958, in addition to the earlier substantial reduction in their armed forces, another cut in the armed forces by a total of 119,000 men, including: the Rumanian People's Republic by 55,000 men, the Bulgarian People's Republic by 23,000 men, the Polish People's Republic by 20,000 men, the Czechoslovak Republic

by 20,000 men and the Albanian People's Republic by 1,000 men. Thus the Warsaw Treaty member-countries will have reduced their armed forces by 419,000 men in 1958.

The Political Consultative Committee approved a proposal of the government of the Soviet Union, agreed with the government of the Rumanian People's Republic, on the withdrawal in the near future from the Rumanian People's Republic of the Soviet troops stationed there in conformity with the Warsaw Treaty.

The Soviet government, by agreement with the Hungarian government, resolved to reduce, in 1958, the Soviet troops stationed in Hungary by one division and to withdraw it from Hungarian territory.

The Political Consultative Committee approved this decision of the Soviet government.

Decisions were also taken on certain organisational matters involved in the activity of the Joint Armed Forces of the states, parties to the Warsaw Treaty.

The Political Consultative Committee resolved to address to the member-states of the North Atlantic Treaty (N.A.T.O.) a proposal concerning the conclusion of a non-aggression pact between the states, parties to the Warsaw Treaty, and the N.A.T.O. member-states. The text of the draft of the aforesaid non-aggression pact is published separately.

The proceedings of the meeting of the Political Consultative Committee of the states, parties to the Warsaw Treaty, demonstrated the complete unity, unbreakable fraternal friendship and co-operation of the socialist countries, which are concentrating their efforts on a relaxation of international tension, the creation of an atmosphere of mutual confidence and businesslike co-operation between all states, for the further consolidation of peace.

DECLARATION OF THE STATES PARTIES TO THE WARSAW TREATY

The following is the full text of the Declaration signed in Moscow on May 24 by the representatives of the countries that are signatories to the Warsaw Treaty of Friendship, Co-operation and Mutual Assistance:

GUIDED by the interests of ensuring peace in Europe and developing peaceful co-operation among states, which is the basic task of the Warsaw Treaty Organisation, the governments of the People's Republic of Albania, the People's Republic of Bulgaria, the Hungarian People's Republic, the German Democratic Republic, the Polish People's Republic, the Rumanian People's Republic, the Union of Soviet Socialist Republics and the Czechoslovak Republic convened in Moscow on May 24, 1958, a conference of the Political Consultative Committee of the Warsaw Treaty countries so as to examine the existing international situation and work out new joint measures to ease international tension.

The exchange of views, in which an observer from the Chinese People's Republic also took part, confirmed the unanimity of the governments represented at the conference, both in their estimate of the international situation and with regard to the ways of strengthening peace.

The state of affairs in the world is being influenced to an ever greater extent by the unceasing struggle of the countries of the socialist camp for the development of international co-operation on the basis of the peaceful co-existence of states with different social structures, for the settlement of disputed questions by means of negotiations between states, for the ending of the arms race and the removal of the threat of atomic war.

The participants in the conference note with satisfaction that today it is not only the socialist countries that are directing their efforts towards strengthening peace but also most of the countries of Asia and Africa that have freed themselves from age-old colonial dependence.

Peace is also supported by the masses of the people and influential public circles, by many parties and trade unions that heed the demands of the workers, by scientists and workers in the cultural field, by clergymen, by people of different political outlooks in the countries of Western Europe, America and other continents. States pursuing a policy of neutrality are also making a positive contribution to the struggle for peace.

The development of international events is again and again giving proof of the fact that the Warsaw Treaty of Friendship, Co-operation and Mutual Assistance, signed three years ago by eight socialist states, not only reliably safeguards the security and independence of the peoples of these states but also constitutes a mighty deterrent to the activities of the military groupings of the western powers and, first and foremost, of the North Atlantic bloc, which are hostile to the cause of peace.

Those circles of the western powers and, in the first place, of the United States, who have closely linked their policy with the continuance of the "cold war" and international tension are, as hitherto, seeking to pursue a "positions of strength" policy, and to hinder the peoples from shaping their lives according to their own will. They bear the responsibility for the unceasing arms race which is acquiring an especially dangerous nature in connection with the expanding production and stockpiling of nuclear means of mass destruction. An unbearably heavy burden of military expenditure has been heaped upon the peoples of the N.A.T.O. countries. Judging only by official N.A.T.O. figures, the military expenditures of the member-countries of this bloc in 1957 were three times as great as in 1950. In all,

during the period from 1950 to 1957, the N.A.T.O. countries spent more than 400,000 million dollars on war preparations.

At the present time the N.A.T.O. military bodies are working out new plans to increase the armed forces and military expenditure of those countries, while the N.A.T.O. War Ministers' conference in April this year discussed the question of doubling the size of the armed forces placed at the disposal of the American supreme commander of N.A.T.O. It is, moreover, well known that on May 1 this year, the permanent Council of N.A.T.O. took a decision providing for the atomic arming of those participants in the North Atlantic bloc who do not at present possess such weapons. The governments of a number of N.A.T.O. countries, such as Britain, France, Italy, Turkey, and others, have, in spite of resolute protests by the population, submitted the territories of their countries for use as American launching sites for rockets bearing nuclear warheads and as storehouses for atomic weapons.

The war preparations in the Federal Republic of Germany, whose Bundestag has taken a decision empowering the Federal government to arm the West German armed forces with nuclear and rocket weapons, are coming to be of a particularly dangerous character. Thus the most dangerous types of weapons are falling into the hands of militarist and revenge-seeking circles who are raising territorial claims against other states.

The United States government, in lending its support to the policy of arming the Federal Republic of Germany and taking upon itself the task of supplying Western Germany with nuclear and rocket weapons is, as a matter of fact, encouraging these circles to pursue a policy fraught with danger to peace and disastrous consequences for the German people themselves. Measures are being taken, at the same time, to involve Western Germany in manufacturing and perfecting new types of weapons, this purpose being served by the disclosed tripartite agreement between France, Italy and the Federal Republic of Germany, on co-operation in the sphere of military

research and the manufacture of armaments.

These military preparations are giving rise to grave fears in Western Germany itself and are meeting with ever-increasing opposition from the West German population.

The present situation is being worsened in an extremely dangerous way by the practice, unheard of in time of peace, of flights by United States air force planes with atomic and hydrogen bombs over the Arctic areas towards the Soviet Union. As is well known, flights of American bombers with atomic and hydrogen bombs are also carried out over the territories of many West European countries under the pretext of patrolling the air space. These actions by the United States government border on direct provocation and if they are not stopped, mankind may any day find itself engulfed in the hurricane of a rocket and atomic war.

One cannot fail to note with satisfaction the fact that certain N.A.T.O. member-states, aware of the direction in which the policy of preparing for an atomic war and juggling with atomic weapons pursued by the major powers of this grouping is leading, are adopting a saner attitude—a circumstance which cannot fail to constitute a definite positive contribution to the relaxation of international tension, particularly in Europe. This is one of the examples showing that, even when there exist aggressive military groupings and commitments imposed by their sponsors upon the other participants in those groupings, there still remain unused possibilities for a *détente* in the European situation and for reducing international tension.

A heavy blow at the hopes of the peoples for lessening the danger of war and curtailing the atomic arms race has been dealt by the governments of the United States and Britain, who have carried out new nuclear test explosions in the Pacific even after the Soviet Union has unilaterally ceased tests of all types of hydrogen and atomic weapons. These explosions show what little concern to the governments of the United States and Britain are the interests of the peoples

demanding that an end be put to the preparations for atomic war and that real steps be taken to remove the threat of such a war.

The participants in the conference express serious concern in connection with the unceasing attempts of the governments of the United States, Britain, France and other colonial powers to interfere in the internal affairs of countries of Asia and Africa, to impose upon them regimes and governments that are alien to the peoples and are ready once again to sell out to the colonialists their countries, which have recently taken the path of national independence. If in Indonesia, Algeria, Lebanon, Yemen and Oman guns are firing and the blood of patriots is being shed, the blame for this rests with those same imperialist circles whose policy is being pursued by N.A.T.O., the Baghdad Pact organisation and S.E.A.T.O., and who, by means of pressure and flagrant interference in the internal affairs of other states, are seeking to lay their hands on the natural resources of these countries and to strangle the national liberation movement of the peoples of Asia and Africa. Just as last summer the clouds gathered over Syria, so today dangerous schemes are being carried out against Lebanon, and this time the United States, falling back on the notorious "Dulles-Eisenhower doctrine," which has been rejected by the Arab peoples, is making ready to set its armed forces in action against a state which wants nothing more than to be master in its own house and to be free from foreign dictation.

It would not be out of place to pose the question of who gave any state the right to impose various doctrines on other countries. Indeed, the time has long since passed when force and arbitrary behaviour could disregard law and even be presented as law. The Dulles-Eisenhower doctrine has clearly pursued the aim of meddling in the affairs of other states, and its authors have not scrupled to declare this openly. And all this is taking place before the eyes of the United Nations, which, so it would seem, should react to deeds constituting interference in the internal life

of the countries of the East, in as much as this is a breach of international law and is condemned by the United Nations Charter. The United Nations, however, owing to the position of certain western powers, remains paralysed and is taking no steps to safeguard the independence of Lebanon or of other states either, which are being subjected to the schemes of imperialist circles.

There exists the opportunity for the United Nations to become a genuinely international organisation and an effective instrument in the struggle for peace, provided all its member-states are guided, not by their narrow interests, but by the interests of peace and the security of nations.

The Warsaw Treaty countries have directed, and will continue to direct their actions towards enabling the United Nations to accomplish successfully the tasks entrusted to it by the Charter.

The states parties to the Warsaw Treaty are convinced that the denial to the Chinese People's Republic of the possibility of occupying its lawful place in the United Nations is doing serious harm to the activities of the United Nations. They are also profoundly convinced that the participation of People's China in the activities of the United Nations would be of great positive significance for the maintenance of peace in the Far East, and also for the cause of peace throughout the world.

For a number of years France has been waging a bloody war against the people of Algeria, who are fighting for self-determination and independence. The war in Algeria not only constitutes a monstrous injustice against the freedom-loving Algerian people but also creates a dangerous hotbed of international tensions and conflicts in that part of the world.

The sponsors of N.A.T.O. and the other blocs of the western powers associated with it are striving to conceal the war preparations being carried out by them on an ever-increasing scale and their interference in the internal affairs of other countries by false references to the "danger of international com-

munism." Whether it is a question of equipping the Bundeswehr with atomic weapons or of preparing armed intervention in the affairs of Lebanon, of deploying American rocket installations in foreign countries or of increasing budget allocations for military purposes, of sending American planes with atomic and hydrogen bombs to the frontiers of the Soviet Union or of restricting international trade—in all these cases this device, which is far from new, is brought into play.

Can anyone have forgotten that the preparations of Hitler Germany for the Second World War were also carried out under the banner of the struggle against the "danger" of communism. Millions upon millions of people who let themselves be misled by that false propaganda paid for it with their lives in the last war. It cannot be assumed that the nations have not drawn conclusions from those dramatic lessons and have not learned, on the basis of their own experience, to discern the real source of the threat of war.

The states united by the Warsaw Treaty and also the socialist states of Asia do not have and cannot have any motives for attacking other countries and seizing foreign lands. The Soviet Union, the Chinese People's Republic and the socialist camp as a whole possess immense expanses of land and untold natural resources. But the main wealth of the socialist countries are the people, the inexhaustible creative forces of the nations which have liberated themselves from exploitation and are following the path of social progress. There is no chance of any groups or sections of the population interested in war emerging in any of these countries, since power in them is wielded by the workers and peasants and they are the ones who bear the greatest sacrifices in any war. They create all the necessary material wealth with their own hands and it is not in their nature to covet what is not theirs.

The people of our countries are devoting all their efforts to the creation of a new social system which will guarantee general prosperity and allow for the comprehensive and maximum

development of man's spiritual abilities. And for this purpose they need, first and foremost, firm and lasting peace. That is why nothing can be more remote from the truth than the allegations that the socialist countries can threaten anyone or that they want to force their way of life on to others.

The states that are parties to the Warsaw Treaty have no reason whatsoever to fear the easing of international tension; they are united, not by the "cold war" atmosphere, not by the state of war hysteria in which the advocates of military preparations want to keep the world, but by their common ideals and aims in the building of the new socialist society and the strengthening of peace among nations. An improvement in the international situation is feared by those who do not want to risk the loss of fabulous profits extracted from the pockets of taxpayers owing to the arms race, and who stand for the preservation of military groupings, the existence of which will become absolutely unjustifiable and superfluous if tension decreases, if confidence among the states is enhanced and the "cold war" ended.

The states signatories to the Warsaw Treaty resolutely condemn the course pursued in N.A.T.O. by the leading states of this aggressive grouping—a course aimed at worsening the international situation and preparing for an atomic war. They call upon the governments of the countries of the North Atlantic Alliance not to permit at the present critical time any steps that might further worsen the already grave situation in Europe and in some other parts of the world. For the war danger not to grow, but to decrease, for mutual mistrust and suspicion among states to give way to confidence and businesslike co-operation, it is necessary, above all, to refrain from such actions as the reckless deeds of the American air force or the decision concerning the atomic arming of Western Germany, which constitutes a challenge to all European nations.

The socialist countries of Europe and Asia have given ample proof of their good will and desire for co-operation with other states in the interests of

strengthening peace among nations. All the parties to the Warsaw Treaty have repeatedly carried out unilateral reductions of their armed forces, which since 1955 have been reduced by 2,477,000 men. The armaments, war material and defence expenditures of these countries have been reduced accordingly. During this period the Soviet Union has cut its armed forces by 2,140,000 men; the Polish People's Republic has cut its armed forces by 141,500 men, the corresponding figure for the Czechoslovak Republic being 44,000, for the German Democratic Republic, 30,000; the Rumanian People's Republic, 60,000; the People's Republic of Bulgaria, 18,000; the Hungarian People's Republic, 35,000; and the People's Republic of Albania, 9,000.

No one can deny that states carrying out reductions in their armed forces to such a considerable extent are preparing, not for war, but for peaceful co-operation. And on the contrary, when states are building up their armaments and increasing their armed forces, this is a sure sign that they, or rather those who shape their policy, are thinking not of peace, but of war.

It appears that the N.A.T.O. countries are responding to the reduction of the armed forces and military expenditures of the states that are parties to the Warsaw Treaty by increasing the number of their troops, augmenting their military budgets and building up their armaments. By pursuing this policy, the N.A.T.O. leaders would like to prevent the relaxation of international tension and the reaching of agreement among states which would guarantee their peaceful co-existence, and in that way to impel the Warsaw Treaty states to participate in the arms race and in the "cold war," so as to slow down peaceful construction and the improvement of the living standards of the peoples of the socialist countries. All this makes it incumbent upon the peoples to be on their guard and to be more active in the struggle against forces working towards the preparations for war.

The participants in the conference take pride in the fact that of the three powers possessing nuclear weapons it was

a state belonging to the Warsaw Treaty Organisation, namely the Soviet Union, that undertook a step of a very humane nature in adopting the decision to discontinue unilaterally tests of all types of atomic and hydrogen weapons. This noble step of historic significance paves the way for the final deliverance of mankind from the threat of a devastating atomic war. The government of the Chinese People's Republic has taken, and is rapidly carrying out, the decision to withdraw the Chinese volunteers from Korea. The United States would have contributed in no small measure to the consolidation of peace in the Far East and to the settlement of the Korean question if it had followed the example of People's China and withdrawn its forces from South Korea, also dismantling all its bases on South Korean territory.

The government of the Polish People's Republic has displayed valuable initiative, which has as its aim the removal of the danger of an atomic war in Europe and which has met with wide international recognition, in proposing the creation in central Europe of a zone free from the production, deployment and use of atomic, hydrogen and rocket weapons.

The proposal of the government of the German Democratic Republic concerning the establishment of a German confederation has opened up a real prospect for ending the unnatural situation in Germany which, 13 years after the end of the war, still remains split into two parts. The governments of the states represented at the conference express their appreciation of this proposal and give it their wholehearted support.

With a view to settling urgent international issues and meeting the universal demand of the peoples that measures be taken to ease international tension and eliminate the "cold war," the Soviet Union, having consulted the other socialist countries, came out with a proposal that a summit conference be held of leading statesmen of East and West. The governments of the Warsaw Treaty countries regard the summit conference as a major means, in the existing

circumstances, to protect mankind from the disaster of war and to direct developments in the international field towards the strengthening of peace. The participants in the conference express their satisfaction at the fact that the agenda for the summit conference proposed by the Soviet side contains questions for whose solution there exist real prerequisites and whose settlement would promote an improvement in the situation and the strengthening of security in Europe, and would also facilitate the removal of mutual distrust. These questions are:

1. The immediate ending of tests of atomic and hydrogen weapons.
2. Renunciation by the U.S.S.R., the United States and Great Britain of the use of nuclear weapons.
3. The establishment in Central Europe of a zone free from atomic, hydrogen and rocket weapons.
4. The conclusion of a non-aggression agreement between members of the North Atlantic Alliance and states parties to the Warsaw Treaty.
5. The reduction of the number of foreign troops on the territory of Germany and within the frontiers of other European states.
6. The drawing up of an agreement on questions connected with the prevention of a surprise attack.
7. Measures for the extension of international trade ties.
8. The ending of war propaganda.
9. Ways of easing tension in the Middle East area.
10. Prohibition of the use of outer space for military purposes, the liquidation of foreign military bases on alien territories, and international co-operation in exploring outer space.
11. The conclusion of a German peace treaty.
12. The development of ties and contacts between countries.

First among these questions is the ending of atomic and hydrogen weapon tests. The governments responsible for the destinies of their peoples have no right to ignore the warnings uttered by thousands of scientists from various countries of the world against the

harmful effects of atomic and hydrogen weapon tests and the dreadful consequences of a nuclear war. One cannot but take into account the warnings of the scientists who point out that in the event of atomic and hydrogen weapon tests continuing further as they have hitherto, millions of people in every generation will be affected by hereditary diseases.

The immediate ending of atomic and hydrogen weapon tests accords with the hopes and aspirations of people all over the world who are alarmed by the dreadful consequences of these tests. An agreement on this issue would halt the creation of new and ever more lethal types of nuclear weapons and would be a major step towards the cessation of the atomic arms race.

One cannot fail to see that the refusal by the governments of the United States and Britain to follow the example set by the Soviet Union, and the continuation of their atomic and hydrogen weapon tests can only throw mankind back to the starting point on this question, which is of the utmost importance for its destiny, in which case the grave responsibility would rest entirely with the governments of the United States and Britain. The participants in the conference declare that the peoples of the states they represent, being fully determined to use all possible means to promote the consolidation of peace and the prevention of a new world conflagration, are interested in establishing in the centre of the European continent a zone free of atomic, hydrogen and rocket weapons and including the two German states—the German Democratic Republic and the Federal Republic of Germany—and also Poland and Czechoslovakia.

In giving support to the proposal of the Polish People's Republic on the establishment of a zone free from nuclear and rocket weapons, the participants in the conference are not seeking any military advantages for themselves.

A comparison between the territories of the states to be included in an atom-free zone will show that the territory of the German Democratic Republic,

Czechoslovakia and Poland is more than double that of the fourth state in this zone—Western Germany. Furthermore, the population of the Warsaw Treaty states in this zone also exceeds the population of the member of the North Atlantic Alliance in this zone. As regards their own production of nuclear weapons it is known that none of these countries—the German Democratic Republic, Czechoslovakia, Poland or the Federal Republic of Germany—manufactures this kind of weapon. Moreover, the government of the Federal Republic of Germany at one time assumed an international obligation not to manufacture such weapons in the future. All this is evidence of the absence of any grounds for supposing that the establishment of an atom-free zone will offer any one-sided military advantage to the Warsaw Treaty countries to the detriment of the interests of N.A.T.O. states. On the contrary, the realism of the proposal for an atom-free zone in Europe consists in the very fact that the member-states of the Warsaw Treaty and the member-states of N.A.T.O. would, in accordance with this proposal, reciprocally undertake such measures in the field of atomic disarmament as would, taken as a whole, be equal in their military significance.

The participants in the conference welcome the readiness of the Soviet Union, as one of the major states possessing nuclear weapons, to assume the obligation to respect the status of the atom-free zone and to regard the territory of the countries of this zone as being excluded from the sphere of the use of atomic, hydrogen and rocket weapons.

It is to be regretted that the government of a non-European power—the United States—not only hastened to declare its negative attitude to the proposal for the establishment of an atom-free zone in the centre of Europe, but also considered it possible to bring pressure to bear upon its European N.A.T.O. allies so as to complicate the submission of this proposal to the summit conference and its subsequent examination. This initiative, however,

is aimed at achieving a *détente* in Central Europe and at reducing the possibility of an atomic war breaking out in this region. The implementation of this initiative, directed as it is towards a partial solution, would facilitate the achievement of broader agreements in the field of disarmament, thus contributing to reaching the main goal of all the peoples, that is to say, the removal of the danger of an atomic war in Europe, and thereby war in general. It should be noted that it is precisely in this sense that this initiative has been interpreted by broad circles of public opinion and various political circles in the West.

The ruling circles of some members of N.A.T.O., professing their desire for successful negotiations, are actually going all out to make it more difficult to convene a summit conference, if not to avoid such a conference altogether. It is with this aim in view that the trumped up question is raised of the so-called situation in the East European countries—a question which in actual fact does not exist. The participants in the conference resolutely reject any discussions of this question as inadmissible interference in the domestic affairs of sovereign states which is incompatible with international law and the United Nations Charter. The states taking part in the conference declare that they will not tolerate any interference in the internal affairs of their countries, whose peoples have firmly and irrevocably taken the road of building socialism and who are determined to safeguard the work of their peoples and their security against any schemes from outside.

As to the attempts to bring before a summit conference the question of German unity, they can only serve the purposes of those who want to prevent the calling of a summit conference and do not want to see it brought to a successful conclusion. The states that are parties to the Warsaw Treaty fully understand the desire of the German people for the elimination of the division of the country and they are in favour of the restoration of Germany's unity and the establishment of a peaceful, democratic

German state. But they believe that this problem can only be solved by the German people themselves as represented by the two German states now in existence, and only through agreement between them. There is no other way of solving the German question. Other states, no matter what rights they may claim, are not competent to tackle this problem over the heads of the German people and the governments of the German Democratic Republic and the Federal Republic of Germany by which they are represented.

The participants in the conference fully share the opinion of the Soviet government that a summit conference should discuss that part of the German problem which is the responsibility of the four powers, namely the question of a German neutral treaty. The participation of representatives from both German states in the preparation of a peace treaty as proposed by the Soviet Union, would give the German people a clear prospect of Germany's future development and would serve as an impetus to uniting the efforts of the German Democratic Republic and the Federal Republic of Germany in the restoration of the German people's national state unity.

The states that are parties to the Warsaw Treaty attach great importance to the participation in a summit conference of neutral states which are not bound by military obligations to either of the opposing military groupings and which have proved their adherence to the cause of peace and international co-operation. The participants in the conference cannot but express their regret that the U.S.S.R.'s proposal of the participation of neutral states in a summit conference meets with no support from the western powers.

In view of the fact that the western powers are not inclined to hold a conference with a broad representation of the governments of the countries parties to the Warsaw Treaty and it is possible in the interests of achieving the necessary agreement, not to insist on the participation in the summit conference of all states that are members of the North Atlantic Pact and all states parties to the

Warsaw Treaty and agree at the present stage to a more limited number of participants in the meeting so that the North Atlantic Pact and the Warsaw Treaty are represented in the talks by three (four) countries each.

For this purpose they give full powers to the Soviet Union, the Polish People's Republic, the Czechoslovak Republic (the Rumanian People's Republic) to take part in a summit conference on behalf of the countries that are signatories to the Warsaw Treaty.

The participants in this conference have come to the unanimous conclusion that the present situation demands of all states new efforts towards easing international tension and solving the most important outstanding problems of our time. The Soviet Union and the other socialist countries parties to the Warsaw Treaty have consistently sought agreement with the western powers on questions connected with the disarmament problem. With these aims in view, they have not only put forward specific proposals but have unilaterally taken a number of practical steps in this sphere. However, the governments of the United States, Britain, France and other countries that are members of the North Atlantic Pact have not responded to all these proposals and continue to pursue the policy of the "cold war" and of building up their armed forces and armaments in a dangerous way.

Taking advantage of the fact that they commanded the majority in the United Nations Disarmament Commission and its sub-committee, the western powers evaded businesslike, honest negotiations and on August 28, 1955, put forward such proposals as, in fact, not only failed to provide for the prohibition of atomic and hydrogen weapons and the reduction of the armed forces and armaments of states but also flung the door wide open for a further arms race.

Having imposed these proposals upon the last session of the General Assembly and taken steps to maintain in the U.N. Disarmament Commission the predominance of members of the military bloc organized by them, the western powers have created in the U.N. Disarmament

Commission a situation that precludes all hopes of a positive solution to the question of disarmament within that body. In these conditions the best prospects for a solution to urgent questions of disarmament on which there already exists a possibility of coming to mutually acceptable agreements, are opened up by a summit conference with the participation of heads of government.

The states parties to the Warsaw Treaty consider it their duty to exert the maximum efforts to urge the western powers genuinely to take the path of disarmament and thereby to prevent military conflict on the continent of Europe and to avoid the tragedy of a new war. Representatives of the states that are parties to the Warsaw Treaty have met to substantiate, not by words but by new and definite deeds and proposals, their heartfelt desire for the strengthening of peace and security in Europe. Desirous of breaking the deadlock on the disarmament problem and of achieving a turn towards the strengthening of confidence and peaceful co-operation among states, the governments represented at the conference have taken a decision to bring about unilaterally a further reduction of the armed forces of the states that are parties to the Warsaw Treaty by 419,000 men. Armaments, war material, and military expenditures will be reduced accordingly.

The participants in the conference have heard and discussed the proposal of the Soviet government, agreed upon with the government of the Rumanian People's Republic, to withdraw from the territory of the Rumanian People's Republic the Soviet troops stationed there under the Warsaw Treaty. The participants in the conference approve of this proposal and express their confidence that it will be received by all the peoples as further proof of the consistent peace-loving policy pursued by socialist countries.

The governments of the states parties to the Warsaw Treaty express the hope that the United States of America, Britain, France and other North Atlantic Pact countries will, for their part, take steps to reduce their armed forces and

armaments and thus prove by deeds their desire to strengthen peace and security in Europe. The association of the N.A.T.O. members with the measures of the socialist countries for the reduction of armed forces and armaments would contribute not only to a *detente* in relations between European countries and to the ending of the arms race, but would also provide a possibility of relieving the peoples of Europe of the inflated military budgets which year by year devour an ever-increasing part of the material resources of states, and would open the way towards the economic and spiritual wellbeing of the peoples.

The parties to the Warsaw Treaty advocate the abolition of all military blocs and groupings since the existence of those blocs and groupings leads to the worsening of relations between states and creates a constant danger of a military conflict between them. However, taking into consideration the fact that the western powers are not ready to disband the military groupings created by them and to establish instead an effective system of collective security in Europe and also in other regions of the world, the participants in the conference consider it necessary to take preventive measures to ease the frictions that arise and to prevent contradictions between the two major groupings of states from growing into a military conflict. For this purpose they propose that the countries that are parties to the Warsaw Treaty and the North Atlantic Pact should conclude a non-aggression pact which could be based on the following reciprocal commitments:

1. Not to resort to the use of force against each other, or to the threat of force;
2. To refrain from any interference in each other's internal affairs;
3. To solve all disputes that may arise between them by peaceful means only, in a spirit of understanding and justice, through negotiations between the parties concerned;
4. To hold mutual consultations when a situation arises that might endanger peace in Europe.

The conference has drawn up a draft of a non-aggression pact between the N.A.T.O. member-states and the Warsaw Treaty countries which it has been decided to hand over to the governments of the N.A.T.O. countries.

The states parties to the Warsaw Treaty call upon the N.A.T.O. countries to accept this proposal to conclude a non-aggression pact. They are convinced that if the N.A.T.O. powers finally found a beginning of the desired turn in the development of the international situation towards confidence and peaceful co-operation between the states now opposing each other as members of military groupings. It is, after all, clear to everybody that a new war can break out only as the result of a conflict between these two groupings. On the other hand, it is no less clear that if the machinery of these military groupings, embracing 23 states with the most developed war industries, is not set in motion for attack against each other, there will be no such war.

Furthermore, the obligation of non-aggression is an efficient deterrent and violation of this obligation, as the experience of history proves, places an aggressor in a position of international isolation facilitating the consolidation of the forces opposing aggression, and thereby facilitating the defeat of an aggressor.

The participants in the conference note as a positive sign the fact that the idea of a non-aggression pact met with a favourable response on the part of the British government, which was made clear by Mr. Macmillan, the Prime Minister of Britain, some time ago.

The states parties to the Warsaw Treaty are ready at any time to appoint their representatives for an exchange of views with representatives of the N.A.T.O. members on matters arising from the proposal to conclude a non-aggression pact. Such an exchange of views could take place immediately before a summit conference and could facilitate the adoption by that conference

of the final decision concerning the conclusion of the pact.

The international situation is such that in taking new steps to end the "cold war," to reduce armed forces and to create conditions for peaceful co-existence, we all have to show sober minds and a sense of responsibility for the security of our socialist countries. We must not allow the sense of vigilance of the peoples of the socialist countries to weaken, for the peaceable efforts by the Warsaw Treaty states do not as yet meet with a response from the governments of the N.A.T.O. countries which are seeking to continue to worsen the international situation and intensify the arms race. It is necessary to continue in the future all efforts to prevent the creation of conditions under which advocates of the "positions of strength" policy could resort to the use of force against the socialist states. This means that in seeking unwaveringly for a *détente* in international relations, the Warsaw Treaty states will in no degree whatsoever relax their concern for the security of their peoples. Let the governments of countries basing their policy on "positions of strength" and trying to balance on the "brink of war" always bear in mind that war against the socialist countries can only bring the aggressor to his doom.

The states represented at the conference declare that they will do their utmost to defend unflinchingly the cause of peace and to struggle for the prevention of a new war. They consider that at the present time the governments of states do not and cannot have a more pressing and noble task than that of establishing lasting peace and ridding the peoples of the threat of a devastating nuclear war. They also consider that the governments should proceed in international affairs, not from what separates the countries, but from what draws them together, in order to ensure, by joint efforts, peace in Europe, and consequently throughout the world.

Wars have on many an occasion brought calamity and destruction to Europe. The many ruins of towns and

villages in the countries of Europe which are to be seen even now bear witness to this. Many millions of crippled people are also a reminder of wars. The tens of millions of men, women and children devoured by the flames of the Second World War are still alive in memory. It is the duty of the governments of all states to prevent a new outbreak and to save Europe and mankind from a new and immeasurably graver tragedy. Europe, with its monuments of centuries-old culture and its numerous big industrial centres, must cease to be a battlefield. It can and must become a zone of peace, tranquillity and security.

War is not inevitable; war can be prevented. The joint efforts of the peoples can protect and strengthen peace Moscow, May 24, 1958

This Declaration bears the signatures of M. Shehu, Chairman of the Council of Ministers of the People's Republic of Albania; A. Yugov, Chairman of the Council of Ministers of the People's Republic of Bulgaria; J. Kadar, Minister of State of the Hungarian People's Republic; O. Grotewohl, Chairman of the Council of Ministers of the German Democratic Republic; J. Cyrankiewicz, Chairman of the Council of Ministers of the Polish People's Republic; C. Stoica, Chairman of the Council of Ministers of the Rumanian People's Republic; N. S. Khrushchov, Chairman of the Council of Ministers of the U.S.S.R.; and V. Siroky, Prime Minister of the Czechoslovak Republic.

DRAFT PACT OF NON-AGGRESSION Between States Parties to the Warsaw Treaty and States Parties to the North Atlantic Treaty

THE High Contracting Parties, states parties to the Warsaw Treaty of Friendship, Co-operation and Mutual Assistance of May 14, 1955, on the one hand, and states parties to the North Atlantic Treaty of April 4, 1949, on the other hand,

Being desirous of putting into effect in international relations the aims and principles of the Charter of the United Nations;

Attaching great importance to the necessity of maintaining and developing peaceful relations and co-operation between states on the basis of equality, non-interference in internal affairs, non-aggression, mutual respect for territorial integrity and state sovereignty;

Inspired by the desire to promote the relaxation of international tension and the creation of an atmosphere of uni-

versal confidence in relations between states;

And considering that in view of the existence in Europe of two opposing groupings it will be of great importance for improving the international situation, terminating the arms race and removing the threat of a new war if the members of these groupings undertake reciprocal obligations not to resort to the use or threat of force in international relations;

Have decided to conclude the present Pact of Non-Aggression and have authorized it to be signed: for the states parties to the Warsaw Treaty by the Union of Soviet Socialist Republics, the Polish People's Republic, the Czechoslovak Republic and the Rumanian People's Republic; for the states parties to the North Atlantic Treaty by . . .

Article 1. Noting that the use or

threat of force in international relations is prohibited by international law and, in particular, by the Charter of the United Nations, the states parties to the Warsaw Treaty and the states parties to the North Atlantic Treaty solemnly undertake to observe strictly this prohibition and not to resort to the use or threat of force against one another, jointly or separately.

Article 2. All disputes that may arise between one or more parties to the Warsaw Treaty, on the one hand, and one or more parties to the North Atlantic Treaty, on the other hand, shall be resolved by peaceful means only, on the basis of the invariable observance of the principle of non-interference in the internal affairs of states, in the spirit of mutual understanding and through negotiations between the parties concerned or by using other means of peaceful settlement of international disputes as provided for by the United Nations Charter.

Article 3. Should a situation arise which might endanger the preservation of peace or security in Europe, the states parties to the present Pact shall consult together with a view to taking and implementing such joint measures

as, in conformity with the United Nations Charter, may be considered appropriate for a peaceful settlement.

Article 4. The present Pact has been concluded for a period of 25 years.

The Pact shall come into force on the day of its signing by duly authorised representatives of the states parties to the Warsaw Treaty of Friendship, Co-operation and Mutual Assistance of May 14, 1955, and the states parties to the North Atlantic Treaty of April 4, 1949.

In the event of the North Atlantic Treaty of April 4, 1949, and the Warsaw Treaty of May 14, 1955, being terminated, the present pact will become invalid.

Article 5. The present Pact, of which the Russian, English and French texts are authentic, shall be deposited for safekeeping with the Secretary-General of the United Nations. Duly certified copies thereof shall be transmitted by the Secretary-General of the United Nations to the governments of states parties to the present Pact. In witness whereof the undersigned Plenipotentiaries have signed the present Pact and have affixed thereto their seals.

Done in the city of . . .

N. S. KHRUSHCHOV'S SPEECH at Meeting of Political Consultative Committee of Warsaw Treaty

N. S. Khrushchov, Chairman of the U.S.S.R. Council of Ministers and head of the Soviet delegation at the meeting of the Political Consultative Committee of the Warsaw Treaty, made the following speech at the committee's meeting on May 24:

DEAR COMRADES, more than two years have passed since the last meeting of the Political Consultative Committee of the states parties to the Warsaw Treaty, held in Prague in 1956. This period has been packed with many important international events.

In summing up briefly the meaning and significance of these events, we may say with confidence that the principal result of the last two years is the further growth of the strength of the countries of the socialist camp and their increased cohesion, and the growth of the forces

of peace throughout the world. These factors are having an ever-increasing effect on the international climate, tending to remove the danger of a new war and to consolidate world peace.

It would be a mistake, however, to ignore the fact that influential circles of the imperialist powers, in spite of the obvious failures of their "positions of strength" policy, are intensifying their military preparations, openly banking on preparing a war with the use of nuclear and rocket weapons.

In these conditions the principal task today, just as was the case at our 1956 meeting in Prague, is to wage a persistent struggle for peace, to remove the threat of a new war breaking out, for the relations among states to be based on the principles of peaceful co-existence and businesslike co-operation. The efforts of all peace-loving states and peace supporters in all countries must be aimed at ending the arms race, ending the "cold war" and establishing an

atmosphere of trust in international relations.

Wars between states have always brought down grave disasters upon the peoples. But a future war, if the aggressors succeed in unleashing it, threatens to become the most devastating war in the history of mankind, because there is no guarantee that it would not become a nuclear war, with all its catastrophic consequences. Millions of people would perish; great cities and industrial centres would be razed from the face of the Earth; unique cultural monuments created by mankind throughout the ages would be irrevocably destroyed in the conflagration of such a war, and vast territories would be poisoned with radioactive fall-out.

Therefore there is not, nor can be, any task more important or noble than that of barring the road to a new war, of relieving the peoples of our planet of the grave danger that is looming over them. This is what the supreme interests of mankind demand.

Overcoming the Resistance of the Forces Hindering the Normalisation of the International Situation and Peaceful Co-existence

THE peoples refuse to reconcile themselves to the growing danger of the outbreak of a nuclear war and with ever-increasing determination they are opposing the aggressive policy of certain influential western circles. The resistance of broad masses of the people to the adventurist policy of "balancing on the brink of war" has assumed unprecedented scope.

Mass public organisations, trade unions, people prominent in culture and science, members of the clergy, millions of ordinary men and women in all countries of the world are coming out in favour of the peaceful co-existence of states, irrespective of their social systems, in favour of settling outstanding

international problems by peaceful negotiation, in favour of a radical relaxation of international tension.

Not only the governments of the countries of the socialist camp but also many governments of other peace-loving states, and in particular those which have recently freed themselves from colonial oppression, are supporting the idea of negotiations for the purpose of easing international tension.

One should bear in mind, however, that along with the steady growth of the forces striving to strengthen peace and to rid mankind of the danger of a devastating nuclear war, those circles in imperialist states who pin their hopes on continuing the "positions of strength"

policy and preparing a new war, are also intensifying their activity.

These circles were alarmed by the fact that after the Geneva conference of the heads of government of the four powers in 1955 there appeared signs of a relaxation of international tension. They feared lest the extension of businesslike co-operation between socialist and capitalist states might result in an easing of international tension, in the ending of the "cold war," which would provide prerequisites for solving the disarmament problem.

Certain influential circles regard such a course of events as a threat to their own selfish interests. They fear lest the solution of the disarmament problem, and consequently a drastic cut in military spending, might result in a considerable reduction of the super-profits which monopolies are making out of military orders. For this reason the monopolies are interested in preventing the relaxation of international tension, in preserving the state of "cold war," in once again worsening the relations among countries.

A clear example of the efforts of international reactionary forces to worsen the international atmosphere and create a dangerous hotbed of war in Europe was the counter-revolutionary uprising staged in Hungary. That gamble fell through, however. The Hungarian people, with the assistance of countries of the socialist camp, upheld their own people's power and gave a fitting rebuff to the international reactionary forces and the Hungarian counter-revolution.

The smashing of the counter-revolutionary uprising in Hungary demonstrated in a completely convincing way the strength of the people's democratic system, the might and cohesion of the socialist camp.

The events in the Middle East, when certain western circles launched an open military attack on Egypt, are still fresh in everyone's memory. By organizing the British, French and Israeli aggression against Egypt, those circles planned to cash in on the Hungarian events and

suppress the national liberation movement in the Middle East, to restore their colonial domination both in Egypt and in the other countries in that area.

The heroic resistance of the Egyptian people, and also the firm stand and assistance of the Soviet Union, the Chinese People's Republic and the other countries of the socialist camp, had a sobering effect on the belligerent circles of Britain, France and Israel and made them end the aggression and withdraw their armed forces from Egyptian territory.

The successful struggle of the Egyptian people against the foreign invaders resulted in the consolidation of the freedom and independence, not only of Egypt, but of other Arab states as well. Seeing in this a threat to the domination of the American monopolies in the Middle East countries, the United States put forward the so-called Dulles-Eisenhower doctrine. This doctrine has the aim of facilitating—under the pretext of filling the "vacuum" allegedly formed following the defeat of Britain and France—the American monopolies' task of replacing Britain and France in the Arab East and extinguishing the national liberation movement in Africa and the Middle East.

It is common knowledge that the "Dulles-Eisenhower doctrine" met with resistance in the Middle East countries, whose peoples have learned sufficiently well from their own experience what colonial oppression is like.

Having suffered a defeat in this fresh attempt to establish their domination in the Middle East, the initiators of this colonialist doctrine began to hatch plots against Syria. By conspiring against the lawful Syrian government they counted on sparking off a military conflict between the countries of this area, on worsening the situation in the whole of the Middle East, on strangling Syria's independence and thus attaining their own selfish ends.

At this difficult time the Syrian people received the help and support of the Soviet Union and other peace-loving

countries, which prevented the aggressive circles from carrying out their plans.

The war against the Algerian people, who are upholding their lawful right to self-determination and independence, is still continuing. A peaceful settlement of the Algerian question through the satisfaction of these just demands of the Algerian people and with due consideration for the historically-shaped relations between France and Algeria would be in line with the interests of world peace. We are deeply convinced that such a settlement will be in keeping with the interests of the peoples both of Algeria and France.

By ending the war against Algeria and thereby eliminating the possible danger of it becoming a large-scale military conflict, which cannot but alarm the Soviet people, France would contribute greatly to the strengthening of world peace.

The systematic raids by British troops on the peaceful towns and villages of Yemen are also continuing to an increasing extent.

These actions of Britain, inflicting numerous losses among the peaceful Yemeni population, are arousing the just anger of all decent people.

An object of foreign intrigues and dangerous provocations at the present time is Lebanon, where the western powers are openly meddling in the internal affairs of that state with a view to establishing a colonial régime there and dealing a blow at the national liberation movement of the peoples of the Arab East in general.

Some states which are members of the aggressive S.E.A.T.O. bloc have embarked upon the path of military interference in the internal affairs of the Indonesian Republic where they are rallying together the local reactionary forces, supplying them with arms, and even smuggling armed hirelings into the country to fight against the lawful government of Indonesia.

Recent events show that the ruling circles of the western powers continue

to go out of their way to step up the arms race, out of which a handful of monopolists are enriching themselves at the expense of millions of ordinary workers, and continue to oppose the easing of international tension and to cling to the "cold war" policy. This is seen particularly clearly from the attitude of the western powers on the question of calling a summit conference with the participation of the heads of government, as proposed by the Soviet Union. Striving to delay the summit meeting, they repeat over and over again that it is necessary to "prepare it carefully," although the entire world knows that preparations are not the point at issue.

In the interests of the early convocation of this meeting, the Soviet government has met half way the wishes of the western powers on several questions.

It agreed to preparatory work being carried out through diplomatic channels and through Foreign Ministers, and also to the holding, in the course of these preliminary conferences, if need be and by mutual consent, of an exchange of views on the problems which the parties suggest for inclusion in the agenda of the summit meeting, for the purpose of ascertaining the desirability of including a particular question and the possibility of taking mutually acceptable decisions on it.

The governments of the western powers, however, are now apparently looking for fresh excuses for shirking a meeting with the participation of the heads of government.

Indeed, although more than five months have gone by since the Soviet Union proposed a summit meeting, the governments of the United States, Britain and France have still given no answer either with regard to the questions involved in organizing the conference, namely, concerning its date, venue and composition, or with regard to the range of problems which are to be considered at the conference.

Thus, when it is a question of preparations for a top-level conference

to settle pressing international problems, the western powers and their diplomatic departments certainly move at a snail's pace.

There has been more than enough time to prepare the conference. But the fact is that the leaders who now stand at the helm of the leading N.A.T.O. member-states refuse to take the road of peaceful co-existence, refuse to renounce the policy of cold war.

This is the reason why the much needed turning point in the development of international events towards the normalisation of the international atmosphere has not as yet been reached.

However, we are now living, not in the 18th, and not even in the 19th century, when some rulers or other could ignore the will of the peoples, although it must be said that even in those times that was far from being a safe thing to do. In our days hundreds of millions of people in all countries have advanced to active political life and hardly anyone would be able to ignore indefinitely the will of the peoples for peace.

Already at the present time the more far-sighted political leaders of the capitalist world have realised the need for radical changes in the methods and approach to the solution of international problems. True, one can also not infrequently hear from those leaders of the western powers who shape the policy of military blocs, assurances about their peaceable intentions and readiness to settle international problems by negotiation. But real intentions are gauged, not by words, but by deeds. If we look at the policy of the western powers from this angle, we shall see a totally different picture.

It is a fact, Comrades, that while dragging out negotiations on a summit meeting, the western powers are intensifying their military preparations and for this purpose have already held a series of conferences of various military blocs—N.A.T.O., S.E.A.T.O., the Baghdad Pact.

The feverish haste with which this activity is being developed indicates that the opponents of a relaxation of international tension, sensing the indomitable

force of the popular demand for a summit meeting, want to confront the peoples with accomplished facts, to worsen the atmosphere, to prevent the calling of such a meeting or to doom it to failure.

The western powers are now trying hard to draw more states into military blocs, to unite the existing aggressive groupings—N.A.T.O., S.E.A.T.O. and the Baghdad Pact—in a single bloc under the leadership of the United States of America, and to create new military blocs directed against the Soviet Union and the people's democracies. In this connection one might mention, for instance, the plans for the so-called Mediterranean bloc.

However, try as the imperialists may to camouflage the real purpose of the aggressive blocs, the latest sessions of N.A.T.O., S.E.A.T.O. and the Baghdad Pact show that those taking part in them intend to foment the "cold war," to carry on with their "positions of strength" policy, which has been condemned by the peoples, and to continue the arms race. The establishment of rocket and nuclear bases, the arming of other participants in the blocs with American nuclear weapons—such are the principal items on the agendas of the sessions of these aggressive groupings.

Let us take, for instance, the session of the N.A.T.O. Council of December, 1957, and the session of the S.E.A.T.O. Council held in Manila early this year. They show that the United States, Britain and certain other western countries are carrying out at a forced pace measures in the sphere of military preparations which tend to worsen the international climate. The meeting of N.A.T.O. War Ministers held in April and the N.A.T.O. Council session held early this month in Copenhagen had the same aims.

The plans of the American ruling circles with regard to the Federal Republic of Germany are of special danger to the cause of peace. Ignoring the lessons of the recent past, the United States rulers close their eyes to the fact that arming with atomic weapons the Federal Republic of Germany, whose

ruling circles openly disagree with the existing European frontiers, can have consequences the gravity of which is, possibly, not realised by some of Western Germany's N.A.T.O. allies, not to mention the fact that it inevitably leads to a dangerous arms race between the European states.

When the western powers concluded the Paris agreements, the Soviet government and the governments of the other countries in the socialist camp gave warning that the drawing of the Federal Republic of Germany into N.A.T.O. would result in the absolutely unrestricted remilitarisation of Western Germany and in the strengthening of the circles seeking for revenge. The western politicians tried to present this warning of ours as "communist propaganda."

Moreover, in order to justify Western Germany's inclusion in N.A.T.O., the ruling circles of the western powers loudly claimed that this would permit them to exercise effective control over the quantitative and qualitative arming of Germany.

In those days western propaganda insisted that the Federal Republic of Germany would under no circumstances be allowed to have atomic weapons.

However, the rulers of the western countries are no longer speaking about this at the present time. On the contrary, the western powers, and above all the United States, are striving to arm Western Germany with atomic weapons. This policy made possible the Bundestag decision to equip the West German armed forces with atomic weapons—a decision approved by the N.A.T.O. allies of the Federal Republic of Germany—and also the United States decision to set up atomic arms depots and American rocket bases on the territory of Western Germany.

Thus, the ruling circles of Western Germany have set foot on the road to preparing an atomic war—a road fraught with serious consequences. In its appeal of March 31 to the Bundestag of the Federal Republic of Germany, the U.S.S.R. Supreme Soviet justifiably emphasised that the implementation of the

decision to equip the West German army with atomic and rocket weapons, like the planting of foreign atomic and rocket weapons on West German territory, was leading to a situation in Europe resembling the time when Hitler Germany launched preparations for the Second World War. It is not without reason, therefore, that the plans for delivering atomic weapons into the hands of the West German military clique have caused serious alarm and anxiety in many states and among the people, including the population of Western Germany.

One must be blind not to see that the decision of the Bundestag to arm Western Germany with atomic weapons does more than merely widen the split in Germany. The atomic arming of Western Germany would slam the only remaining door to the restoration of the German people's national unity through *rapprochement* and accommodation between the German Democratic Republic and the Federal Republic of Germany.

Using the system of military groupings—N.A.T.O., S.E.A.T.O. and the Baghdad Pact—the United States is stationing on the territories of the member-countries special task units equipped with atomic weapons. What is more, officials in the United States and other western countries do not consider it necessary to conceal their plans to employ atomic and hydrogen weapons against the Soviet Union and the other peace-loving states.

Thus, in one of his numerous statements made in 1957, for instance, the supreme commander of the N.A.T.O. armed forces, General Norstad of the United States, said that N.A.T.O. strategy was based on atomic weapons. Distorting the foreign policy of the Soviet Union and ascribing all sorts of intrigues to it, Norstad said that in the event of "Russian aggression" the N.A.T.O. armed forces were ready to use atomic weapons first, even if the Soviet Union declared that it would not employ nuclear weapons. The same idea was reiterated in the British government's recently published White Paper, which openly proclaims Britain's intention of

using nuclear weapons first against the Soviet Union.

The question suggests itself: Did the authors of the White Paper think about where this policy is leading? Did they think what an atomic war could bring to their country?

The United States ruling circles now attach particular importance to the creation of a network of atomic and rocket bases in Europe and other areas of the world, directed against the countries of the socialist camp. It is easy to realise that the very idea of establishing such bases many thousands of kilometres away from the American territories proper has nothing in common either with the interests of the United States' defence or the security of the countries where these bases are situated, but is from beginning to end an expression of an aggressive policy.

As is well known, the signing of an Anglo-American agreement on establishing rocket launching sites in Britain was announced in February. Such an act, which is unpopular in western countries, and especially in Britain herself, cannot, of course, be regarded as an expression of a desire on the part of the governments of the United States and Britain to help to ease international tension.

The leaders of the Atlantic bloc are spreading fabrications of all kinds in order to justify in some way in the eyes of the peoples the organisation of rocket bases on the territories of West European states. An example of these fabrications can be found in the false reports alleging that the Soviet Union has bases for intermediate-range rockets on the territories of the German Democratic Republic, Poland and Czechoslovakia. It can easily be seen that such reports, too, are aimed at worsening international tension for the purpose of continuing the arms race. Is not the intention of the United States to continue the arms race confirmed in President Eisenhower's statement on May 6, to the effect that the United States plans to spend more than 40,000 million dollars a year on armaments for the next 10, 15, and perhaps even 40 years? Certainly it is.

However, such a policy on the part of the United States and other N.A.T.O. countries naturally compels the Warsaw Treaty member-states to draw the appropriate conclusions. However unwilling they were, they might be compelled by circumstances to consider the question of stationing rocket weapons in the German Democratic Republic, Poland and Czechoslovakia. What would this mean for the situation in Europe? It would mean that the distance between rocket installations aimed against each other would become smaller and smaller, which would inevitably increase the danger of an outbreak of war, of a terrible war of extermination.

It is well known that rocket weapons are area weapons, striking at enormous areas and objectives. They are weapons for the mass extermination of human beings and for the destruction of immense material wealth.

It must be hoped that the N.A.T.O. leaders will display sound judgment and will not compel the Warsaw Treaty states to take reciprocal measures with regard to the stationing of rocket weapons.

The United States leaders responsible for American foreign policy obviously hope that the presence of American bases on the territory of European states will ensure that those states are automatically involved in a war which might be unleashed by the United States. These plans which envisage the use of the territories of other states for establishing bases, atomic and hydrogen weapons depots and sites for launching rockets with nuclear warheads, show that the American politicians, at the cost of sacrificing their allies, hope to avert a retaliatory blow from themselves and to protect the territory of the United States of America from the fatal consequences of a nuclear war, or at least to mitigate those consequences.

Some of the United States military leaders do not even consider it necessary to conceal the real purpose of American overseas bases. At the end of last year the N.A.T.O. chief of staff, the American General Schuyler, spoke at

a press conference in Oslo. The gist of his statement was that the principal merit of American bases in Europe was the fact that they were far removed from the United States' vital centres.

As for the European countries on whose territories the American bases are situated, those countries, Schuyler said, should be prepared for the possible use of nuclear weapons against them. Such is the prospect which American atomic strategists hold out for the peoples of Europe!

No wonder that in these conditions the policy of the United States ruling circles is arousing increasing anxiety and mistrust among the United States' N.A.T.O. partners and in other countries on whose territories American bases are being established. It is not by chance that the governments of such countries as Norway and Denmark, displaying a sense of duty and responsibility for the future of their countries, have opposed the establishment of American atomic and rocket weapon launching sites on their territories.

One cannot help feeling surprise at the short-sightedness of the American ruling circles who hope to divert a retaliatory blow from themselves towards their allies in the event of the United States unleashing a nuclear war.

Certain people should not forget that intercontinental ballistic rockets and other modern means of warfare can now hit targets at any point on the globe.

If we are to speak of American bases brought forward close to the frontiers of the states against which these bases are aimed, it would be naive to suppose that only the American side possesses modern means of warfare. The progress of science and technology now gives equal opportunities for highly developed industrial countries to manufacture weapons of the most up-to-date types. Every intelligent person who has some understanding of the progress of science and technology realises clearly that the Soviet Union and the other Warsaw Treaty countries can have, and do have, everything necessary so as not

to find themselves in a strategically disadvantageous position.

A very convincing proof of the technical potential of the Warsaw Treaty states is the launching of Soviet artificial earth satellites and the creation of intercontinental rockets.

It is not advisable, therefore, for anyone to proceed from positions of strength, or for either side to frighten the other. The end product of all this is only an arms race, and an arms race, as everyone knows, has eventually always led to war.

Every statesman who is conscious of his responsibility must make a sober appraisal of the situation and, far from doing anything, for his part, which might be likely to make the atmosphere more heated and promote the arms race—and thus tend to bring war nearer, must make it his concern to bring about an end to the "cold war" and work in real earnest towards creating conditions for good-neighbourly relations between all states. We have never failed, nor shall we ever fail, to pursue this goal.

An atmosphere of war hysteria is being maintained by regular flights of American atomic and hydrogen bombers, both over the territory of the United States itself and over that of a number of other countries. Is an atomic war likely to take long in breaking out under such circumstances?

Anyone whose mind is not afflicted by war psychosis shares the feeling of grave alarm and the righteous anger which world opinion feels at the news that an atom bomb was "accidentally" dropped from an American bomber on a small town in the American state of South Carolina, and although the bomb failed to explode, the peoples of the world are posing this legitimate question: What will happen if an incident like that repeats itself and if this time a nuclear explosion, with all its horrible consequences, does occur? What is to prevent the possibility that an accidental explosion of an American atomic or hydrogen bomb on American territory or on that of some other state over which American hydrogen bombers are

flying, may be taken for a surprise attack? There is nothing to guarantee that this will not happen. Thus, an accidental atom bomb explosion may well trigger off another world war.

A wave of indignation has swept all countries at the news that the United States is systematically sending its military aircraft with atomic and hydrogen bombs flying towards the frontiers of the Soviet Union. Such activities on the part of the American military command, which are unprecedented in peacetime, are indeed bringing the world to the brink of an atomic war.

It will be recalled that the Soviet government has emphatically protested against these flights and has brought the matter before the United Nations Security Council. Nevertheless, the United States, far from calling a halt to the provocative flights of its aircraft, attempted to distract the attention of world opinion from the essence of the question raised by the Soviet Union. It proposed that an international inspection system to forestall a sudden attack should be established in the Arctic region over which American planes are flying.

The Soviet government has had occasion to point out that this proposal of the United States does not in any way reduce the threat to world peace represented by the flights of American atom and hydrogen bombers towards the frontiers of the Soviet Union.

The Arctic region is the one through which the shortest air route between the Soviet Union and the United States passes. For this reason it is of great strategic importance, and the flights of American military aircraft with atom and hydrogen bombs over that region are, undoubtedly, a grave threat to peace. It is precisely for this reason that the United States must put an end to such flights of American aircraft towards the Soviet frontiers. Yet the government of the United States is stubbornly refusing to comply with this just demand and to heed the voice of reason.

In addition, the Soviet Union's

security is being jeopardised by the flights of American aircraft, not only across the Arctic region, but also over those areas of Europe, Africa and Asia where the United States maintains an extensive network of air bases.

This being the situation, the American proposal for an Arctic inspection system cannot be of any value to the security of the Soviet Union because, in the first place, while proposing such a system, the United States is not even promising to end such nuclear flights altogether, but only to reduce their number; secondly, this proposal concerns only one stretch of the Soviet Union's frontier. Lastly, the system of inspection under the American proposal is to cover a substantial portion of the territory of the Soviet Union and not one inch of that of the United States proper.

Consequently, the purpose behind the United States proposal is to gain certain military and strategic advantages for the United States at the expense of weakening the security of the Soviet Union. It is simply obvious that no self-respecting state can agree to such a proposal.

Proposals like this indicate only one thing, and this is that the United States of America is persisting in its "policy of strength," for only a state banking on such policy can put forward such proposals. But it is making a mistake, for to every force there is always a counter-force. It is only natural, therefore, that no state, and still less a state possessing all the necessary means of defence, can accept proposals which are advantageous to one side only, like the ones which have been made by the United States.

In an effort to counter in one way or another the pressure of the peoples for an end to the arms drive being carried on by the western powers, the statesmen of the United States, Britain and France often declare that they are compelled to follow this policy because of a threat to the West from the Soviet Union.

Yet, have any of these statesmen been

able to cite even one fact to indicate any activity on the part of the U.S.S.R. which jeopardises the security of any state? No one has ever cited such facts and, indeed, no one can do so, for no such facts exist.

Definite efforts are now being made in the West to justify the policy of speeding up war preparations, including the installation of American atomic bases and rocket launching sites on other people's territory, by alluding to the Soviet Union's development of an intercontinental missile. But it is well known that the United States had begun to set up its military bases outside its own territory long before modern rockets, and especially intercontinental missiles, had been created. It must be recalled in this connection that after the end of the Second World War, the Soviet Union put forward proposals for withdrawing all foreign troops from the territories of other countries and for eliminating all foreign bases set up on the territories of other states. The governments of the United States, Britain and France not only flatly refused to accept that proposal of the Soviet Union but also continued to set up more and more military bases in the vicinity of our frontiers.

Could the Soviet government be expected, in the circumstances, not to display due concern for the security of its own country and not to think of creating dependable means of ensuring that security? No, it could not.

Yet even today, when the Soviet Union is in possession of the intercontinental weapon, we are prepared to come to an agreement to ban the use of outer space for military purposes if the western powers, for their part, agree to dismantle their military bases on foreign territories. It is common knowledge that the Soviet government has proposed the inclusion of that question in the agenda of a summit meeting. It is now up to the western powers, and in the first place the United States.

In stepping up the arms race, the ruling circles of the United States and the other western powers are demanding

ever new sacrifices from their peoples for the sake of expanding war preparations. All this cannot but affect the economic circumstances of the working people, who are forced to bear the heavy burden of military expenditures.

The militarisation of the economy of the western powers has led to a serious disruption of the economy, to a growth of unemployment in those countries and to calamities for millions of people. The supporters of the "positions of strength" policy and the stepping up of the "cold war" have been sparing no pains to inculcate in the minds of the working people that such a policy is in their own interests because it is connected with a rise in military production and therefore, so they allege, leads to more employment in industry.

They go so far as to frighten the working class with the assertion that if the "cold war" were to be terminated and the need for an arms race ceased to exist, this would lead to a drop in production, a growth in the army of unemployed and a fall in the working people's living standards.

Are these arguments used by the opponents of ending the "cold war" and the flunkeys of monopoly capital correct? No, these arguments are erroneous. First and foremost, they are contrary to the essence of human life. They are profoundly anti-humanistic, because they are used to convince man, whose lot it is to engage in creative labour, that he can live only when creating the means of his own destruction.

These arguments also fall to the ground when analysed from the scientific standpoint. Isn't it true that the possibility exists at the present time of organising on a large scale the production of the means of consumption and the means of production instead of the manufacture of the means of destruction? The market for this—both internal and external—is veritably limitless. If the United States, for example, were to cut prices for consumer goods and raise the working people's wages, the purchasing power of the people would sharply increase and this would create

conditions for expanding the production of the means of consumption.

Is it not clear that if the United States were to follow a policy of peaceful co-existence and businesslike co-operation, this would open up vast possibilities for developing the productive forces of the United States? Such countries, for example, as India, People's China, Pakistan, Indonesia, Iran, the countries of the Arab East and the Soviet Union could alone become vast markets consuming enormous quantities of American goods.

This would lead to greater employment and consequently to higher living standards for the American population and would at the same time help to realise the desire of the peoples of other countries to develop and expand their economy, raise their living standards and promote the advance of their national culture.

Under the present "positions of strength" policy, the powers participating in N.A.T.O. have spent a total of more than 400,000 million dollars for military purposes in the period from 1950 to 1957. However, these vast military expenditures have not helped them to evade the mounting difficulties in the economy clearly exemplified by the situation in the United States, which, as the Americans themselves admit, is now undergoing an economic crisis.

Nor has that policy of the United States benefited the countries which support the "cold war" policy and the arms drive. Quite the contrary, by

fettering themselves with the "positions of strength" policy, these countries are forced to shoulder unbearable military expenditures. Their economy is being undermined and civilian production is being curtailed—a fact which allows the American monopolies to place these countries in a position of ever greater dependence, both in the economic and the political sense.

All this shows that the real interests of all countries are not served by the "cold war" policy, but by a policy of peaceful co-existence, mutually advantageous trade and businesslike co-operation.

Needless to say, all the peoples would have a sigh of relief if the threat of war were eliminated and people everywhere could devote their efforts to creative labour, to raising living standards and developing their culture.

That is precisely what the interests of mankind demand. Every day the peoples are realising ever more clearly the ruinous effects of the arms drive and the "cold war" policy, and it may be said with confidence that the demands of the peoples will triumph and that the peoples will make their governments end the arms race.

It should be noted that at the present time, too, the policy-makers of the western powers cannot fail to reckon with these demands. That is why they pay lip service to peace, although they systematically work to step up the pace of preparations for a new war.

Socialist Countries Stand for Ending Arms Race, for Eliminating 'Cold War'

COMRADES, the peoples represented by those taking part in our conference know what war is. They were spared neither by the First World War nor by the second. In both these wars the people of the Soviet Union, the Germans, the Poles, the peoples of Czechoslovakia and other peoples of the

countries parties to the Warsaw Treaty suffered the greatest sacrifices. And we are justified in saying that there are no other states on earth whose governments so insistently and unflinchingly follow the policy of preventing the unleashing of a new war as the governments of the socialist camp states do, expressing the

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cherished desires and vital interests of their peoples.

In our time war has ceased to be fatally inevitable. The profoundly abnormal international tension which now prevails can and must be overcome. Peace can and must be preserved.

Like the other governments of the socialist countries, the Soviet government far from believes that the prevailing situation cannot be changed for the better. It will be recalled that in the period of the Second World War, relations of close co-operation existed between the Soviet Union, the United States of America, Britain and the other powers of the anti-Hitler coalition. If this co-operation gave way to relations of mistrust, estrangement and even a measure of hostility, that has occurred in spite of the wishes of the Soviet Union.

The government of the United States, and not only that government, clearly could not stomach friendship with states having social and economic systems differing from that of the United States. In the postwar years, politicians have come to power in the United States of America who have taken it into their heads that the United States can succeed in tilting the balance of forces in its favour and eliminating the socialist system in the people's democracies, a system which the peoples of these countries have themselves set up. Not daring to attack the Soviet Union directly, these politicians have concentrated their efforts against the East European countries, as they call them, trying to make the peoples of these countries swerve off the road they have chosen and embrace the way of life favoured by certain circles in the United States of America.

It is obvious that such calculations are not the result of sound reasoning or a correct evaluation of the situation and correlation of forces in the international arena.

Having set before themselves the fantastic task of eradicating socialism all over the world, these politicians would like to solve that problem stage

by stage, because they lack the means even to dare to hope for something greater. At the same time they continue to act against the world's first socialist state, the Soviet Union, pouring hundreds of millions of dollars into subversive activities against the Soviet Union. They are surrounding the U.S.S.R. with military bases.

Today the failure of the originators of the "positions of strength" policy is patent. The socialist camp has become even more united and powerful, while the United States of America, pursuing such a policy, has largely lost its international prestige by assuming the role of leader of the "cold war" and organiser of military blocs hostile to the cause of peace.

If we turn to considerations of a military nature, it will be found that the American leaders in that sphere have also made considerable miscalculations. This is particularly evident since the launching into outer space of the three Soviet artificial earth satellites, which have demonstrated the high level of industrialisation and of the development of science and engineering in the Soviet Union. Far be it from us, of course, to deny that the United States and other countries with a high level of development in industry, science and technology are able to achieve similar results.

We should like to hope that the leaders of the United States of America, for their part, might take a more sober view of things. A solution of the contradictions dividing the states of the East and the West does not lie in the arms race, but in negotiations between them. It is not sabre-rattling but meetings between responsible statesmen that will lead to a solution of controversial issues.

In the present circumstances, with the "cold war" outgrowths that have been amassed over the years making themselves felt literally at every turn, a daring search and a concerted and determined effort are needed to ensure the turn in international relations which the peoples want and to spare the world the

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nightmare of a war catastrophe.

The fact that only a conference of the most authoritative and plenipotentiary representatives of states can tackle this task can hardly be disputed. This is precisely why the Soviet Union, upon consulting all the socialist countries, made a proposal last December for a top-level East-West conference.

The Soviet government has done everything in its power to clear the way to a conference at the summit and to create an atmosphere of trust and businesslike co-operation. It is enough to mention the Soviet Union's reduction in its armed forces and its unilateral suspension of all atomic and hydrogen weapon tests. This conference is also considering further steps to be taken by the Warsaw Treaty countries towards relaxing international tension and safeguarding peace in Europe. We have concrete deeds to back our good will for agreement and mutual understanding.

The Soviet Union and the other socialist countries will continue steadfastly and perseveringly to pursue a policy aimed at easing international tension and ending the "cold war." Every day the peoples will be giving increasing support to this peace policy and will duly appreciate it. We are confident that through hard work we shall eventually bring about a situation in which the peoples of the states whose governments pursue a policy of strength and the arms race will compel their governments to take the road of peaceful co-existence.

The Soviet Union and the other Warsaw Treaty countries are prepared for a summit conference and have forwarded to our partners proposals to this effect. The Minister of Foreign Affairs of the U.S.S.R. is holding preparatory discussions to this end with the Ambassadors of the United States, Great Britain and France in Moscow. But we are finding it increasingly difficult to overcome the conviction that lying behind the talk of the western leaders about the need for careful summit preparations is the lack of desire of the western powers to talk business, although

the governments of these powers must have as much ground for being concerned about easing international tension and removing the rocket and atomic war danger as the countries of the socialist camp have.

The questions we suggest for discussion at the summit meeting are well known. They have been raised and made urgent by life itself. Every one of these proposals, whether it deals with ending nuclear tests, the creation of a zone free of atomic, hydrogen or rocket weapons in Europe, measures for the prevention of a surprise attack, the conclusion of a non-aggression pact between the Warsaw Treaty Organisation and N.A.T.O., or anything else suggested for discussion, has the purpose of contributing to a relaxation of tension in international relations. At the same time every one of them could be put into effect even today, provided only that our partners at the talks guide themselves by the same striving as we guide ourselves: namely, to put an end to the "cold war" and reduce international tension.

We cannot, however, fail to note that the tactics of the United States and the countries supporting it boil down to an attempt to lull the vigilance of the peoples by declarations and by talk about thorough preparations for the summit conference while burying the very idea for good and all. Nor can one fail to see that what lies behind the talk of the need for careful summit preparations is, in point of fact, the intention of certain circles in the West to go ahead with their "positions of strength" policy in order to try to compel the Soviet Union and the other Warsaw Treaty countries to accept the United States demands without the least objection, a fact which these circles bluntly admit.

But who, indeed, can take seriously the calculation that as a result of some careful summit preparations the Soviet Union and the other Warsaw Treaty countries will agree to an international conference considering such issues as the situation in the East European countries, which constitutes an attempt at interference in the internal affairs of these coun-

tries in order to force a change in the socialist system established by the peoples of these countries? Or take the question of German reunification, as treated by the western powers.

Is it being serious to say that Germany can be reunited, while ignoring the existence of the two sovereign German states, the German Democratic Republic and the Federal Republic of Germany, to say that this can be done without them, behind their backs and in the interests of certain groups in one of these states alone, the Federal Republic of Germany? If the western representatives, in pleading the need for thorough preparations for the meeting, have it in mind to compel the Soviet Union to agree to a discussion of such questions, we must say openly that the time needed for such "preparations" would be unlimited, for never, under no circumstances, will the Soviet Union agree to such a solution.

The Soviet Union has submitted absolutely specific proposals for discussion at a summit meeting. Life itself has dictated them. If the western powers are not yet prepared to consider all of them, would it not be possible to select some of these questions, to reach agreement on them and thereby lay the foundation for a solid edifice of peace?

We consider that such questions should be selected, in preparing for a summit meeting and in preparing questions for discussion at it, as could be resolved now, at this stage. This can be accomplished only if countries with different internal systems, that is, capitalist countries and socialist countries, approach the matter realistically, proceeding from the immutable fact that two world systems—capitalism and socialism—exist on the globe today, and if they recognise the principle of the peaceful co-existence of two systems and tackle questions that would promote this peaceful co-existence.

That is why the Soviet Union and the other socialist countries propose that the summit meeting should consider questions that in no way affect the foundations of the capitalist countries and at the same time do not prejudice the

socialist countries. This is the principal thing, and it is precisely this approach that can make a summit meeting successful.

We propose to the United States of America, Britain and our other partners to try the way of partial disarmament measures. We are not doing this because we consider radical, all-embracing disarmament to be less desirable. On the contrary, the Soviet Union is ready to negotiate it today. But experience of years of long negotiations in the United Nations shows that the western powers reject a radical solution of the disarmament problem.

It appears that not the least of the fears of the governments of the U.S.A. and other western powers is that curtailment of military production would lead to an economic recession in their countries. Our proposals for partial disarmament measures, as a start, take these fears into account, enabling the western powers to convert their industry to peaceful production gradually and painlessly.

The Soviet Union has always considered it its sacred duty to mankind to bring about a ban on the means of mass destruction—atomic and hydrogen weapons.

How can this problem be most speedily approached? Since the western powers say that they cannot agree at present to the complete prohibition of nuclear armaments, we suggest that they take—as a beginning—merely the first step in this direction, and halt their tests, for the continuation of tests poisons the atmosphere by fission products and leads to the development of even more powerful nuclear weapons, weapons even more frightful in their consequences.

Considering that the western powers have turned the question of control into the main stumbling block in the course of disarmament talks, the Soviet Union proposed the establishment of a system of control over the suspension of tests through the establishment of control posts in the U.S.S.R., the U.S.A., Britain and the Pacific. We agreed to this even though we knew that the existing national

scientific institutions are themselves able to detect all nuclear explosions, anywhere in the world, without the aid of any international control system.

But this did not prompt the western powers to agree to a universal suspension of atomic and hydrogen weapon tests. So far, all our proposals have come up against the blank wall of western objections.

Guided by a desire to make a start on the universal suspension of nuclear weapon tests and thereby take the first step towards a complete ban on these weapons, the Supreme Soviet of the U.S.S.R. passed a decision on the unilateral suspension of atomic and hydrogen weapon tests by the Soviet Union and called on the other countries to follow suit.

It is now obvious that the western powers will not respond to this initiative of the Soviet Union. Towards the end of April the United States and Britain started another series of atomic and hydrogen tests. These nuclear tests show that the ruling circles of the U.S.A. and Britain are sabotaging agreement on an immediate, universal suspension of atomic and hydrogen weapon tests and thereby assume a heavy responsibility for the continuation of the nuclear arms race.

To evade ending nuclear tests, the western powers insist on preliminary work by experts on the technical details of control over the suspension of tests.

The Soviet government holds, as it always has, that it is necessary to agree in principle on the suspension of nuclear tests first and to take up the matter of control over it afterwards. However, wishing to bring closer agreement with the western powers on the suspension of nuclear tests, the Soviet government has agreed to experts being detailed to start work immediately to study the means of detecting possible violations of an agreement on the suspension of nuclear weapon tests. We stressed, however, that this work should be completed in a short period, specified in advance.

These steps of the Soviet government

have paved the way for agreement on the immediate suspension of tests of all types of nuclear weapons. All peoples agree in demanding that the suspension of nuclear weapon tests should be the first item discussed at the summit, and they will not forgive the governments of the United States and Britain if they block the matter of ending nuclear tests tackled so vigorously by the Soviet Union.

Rejection of the use of atomic and hydrogen weapons which the powers have in their armaments would be of great importance for easing international tension and ending the arms race. That this measure is perfectly realistic is obvious to all. It requires neither lengthy talks nor any control or material expenditures. But such moral condemnation of nuclear arms would be of truly inestimable value for the cause of peace, besides creating conditions for further steps towards resolving the disarmament problem.

A moral undertaking by states not to use atomic and hydrogen weapons would be especially significant today when it is no longer possible to establish foolproof control over compliance with an agreement banning nuclear weapons, and when it is easy for either side to start, if it so wishes, the secret manufacture of nuclear weapons. We now have to reckon with the fact that the process of nuclear materials manufacture is the same, whether for military or peaceful purposes. The same nuclear materials can be used both in peaceful branches of production and for the manufacture of nuclear weapons. This means that the manufacture of nuclear energy for peaceful purposes, which is becoming increasingly extensive and widespread, can be used, simultaneously, for the secret stockpiling of explosive nuclear materials in circumvention of control. And once enough materials have been stockpiled, it would not be too difficult to hide the designing and manufacture of nuclear bombs and atomic rocket warheads. This can be done by any industrially developed country.

Today, when nuclear arms have ceased to be the monopoly of one state, as was the case 13 years ago, it is very, very dangerous to use these weapons of mass destruction without risking a shattering retaliation. Things must be viewed realistically. Under the present circumstances, the way to eliminate the threat of atomic war is moral condemnation of the use of atomic and hydrogen weapons. Anyone who tries to evade agreement on renouncing the use of nuclear arms is being hypocritical in saying that it could have no force but would remain an uncontrolled moral commitment.

Moral condemnation by the peoples is a great force. It will be a means of rigid control and a containing factor against those planning to use nuclear weapons, those barbaric weapons for the mass annihilation of people and the destruction of material values. The experience of the recent past confirms the significance and effectiveness of international agreements imposing moral obligations on states.

It is common knowledge that the Geneva Protocol of 1925, banning chemical and bacteriological means of warfare, played a positive role, preventing the use of these weapons of mass destruction during the Second World War. The aggressors dared not use these weapons, morally condemned by an international treaty and by world public opinion.

A ban on the use of atomic and hydrogen weapons would be a good beginning. Later, when the relations between states have been developed and extended, when these relations have become relations of friendship, the conditions will arise for broader control and greater international confidence, and this will make it possible to exclude war altogether as a means of settling disputed issues.

A summit meeting should also give the closest consideration to the proposal of the Polish People's Republic for the establishment in Europe of a zone free of atomic, hydrogen and rocket weapons. The Soviet Union, like the other mem-

bers of the Warsaw Treaty Organisation, does not seek any military advantages in supporting this proposal. It wants only one thing—to achieve a relaxation of tension in Central Europe and to reduce the likelihood of atomic war in the area and, consequently, help eliminate the threat of such a war in general.

Those who allege that only one side stands to gain from the establishment of such a zone are chopping logic. They deliberately ignore facts which run counter to their contentions.

In what circumstances could the establishment of an atom-free zone—composed, as is proposed, of four countries: Poland, Czechoslovakia, the German Democratic Republic and the Federal Republic of Germany—be said to give definite military advantages to the Soviet Union and its Warsaw Treaty partners? Only if N.A.T.O.'s contribution to the establishment of such a zone is greater than that of the Warsaw Treaty countries. In reality, this is far from being the case.

Naturally, simple arithmetical calculations are inapplicable in comparing military and economic factors. But some figures are indisputable.

A comparison of the territories of the states to make up this zone shows that the combined territory of the German Democratic Republic, Czechoslovakia and Poland is more than twice that of the fourth proposed member of the zone, Western Germany. Moreover, the combined population of the Warsaw Treaty countries in the zone is also greater than the population of the sole N.A.T.O. country in it.

It is known that neither the German Democratic Republic, Czechoslovakia, Poland, nor the Federal Republic of Germany manufactures its own nuclear weapons. What is more, the government of the Federal Republic of Germany assumed, in its time, an international commitment not to manufacture such weapons in the future. All this shows that there are no grounds for supposing that the establishment of a zone free of atomic, hydrogen and rocket weapons

would give any military advantages to the Warsaw Treaty countries at the expense of the N.A.T.O. countries.

If the western powers fear that following the establishment of this zone the Soviet Union will retain in it a superiority in conventional arms, one might ask why they reject the Soviet proposals for reducing the strength of foreign troops on the territory of Germany and other European states.

To our mind, it would be hardly correct to preclude in advance the possibility that the establishment of a zone free of nuclear and rocket weapons would be accompanied by measures for the reduction and mutually acceptable adjustment of the strength of foreign troops now kept on the territory of states which may form part of the proposed zone.

The establishment of a zone free of nuclear and rocket weapons would not only be of great international significance, but would also go a long way towards ensuring the security of the states which would belong to it. We find it difficult, therefore, to understand the position of the government of the Federal Republic of Germany, whose attitude to the Polish proposal has so far been negative.

The Soviet government has already announced its readiness to undertake to respect the status of the zone free of nuclear and rocket weapons and to regard the territory of the countries in it as excluded from the application of nuclear and rocket weapons, if the governments of the U.S.A., Britain and France do likewise.

The Soviet government recently made another concession to the western powers by proposing the conclusion of a broad international agreement on banning the use of outer space for military purposes and closing down military bases on foreign territories, and on international co-operation in the study of outer space.

The rapid scientific and technical progress in the development of rockets capable of reaching out into cosmic space places a grave responsibility on the states. Their duty is to channel pro-

gress in this field to peaceful uses, so that intercontinental and all other rockets may be used not for destruction but for peaceful research, for conquering the great expanses of the universe.

The Soviet Union has proposed the establishment of a United Nations agency on international co-operation in the study of outer space with a view to making the new scientific discoveries serve the peaceful needs of mankind. The Soviet proposals, considering as they do the security interests of all states in equal measure, make it possible to provide a really solid foundation for international co-operation. They are, at the same time, a major step towards solving the problem of disarmament in general.

The United States approaches the question of outer space from different positions. It limits its proposals to control over intercontinental missiles, leaving aside the question of other rockets which may carry nuclear warheads, and also the question of overseas bases suitable for the launching of such rockets and for accommodating warplanes carrying atom and hydrogen bombs.

One cannot fail to see that the United States, in limiting its proposals to a ban on intercontinental ballistic missiles, wants to safeguard itself against atomic retaliation through outer space in case of atomic war, retaining the while its numerous military bases on foreign territories, intended for an attack on the Soviet Union and the peaceable countries friendly to it.

It goes without saying that the Soviet government cannot agree to the security of the Soviet Union and the countries friendly to it being placed in jeopardy.

The task of ensuring to the maximum the security of all states requires that a ban on the military use of outer space be accompanied by measures for the closing down of military bases on the territory of other states, and primarily in Europe, the Middle East and North Africa.

Discussion at the summit of other questions listed in the well-known Soviet proposals would also be of great import-

ance for the relaxation of international tension.

However, the western reaction to them cannot so far be regarded as encouraging.

In their efforts to prevent the holding of a summit conference, certain circles in the West would like to do some bargaining, as it were, making out that the Soviet Union has some special interest in the questions submitted by the Soviet government for consideration at the summit. Therefore, they argue, if we drive a hard bargain with the Soviet Union, we can wrest, in exchange for our consent to take part in the meeting, some advantages at the expense

of unilateral concessions by the socialist states.

The western demands for a discussion of matters which mean interference in the internal affairs of the socialist states cannot be regarded in any other way than as provocations designed to stir up enmity between states.

It is time for the western powers to realise that the question of the government system of the people's democracies, as of any other sovereign state, is not a matter for discussion at international conferences, for it has long been settled by the peoples of these countries, who have taken firmly and unequivocally to the road of building socialism.

Conclusion of a Non-Aggression Pact between Member-Countries of Warsaw Treaty and NATO Countries — an Effective Step towards Consolidation of Peace

COMRADES, the efforts made by the Soviet Union and other countries of the socialist camp to achieve a relaxation in international tension, to make a start on disarmament, to halt the tests of atomic and hydrogen weapons, and to reduce armed forces and conventional armaments have been warmly received, as you know, by all the peoples of the world.

The Soviet Union has demonstrated by deeds its peacefulness and its sincere desire to provide conditions for a firm and lasting peace. The Soviet government, without awaiting an international agreement on disarmament, has repeatedly reduced its forces, unilaterally, in recent years. In 1955 it reduced them by 640,000 men, and in 1956-57 by another 1,200,000. At present, a further reduction, by 300,000, is nearing completion, with considerable cuts effected in our troops temporarily stationed under existing agreements in

the German Democratic Republic and Hungary

Our country's armaments, military equipment and military expenditures for defence have been reduced accordingly.

The other member-countries of the Warsaw Treaty Organisation reduced their armed forces by a total of over 337,000 in the course of 1955-57.

We all give due recognition to the great contribution made to the maintenance of peace by the great Chinese People's Republic, which recently decided to withdraw the Chinese Volunteers from Korea. If the United States followed the example of People's China and withdrew its troops from South Korea and dismantled all its bases there, this would unquestionably help to strengthen peace in the Far East and to adjust the Korean problem.

In discussing the convening of the Political Consultative Committee, the parties to the Warsaw Treaty agreed on

the questions to be considered by our meeting.

The Soviet government considers it desirable for our meeting to go on record for the further unilateral reduction of the armed forces of the Warsaw Treaty countries and to call on the N.A.T.O. countries to effect a similar reduction.

Following consultations with the government of the Rumanian People's Republic, the Soviet government submits to the meeting the question of withdrawing the Soviet troops stationed on the territory of the Rumanian People's Republic under the terms of the Warsaw Treaty, as another measure designed to ease international tension.

The Soviet government favours the withdrawal of all foreign troops from the territories of other states and the closing down of all military bases on foreign territories. Considering western objections to the proposal for the complete withdrawal of troops from foreign territories, the Soviet government has proposed to the western powers to agree—as a beginning—at least on a reduction of their troops on these territories. But this proposal, too, is opposed by the United States and its N.A.T.O. partners.

Recognising the importance that the withdrawal of foreign troops from European states would have for improving the international climate, the Soviet government considers it necessary, in the present situation, to make new efforts, to do everything to impel the western powers to effect such a measure. This is the aim pursued by the withdrawal of the Soviet troops from the Rumanian People's Republic. This step of the Soviet Union could make a start on the withdrawal of foreign troops from the territories of other states and clear the way for agreement on this matter between all countries concerned.

The peaceful foreign policy of the Soviet Union and the other socialist states day by day enjoys the growing support of all the peoples of the world.

In the opinion of the Soviet govern-

ment, the easing of tension in the relations between the countries which are parties to the Warsaw Treaty and the countries belonging to N.A.T.O. would be of paramount importance under the present circumstances. No one can deny that the friction and mistrust engendered by membership of N.A.T.O. and the Warsaw Treaty by the 23 economically and militarily most developed countries is having a deleterious effect on the entire range of international relations.

The conclusion of a non-aggression pact between these two groupings would help remove the edge in the relations between them. After all, it is clear to everyone that a new major war can only be produced by a conflict between the Warsaw Treaty Organisation and N.A.T.O. If, on the other hand, their military machines are not put into motion, such a war, too, would not take place.

Very important also is the fact that a non-aggression pledge is an effective antidote to aggression, since violation of it, as shown by history, leads to the isolation of the aggressor internationally, facilitating the rallying of forces opposed to aggression and, thereby, to the aggressor's defeat.

The Soviet government regards as a favourable factor the pronouncements by certain N.A.T.O. statesmen that a non-aggression pact could be useful and could serve the interests of peace. In this connection, mention can be made of the well-known statement made on the subject by the Prime Minister of Britain, Mr. Macmillan.

The Soviet government considers that it would be useful for those taking part in the present meeting to approach the N.A.T.O. countries with a proposal for the conclusion of a pact of non-aggression between members of that bloc and the countries belonging to the Warsaw Treaty Organisation.

At the same time, one could inform the N.A.T.O. member-states that the Warsaw Treaty Organisation is willing to delegate representatives at any time for an exchange of opinion on questions

arising from the proposal concerning the conclusion of a non-aggression pact. Such an exchange of opinion between representatives of the Warsaw Treaty Organisation and the North Atlantic Alliance could take place immediately.

Many western statesmen cannot stomach the fact that the socialist countries hold the initiative in international affairs, that they are making proposals which are popular with the peoples. One might ask why our countries should not take such initiative if it accords with the vital interests of all peoples, including the peoples of the member-states of the western powers' military blocs, and why we should worry if our peace initiative deprives of their sleep those who are interested in the arms race and are haunted by the fear of losing their profits!

Every peace offer by the Soviet Union, the Chinese People's Republic and the other socialist countries enlists new friends for us abroad, gives fresh vigour to the powerful peace movement.

In our era international developments are determined by the progress and results of the competition between two antagonistic social systems—socialism and capitalism. The bigger the successes achieved by the working peoples of the Soviet Union, the Chinese People's Republic and the other socialist countries in the expansion of industry, the improvement of technology, the rise in the productivity of agriculture and the advance in the material and cultural standards, the stronger become the forces of peace, the more distant becomes the danger of another war. We sincerely rejoice in the tremendous successes of our friends, the peoples building socialism.

It has been proved conclusively that socialism, in emancipating labour, sets free the inexhaustible forces of the peoples, gives unbounded scope for the peoples' creative endeavour, for the genuine blossoming of science and culture, for the realisation of man's most daring plans. The experience of life of the peoples bears out that socialism as a social system is superior to capitalism.

It ensures the development of the productive forces at a pace unprecedented and unattainable for capitalism, ensures the steady advance of the material and cultural standards of the working peoples.

We say to the capitalist countries: Let us compete in the manufacture of goods and articles which the peoples need to make their life more joyous and fuller, let us compete in advancing the living standards and well-being of the peoples. And let the peoples themselves decide during this competition for man's benefit which road is more in keeping with their interests.

The socialist states are not afraid of peaceful competition with the capitalist countries, for they are deeply confident of its outcome.

A firm guarantee of the national independence and sovereignty of each socialist country is the close cohesion of the socialist states, united in a single camp on the basis of the principles of fraternal mutual assistance and proletarian internationalism, full equality, respect for one another's territorial integrity, national independence and sovereignty, non-interference in one another's internal affairs. The solidarity of the socialist states is not directed against any other countries but serves the interests of all peoples by containing the aggressive tendency of the imperialist circles and supporting the steadily growing forces of peace and progress.

Comrades, the questions under discussion at our meeting make it quite clear that we have assembled here not to draft new plans for intensifying the arms race. Unlike N.A.T.O. and other aggressive military blocs of the western powers, the Warsaw Treaty has been concluded exclusively with the object of safeguarding the security of our countries and serves the interests of strengthening peace. The states which are parties to this treaty have never intended, nor do they intend, to attack anyone.

At the same time, we must draw correct conclusions from the fact that the N.A.T.O. countries reply to our measures for reducing armed forces and arms ex-

penditures, to our proposals for easing international tension, by increasing their forces and their military budgets and by stockpiling armaments.

All this is being done to prevent a relaxation in international tension and the achievement of agreement between the states that would ensure their peaceful co-existence, thus spurring on the Warsaw Treaty countries to take part in the arms race and in the "cold war" in order to retard our peaceful construction.

In taking new steps in this situation to end the "cold war," to reduce armed forces and to provide conditions for peaceful co-existence, we must have a sober approach to and display a sense of responsibility for the security of our socialist countries.

The governments of the countries which are parties to the Warsaw Treaty cannot allow a situation to arise in which the vigilance of our peoples would be

lulled and conditions would arise in which the "positions of strength" champions might yield to the temptation of using force against the socialist countries. This means that in fighting consistently for the easing of international tension we should in no way forget the necessity of safeguarding the peaceful labour of the peoples of the socialist countries against any encroachment by the forces of aggression.

Let the governments of the countries relying on the policy of strength know that war against the socialist countries can end in only one way—in the death of the aggressor.

The Soviet government is confident that our conference will successfully accomplish the task set, that it will take decisions that will promote the strengthening of peace and will make a new contribution to an early settlement of the pressing international problems which are agitating mankind.

Communique on the Conference of Representatives of Communist and Workers' Parties

The meeting of representatives of the Communist and Workers' Parties of the member-countries of the Economic Mutual Assistance Council issued the following communiqué when it ended in Moscow on May 23:

A CONFERENCE of representatives of the Communist and Workers' Parties of the member-countries of the Economic Mutual Assistance Council met in Moscow from May 20 to 23, 1958.

It was attended by representatives of the Albanian Party of Labour, the Bulgarian Communist Party, the Hungarian Socialist Workers' Party, the Socialist Unity Party of Germany, the Polish United Workers' Party, the Rumanian Workers' Party, the Communist Party of the Soviet Union, and the Communist Party of Czechoslovakia. Representatives from the Viet Namese Party of Labour, the Communist Party of China, the Korean Party of Labour and the Mongolian People's Revolutionary Party were also invited to take part in the conference.

The conference considered the further promotion of economic co-operation between the socialist countries on the basis of the consistent implementation of the principle of international socialist division of labour and rational industrial specialisation and co-ordination, and heard reports on the work of the government planning agencies of the socialist countries in drawing up long-term plans for the basic sections of the national economy.

The members of the conference were unanimous in noting that economic contacts between the socialist countries were steadily being consolidated and were acquiring an increasingly many-sided character. Considerable progress has been made in recent years, in specialisation

and co-ordination of production, notably in machine-building.

The Economic Mutual Assistance Council and its standing committees have carried out a considerable amount of work in preparing recommendations in connection with the drafting of long-term plans for the development of the economy of the socialist countries.

The many-sided co-operation among the socialist countries, founded on the principles of complete equality, respect for one another's national interests and socialist inter-assistance, serves the cause of building socialism and communism and makes it possible to use to the full the advantages of the world socialist system of economy for developing the productive forces of every socialist country individually and for strengthening the economic might of the socialist camp as a whole.

The conference holds that now that the economic ties among the socialist countries have been considerably strengthened and have become all-embracing, it is becoming particularly important further to develop and improve the forms of economic co-operation among them, further to specialise and co-ordinate the production in the inter-related branches of national economy of the countries of the socialist camp.

The correct organisation of co-ordination and specialisation in production within the socialist camp ensures an economy of material resources and a rise in the productivity of social labour, the most rational use of the natural resources and the economic conditions in the socialist countries for speeding up the expansion of socialist reproduction. The conference drew attention to the need for the utmost development of the raw material branches of the national economy and the power industry and for

the further development and introduction of new machinery and techniques. Particular attention was drawn to the necessity of further co-ordination and specialisation in machine-building, making it possible to go over to the more rational mass and serial production, which sharply reduces production expenditures per unit of output.

The representatives of the Communist and Workers' Parties unanimously reaffirmed the need for the utmost utilisation of the vast possibilities and the greatest possible consideration for the interests of all socialist countries in the preparation of long-term plans, and also for expanding the mutually advantageous forms of co-operation with a view to raising the level of industrialisation in countries with a less developed industry.

The conference found it necessary further to enhance the role of the Economic Mutual Assistance Council and its agencies in the organisation of economic co-operation.

The conference worked out and ap-

proved agreed recommendations on the further development of economic co-operation among the socialist countries, the co-ordination and specialisation of production, and on the preparation of long-term national economic development plans. The conference decided to refer these recommendations to the Economic Mutual Assistance Council for the elaboration of the required practical measures.

The representatives of parties of the countries which do not belong to the Economic Mutual Assistance Council expressed readiness to take an active part in the economic co-operation of the socialist countries and to strengthen this co-operation in due form by measures conforming to the specific conditions in their countries.

The discussion of the questions on the conference's agenda took place in a friendly and cordial atmosphere, in the spirit of fraternal mutual understanding, and revealed the complete community of views of the parties represented on all the questions discussed.

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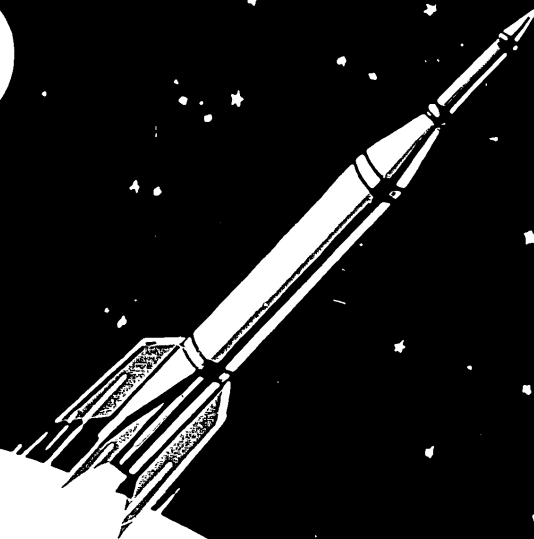
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SOVIET PLANET INTO SPACE

SOVIET BOOKLET No. 48

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SOVIET PLANET INTO SPACE

This booklet contains material kindly provided by the following scientists:

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Foreword

The years 1957 and 1958 have been marked by outstanding Soviet achievements in rocketry. The launching of Soviet sputniks has provided the necessary material for carrying out space flights and reaching other planets of the solar system. Research and experimental designing work in the U.S.S.R. have been aimed at creating bigger and heavier sputniks.

On October 4, 1957, a truly epoch-making event took place—the Soviet Union successfully launched Sputnik I, the first artificial earth satellite. It weighed 83.6 kilograms (174 lbs.), and was put into orbit with a perigee of 228 kilometres* (142.5 miles) and an apogee of 947 kilometres (592 miles). During its existence from October 4, 1957, to January 4, 1958, it completed some 1,400 revolutions around the earth.

On November 3, 1957, Sputnik II was put into orbit. It weighed 508.3 kilograms (1,118.3 lbs. or nearly half a ton), its perigee when in orbit was 225 kilometres (140.6 miles) and its apogee 1,671 kilometres (1,045 miles).

On May 15, 1958, an even bigger sputnik was launched, weighing 1,327 kilograms (nearly 1 ton 6 cwt.), with 968 kilograms (over 19 cwt.) of instruments, measuring apparatus and sources of electric power. Its apogee is 1,880 kilometres (1,167½ miles). This Sputnik is still in orbit. All three sputniks were satellites around the earth.

When the world's first artificial earth satellite was put into orbit on October 4, 1957, and with the subsequent launching of heavy Soviet sputniks under the International Geophysical Year programme, the first cosmic speed of 8 kilometres per second was attained.

As a result of the further creative work of Soviet scientists, designers, engineers and workers, there has now been developed a multi-stage rocket, the last stage of which is capable of attaining the second cosmic speed of 11.2 kilometres per second, making possible interplanetary flights.

On January 2, 1959, a Soviet space rocket took off in the direction of the Moon. The multi-stage rocket, following the set path, passed near the Moon and entered an orbit of its own around the Sun, becoming a satellite of the latter, the world's first artificial planet of the solar system.

Thus, the creative work of the Soviet people has made possible the first successful flight beyond the earth's gravitational field.

* 1 kilometre=½ miles approx.

Preface

By Academician A. Topchiev,

Vice-President, U.S.S.R. Academy of Sciences

THE TRIUMPHANT MARCH of human intelligence on the road to progress and happiness, to mastering the forces of nature, has been marked by another outstanding victory. The successful flight of the first Soviet artificial planet has ushered in the era of interplanetary flights.

We Soviet scientists are proud of the fact that the Soviet people, socialist society, were destined to be the first to overcome the earth's gravitational pull and carry out the first flight into interplanetary space. For us it was a logical result of the free development of science and technology under socialism, a system which provides limitless scope to the talents and genius of man working for the benefit of society.

When on October 4, 1957, the first artificial earth satellite was launched and flew in its predetermined orbit, some of our critics tried to argue that it was a stroke of luck against the background of backward Soviet science and technology.

But it soon became clear to everyone that it wasn't that at all. The first sputnik by its striking magnificence dispersed the fog of fiction that Soviet science and technology were backward. The Soviet sputniks became the best yardstick for measuring scientific and technical progress.

This is easy to understand. To build a flying machine capable of developing cosmic speed in a few minutes and ensure its travelling automatically to the exact spot in a pre-determined path, and to develop automatic equipment for studying the nature of the physical phenomena beyond the upper atmosphere is within the capacity only of countries with the highest developed science and engineering.

The artificial planet of the solar system which started out on its perpetual path in an orbit set by scientists between the Earth and Mars is a scientific and technical summit resting on a foundation of the most up-to-date achievements in the most diverse sphere of science and engineering, on the firm basis of an advanced industry.

The artificial planet has incorporated in it the latest attainments

in radio engineering, remote control, electronic computing techniques, metallurgy, chemistry, semi-conductor engineering, heat techniques, automation, radio-physics, and others.

The launching of the Soviet sputniks opened up to humanity new prospects for its further development, for extending its will over a broad range of nature's phenomena. Data obtained on the nature of the processes going on in the upper atmosphere, and beyond it, have entered the store-house of world science.

In studying the Earth's magnetic field and the streams of cosmic radiation and establishing the relation of their variations to the processes taking place on the Sun, the scientists have found that the Earth's atmosphere, in particular the upper layers, causes substantial interference in the indications of instruments. The high concentration of charged particles revolving around the Earth in its magnetic field, disguises the streams of corpuscular radiation of the Sun, making it difficult to study the "hard" photons (short-wave electromagnetic radiation) in the streams of cosmic rays.

For studying all these phenomena in their pure form it has become necessary to take research equipment far beyond the Earth's atmosphere, beyond the bounds of active influence of its magnetic field. And so, the decision was made to launch a space rocket which would be able completely to escape the Earth's pull and reach the expanses of interplanetary space.

Of great interest for learning the secret of the origin of the magnetic field of the Earth and of other heavenly bodies is the observation of the magnetic field of the Moon, which, it is believed, unlike the Earth, has no high-temperature core. The study of the Moon's radioactivity is of considerable importance for future interplanetary travel.

Therefore, after deciding to launch a space rocket into interplanetary space, scientists mapped its path to pass close to the Moon.

The space rocket was launched on January 2, 1959. Following exactly along the set path, the rocket passed close to the Moon at 5.59 a.m. January 4, and headed beyond into interplanetary space.

The tasks set the Soviet space rockets were fully carried out, and the data obtained from the many instruments, which worked faultlessly all the time, are being analysed.

The flight of the rocket yielded abundant material in all of the scientific tasks set. It will, of course, take a relatively considerable time to work up the material, and as it is analysed it will be published in the scientific press and thus become available to the scientific community all over the world.

THE PROBLEM OF LAUNCHING

"For forty years I have worked on jet-propelled engines and have thought that it would be several centuries yet before we could take a trip to Mars. But time moves more quickly, and today I am sure that many of you will witness the first flight beyond the atmosphere. Heroes, men of audacity, will inaugurate new airlines: Earth-Moon's orbit; Earth-Mars' orbit, or further; Moscow-Moon; Kaluga-Mars."

—From an address made on May Day, 1933, by Konstantin Tsiolkovsky, Russian pioneer of rocket-dynamics, at his Kaluga residence and broadcast to the demonstration in the Red Square, Moscow.

LET US IMAGINE a gun placed on top of the highest mountain the summit of which protrudes from the dense layers of the atmosphere. If it is fired horizontally, the distance of the shell's flight will depend on the initial velocity imparted to it. The greater the initial velocity, the farther the shell will land. At a speed of some 8 kilometres (5 miles) a second it will not land for a long time, becoming an artificial Earth satellite.

What force will keep it in orbit, will be able to equalise the force of the Earth's attraction? Centrifugal force. It increases as the speed of the body's movement increases. The speed of horizontal flight at which the centrifugal force becomes equal to the force of weight is called the first cosmic speed. Sometimes it is called "circular" speed, as the satellite's orbit in such a case is a circle.

Now let us assume that we have changed the weight of the shell. Will its first cosmic speed be different? No, and the explanation for it is that centrifugal force is proportional to weight and the equality of these forces is not disturbed.

And what will happen if the shell is imparted an initial speed exceeding first cosmic speed? In such a case the orbit will no longer be a circle, for centrifugal force exceeds the force of weight, and the shell will begin to move further and further away from the Earth. At the point in the orbit opposite to the spot where the imaginary gun is located, the shell will be much farther away from the Earth's centre than the gun. As it keeps moving away from the Earth it will lose some of its energy in overcoming the gravitational pull, with the result

that the speed of its movement will become less than "circular" and it will begin to draw closer to the Earth and will come back to the same spot in space where it reached orbit.

Therefore, if the initial speed of the shell is greater than first cosmic speed the orbit will no longer be a circle, but will be an ellipse. It is exactly such an orbit that was characteristic of all the Soviet sputniks which, it will be remembered, were launched with the aid of carrier-rockets. The rocket took off practically vertically, and after it had left the dense layers of the atmosphere, its direction changed into one approximating a horizontal.

If the initial speed is increased, the orbit will extend more and more. At a speed of 11.2 kilometres (7 miles) per second it will not return to the Earth, and its margin of energy will be enough to allow it to escape the Earth's gravity. This speed is called second cosmic, or "parabolic" speed, since the space rocket in that case will move along a parabola. If the initial speed exceeds 11.2 kilometres a second, the rocket will move out into interplanetary space along a hyperbola, and speeds exceeding 11.2 kilometres a second are therefore called "hyperbolic".

And is there a third cosmic speed? And if so, what is it?

The third cosmic speed is approximately 16.7 kilometres (about 10½ miles) per second. This speed will permit a body to escape the gravitational pull of both the Earth and the Sun, in other words, beyond the solar system. Attainment of third cosmic speed will make it possible to make flights to other stellar worlds.

Immediately after the launching of the world's first sputnik it became obvious that Soviet rockets were powerful enough to reach the Moon, provided the payload to be taken up to it was pared down a bit. And the launching of the first sputniks, especially the second and third, have created the impression that there are no longer any obstacles to reaching our natural satellite.

That, however, is not so, of course.

First of all it should be borne in mind that here the methods of calculating orbits and trajectories of the movement of bodies which move in the field of attraction of one planet, are entirely inapplicable. The force of lunar and solar attraction operates on all objects on the Earth's surface, a good illustration of which are the tides of the ocean and of the Earth's atmosphere.

Of course, because the Moon and Sun are so far away from the Earth their pull is infinitely less than that of the Earth near itself.

and we simply do not take into account the influence of the Moon or Sun on the Earth's surface.

This influence need not be taken into consideration when launching artificial satellites. However, as the rocket moves further and further away from the Earth toward the Moon, the gravitational force of the Earth keeps diminishing all the time, while the force of attraction of the Moon and other heavenly bodies keeps increasing.

If we bear in mind that all these bodies constantly move in relation to one another, it becomes clear how difficult it is to ensure the exact movement of a rocket in time and space, a precision which has to be provided so that the rocket will reach the set goal in the fixed time.

To accomplish this it was necessary to develop equipment capable of developing gradual acceleration of one stage of the rocket after the other and of maintaining the set final speed for the last stage of the rocket. If the speed had been less or greater, the rocket would have taken another path and would have deviated considerably from the area of the Moon.

Another thing which had to be maintained very accurately was the angle of ascent of the last stage. Here, too, the slightest declination from the set angle could have led to a sharp deviation of the rocket from the objective.

Further, it should not be forgotten that the rocket was moving towards the Moon, which itself moves at a great velocity. At the moment the rocket took off, the Moon was far away from the point in celestial space where the meeting with the rocket was to take place, and, therefore, besides directing the rocket to that point it was also necessary to start the rocket precisely at a set time.

Even a slight delay in launching would have led to the rocket, after flying over the set path, failing to meet the Moon where it was to be.

Moreover, it should be borne in mind that the escape of the Soviet space rocket into the area of the Moon was accomplished in a difficult cosmic situation, if we may use such an expression.

The point is that the best chance of reaching the Moon is to take off in the New Moon, for then the Sun is on the other side of the Moon and by its gravity helps the movement of the rocket to the area of the Moon.

Thus when the heavenly bodies are so situated we have a "free" extra force to help us reach the area of the Moon. The phase in

which the Moon was at the moment of launching the Soviet rocket made it impossible to utilise the Sun's gravitational force.

Moreover, being out of the direction of the movement of the rocket, the Sun created a lateral force, which increased the probability of the rocket's declination from the straight path to the Moon.

These are the main technical difficulties which Soviet science faced in preparing and launching the rocket in the direction of the Moon.

However, very important too is the question of the preparation of the whole range of studies conducted while the rocket is in flight.

The rocket's ample power and the thorough preparation of the experiment itself ensured the success of the colossal test conceived. While the result accomplished is not a sensation in the strict sense of the term, it is a logical achievement of Soviet science and technology.

The Flight of the Space Rocket

THE MULTI-STAGE SPACE ROCKET took off from the Earth's surface vertically, and gradually it was made to veer away from the vertical line of flight by the programme machinery of the automatic control system. The rocket quickly picked up speed.

When the final point of acceleration was reached the last stage of the rocket had attained the speed required for its further motion. The automatic control system of the last stage shut off the engine and issued the order to separate the container with the scientific instruments from the last stage. Both the container and last stage of the rocket orbited and began to move towards the Moon near one another.

To break the Earth's gravitational pull the space rocket had to attain a speed of not less than the second cosmic speed, which is 11.2 kilometres (7 miles) per second at ground level.

The rocket had already exceeded the second cosmic speed at the time the engine of the rocket's last stage was shut off.

As its further motion up to its approach to the Moon was mainly influenced by the Earth's pull, according to the laws of celestial mechanics, the path of the rocket's movement in relation to the centre of the Earth was very near to a hyperbola, for which the centre of the Earth is one of its foci.

The path was most curved near the Earth, becoming straighter and straighter the further it moved away from the Earth. At great

distances away from the Earth the trajectory becomes very close to a straight line.

When starting along the hyperbolic trajectory the rocket moved very fast. But the farther it got away from the Earth the more its speed diminished due to the Earth's gravity. For instance, while at the altitude of 1,500 kilometres the rocket's speed in relation to the Earth's centre was slightly more than 10 kilometres per second, at the altitude of 100,000 kilometres it was no more than roughly 3.5 kilometres a second.

Approximately after an hour's flying, the rocket's path in the celestial sphere entered the Constellation of Coma Berenices. Then it passed into the Constellation of Virgo, in which it drew near to the Moon.

The Moon, moving along its orbit around the Earth, approached the nearest point to the rocket from the right, if viewed from the northern part of the Earth. The rocket drew near this point from above and from the right. During the period when they were closest, the rocket was above and slightly to the right of the Moon.

The time required by the rocket to reach the Moon's orbit depends on the excess of its initial velocity over the second cosmic speed; the greater the excess the less time it will take. The value of the excess was selected so that the passage of the rocket near the Moon could be observed by radio means located on the territory of the Soviet Union and in other countries of Europe, as well as in Africa and the greater part of Asia. It took the space rocket thirty-four hours to reach the nearest point to the Moon.

The distance between the rocket and the Moon when they were closest to each other was, according to verified data, 5,000-6,000 kilometres, or approximately 1.5 diameters of the Moon.

When the rocket was approaching the Moon within several tens of thousands of kilometres, the Moon's gravitational pull began appreciably to affect the motion of the rocket. The Moon's gravity led to a declination in the direction of the rocket's movement and to a change in the velocity of its flight near the Moon.

When they drew nearest, the Moon was below the rocket and therefore, owing to the Moon's force of gravitation, the direction of the rocket's flight declined downwards.

The Moon's pull also created a local increase in the speed, which reached its maximum in the area in which the rocket and Moon were closest to one another.

One may ask why didn't the rocket become an artificial satellite

of the Moon? The thing is that the "circular" speed near the Moon's surface barely exceeds 1.7 kilometres a second, and at the distance at which the rocket was closest to the Moon the first "lunar" cosmic speed is altogether about one kilometre per second. The second "lunar" cosmic speed is equal to about 2.5 kilometres a second for a rocket taking off from the Moon. A rocket 7,000 kilometres away from the Moon needs to have a speed of 1.5 kilometres per second to move out into interplanetary space. Since the Soviet space rocket had a much higher speed it skirted the Moon, moving away from it along a hyperbolic trajectory.

At a distance of the order of roughly 1 million kilometres or more from the Earth, the effect of the Earth's gravity is so weak that the rocket can be considered to be moving only under the influence of the Sun's gravitational pull. Around January 7th or 8th the Soviet space rocket entered its own orbit around the Sun, becoming its satellite, the world's first artificial planet in the solar system.

How the Man-Made Planet Moves

PEOPLE HAD OBSERVED the movement of the Moon round the Earth for many centuries without knowing what made the Moon keep on its orbit. It was only in the seventeenth century that Isaac Newton showed that one and the same force makes a stone thrown up come down, the Moon move around the Earth, and planets around the Sun—the force of gravity. By the law of universal gravitation, any two material particles are attracted to one another by a force directly proportional to their masses and inversely proportional to the square of the distance between them.

Acting on a rocket flying in cosmic space are the forces of attraction of the Earth, the Sun, the Moon and other planets, and the force of their interaction with the rocket depends on the distance between these bodies and their masses.

In the initial stage of the flight the Earth's pull exercises the greatest influence on the rocket, and to overcome it, it was necessary to develop the enormous second cosmic speed. When the rocket passed near the Moon, the latter's attraction, of course, affected the rocket's path to a certain extent.

Today it is the Sun's gravity which exercises the greatest influence on the rocket's flight. If there had been no Sun's attraction the rocket would have gone out into the endless expanses of the universe

However, the Sun's attraction does exist, and under its influence the direction of the rocket's flight underwent changes: the path of its flight became an ellipse, that is almost a circle.

As the Earth's speed is 30 kilometres (nearly 19 miles) a second and the rocket's speed in relation to the Earth is two kilometres (1½ miles) a second, the velocity of the movement of the rocket as a planet around the Sun is equal to approximately 32 kilometres (20 miles) a second.

Exact data on the rocket's position, its direction and velocity at great distances away from the Earth have enabled us, by applying the laws of celestial mechanics, to calculate the movement of the space rocket as a planet of the solar system. The orbit has been calculated without taking into account the perturbations which the planets and other bodies of the solar system might produce. The orbit has been computed to be as follows:

The orbit's inclination to the Earth's orbital plane is approximately one degree, in other words, very little;

The eccentricity of the artificial planet's orbit equals 0.148, which is appreciably more than the eccentricity of the Earth's orbit, which equals 0.017;

The closest the artificial planet will get to the Sun will be about 146 million kilometres (91½ million miles), or only a few million kilometres less than the distance from the Earth to the Sun, which averages 150 million kilometres (about 94 million miles);

The farthest the artificial planet will get away from the Sun will be about 197 million kilometres (about 123 million miles), in other words, at that point the rocket will be 47 million kilometres (about 30 million miles) farther away from the Sun than the Earth;

The artificial planet's period of revolution around the Sun will be 450 days, or about 15 months. The rocket reached the closest point to the Sun for the first time in the middle of January, 1959, and it will reach the farthest point away early in September, 1959.

It is noteworthy that the artificial planet's orbit approaches the orbit of Mars within the range of 15 million kilometres (about 9½ million miles), which is roughly four times closer than the Earth's orbit is.

The distance between the rocket and the Earth as they move around the Sun will keep on changing, now increasing and now decreasing. The greatest distance between them may be as much as 300 to 350 million kilometres (i.e. 180 to 220 million miles), and the shortest one million kilometres (i.e. 625,000 miles).

The Space Rocket's Scientific Equipment

THE LAST STAGE of the space rocket is a guided rocket fastened to the stage immediately preceding it by means of an adaptor.

Control of the rocket is effected by an automatic system which keeps the rocket moving along the set path and ensures the set speed when the engine has completed its duty. The last stage, after the stock of fuel has been consumed, weighs 1,472 kilograms.*

Besides the devices to ensure the normal flight of the last stage of the rocket, its body houses:

A hermetically-sealed separable container with scientific and radio-technical instruments;

Two transmitters equipped with acrials working on frequencies of 19.997 and 19.995 megacycles;

A counter of cosmic rays;

A radio system with the aid of which the flight trajectory is determined and its further movement is forecast;

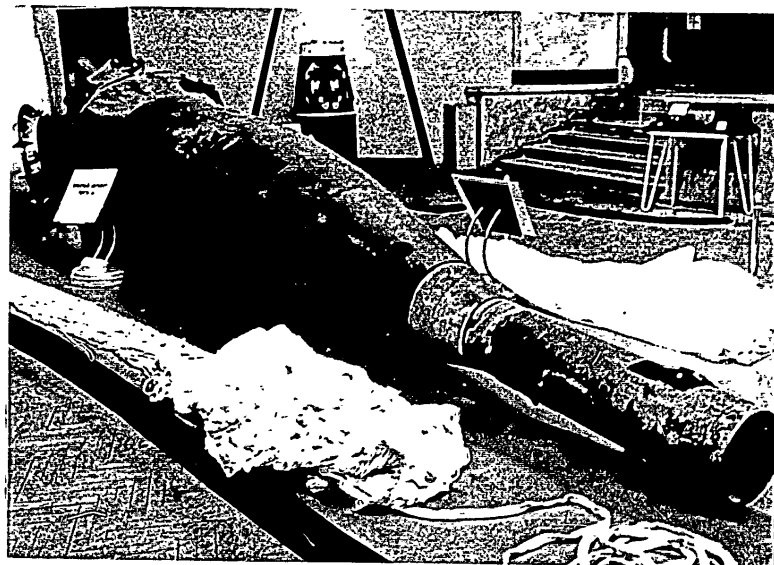
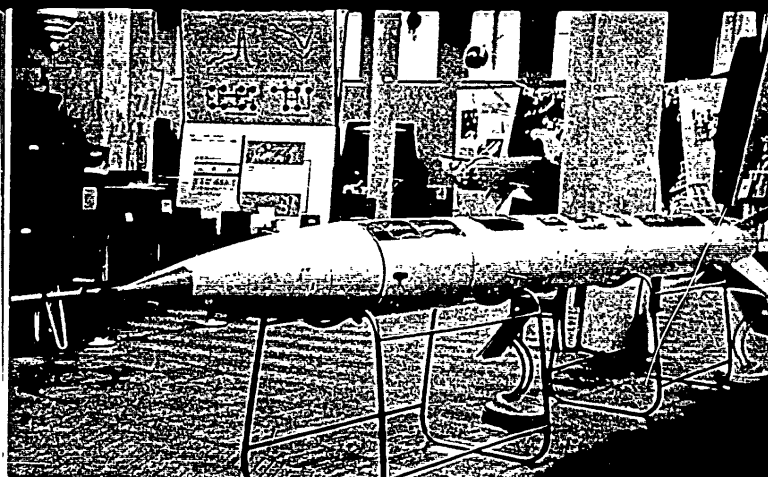
Equipment for producing an artificial sodium cloud.

The container is located in the upper part of the last stage of the rocket and is protected from overheating when the rocket passes through the dense layers of the atmosphere, by a cone which is then discarded.

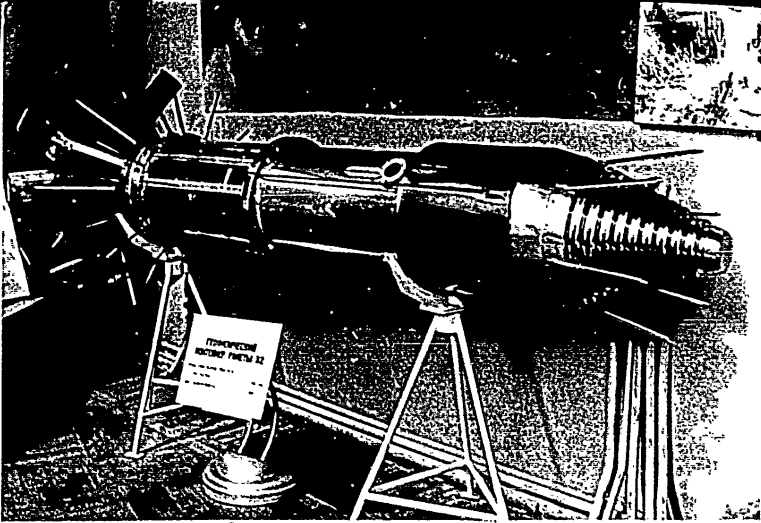
The container consists of two spherical half-shells tightly connected by frames with packing made of special rubber. Located on one of the half-shells are four rods of the antennae of the radio transmitter operating on a frequency of 183.6 megacycles. The antennae are fastened on to the body symmetrically relative to the hollow aluminium pin, at the end of which is an instrument for measuring the magnetic field of the Earth and for detecting the Moon's magnetic field if it has one. Up to the time the protective cone is discarded the antennae are folded up and fastened on to the pin by a magnet, and after the cone is discarded the antennae open up. Located on the same half-shell are two proton traps for finding out the gas component of interplanetary matter, and two piezo-electric pick-ups for the study of meteoric particles.

The half-shells of the container are made of a special aluminium-magnesium alloy. On the frame of the lower half-shell an instrument holder of tubular design made of a magnesium alloy is fastened and the instruments of the container are placed on it.

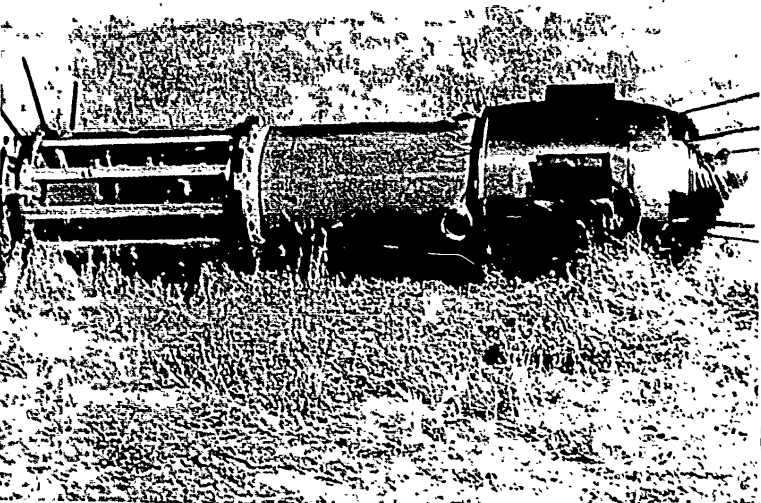
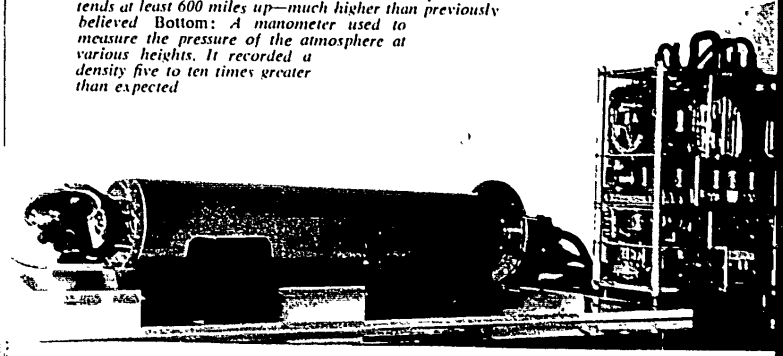
* 1 kilogram = 2.2 lb.



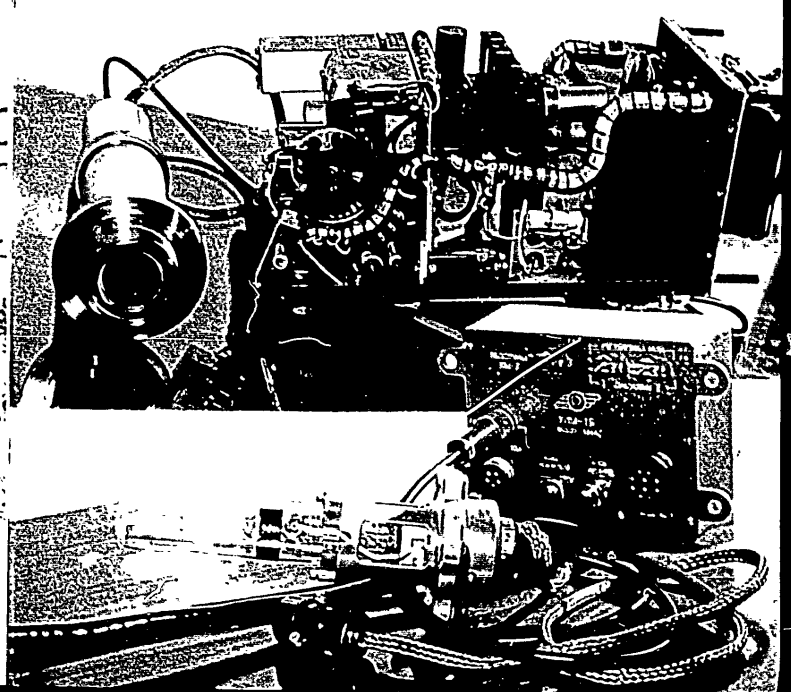
ROCKET DEVELOPMENT Above are Soviet geophysical rockets in a Moscow Exhibition. The top one is 23 feet long, has a starting weight of 1,595 lbs., and is designed to reach an altitude of 60 miles. The instrument-head below was recovered after parachuting back from a height of 270 miles.

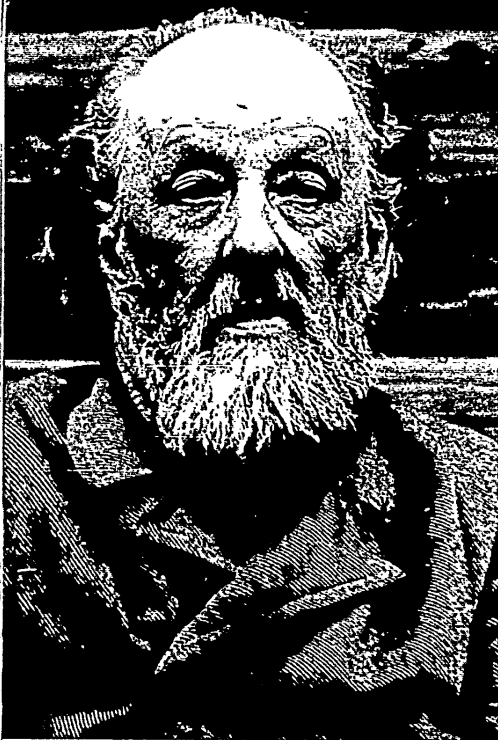


INSTRUMENTS Three of the instruments incorporated in the Soviet geophysical rockets and sputniks. Top: A magnetometer used to measure the magnetic field of the Earth and a sputnik's position as it rotates about its own centre of gravity. Centre: The mass spectrometer tube for measuring ion composition. This showed that the atmosphere extends at least 600 miles up—much higher than previously believed. Bottom: A manometer used to measure the pressure of the atmosphere at various heights. It recorded a density five to ten times greater than expected.



A replica (above) of the instrument-case of a Soviet geophysical rocket weighing 792 lbs., and (below), a similar case after its descent from a height of 150 miles. Note its squashed nose from the impact of landing.





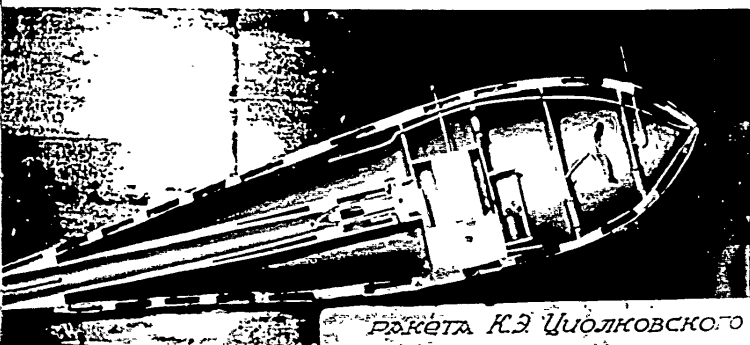
EARLY DAYS

One of the first to be interested in rockets and sputniks was the Russian schoolmaster, Konstantin Tsiolkovsky (1857-1935), who became a pioneer in aeronautics, rocketry and inter-planetary communication research.

Speaking at a May Day meeting in 1933, he said

"Mankind will not always remain on Earth; in his pursuit of light and space man will at first timidly penetrate beyond the atmosphere and then conquer all the space around the Sun. I believe that many of you will witness the first journey beyond the atmosphere"

The model of a space ship below, prototype of the modern rocket, was made by Tsiolkovsky over fifty years ago—in 1903



The following equipment is housed in the container:

1. Equipment for radio control of the trajectory of the rocket's movement consisting of a transmitter operating on a frequency of 183.6 megacycles and a block of receivers.
2. A radio transmitter operating on a frequency of 19.993 megacycles.
3. A telemetering unit designed for transmitting by radio to the Earth measurement data and data on the temperature and pressure in the container.
4. Instruments for studying the gases contained in interplanetary matter and the corpuscular radiation of the Sun.
5. Equipment for measuring the Earth's magnetic field and detecting the magnetic field of the Moon, if there is one.
6. Instruments for studying meteoric particles.
7. Instruments for registering heavy nuclei in primary cosmic radiation.
8. Equipment for registering the intensity of cosmic rays and the variations of this intensity, and for recording photons in cosmic radiation.

The radio and scientific equipment housed in the container get their electricity from silver-zinc and mercury oxide batteries placed on the container's instrument frame.

The container is filled with gas at a pressure of 1.3 atmospheres. Its design ensures high pressurisation inside. The temperature of the gas in the container is maintained within the set limits (approximately 20°C); this is accomplished by imparting to the container's shell certain co-efficients of reflection and radiation through special treatment of the shell. In addition, a system ensuring forced circulation of the gas is installed in the container, and the circulating gas draws off the heat from the instruments and transfers it to the shell, which thus serves as a radiator.

The container detaches itself from the last stage of the rocket when the engine of the last stage has done its work.

The separation of the container is necessary to ensure its thermal regime. Located in the container are instruments which generate a lot of heat, and the heat regime, as has been pointed out before, is ensured by maintaining a certain balance between the heat emitted by the container's shell and the heat received by the shell from the Sun.

The detaching of the container ensures normal functioning of the

container's aerials and the instruments for measuring the Earth's magnetic field and for finding out whether the Moon has one; as a result of the separation of the container the magnetic influences of the rocket's metallic structure are eliminated from the readings of the magneto-meter.

The combined weight of the scientific and measuring equipment plus the container and the source of power located in the last stage of the rocket is 361.3 kilograms (i.e. 794.86 lbs.).

To mark the building in the U.S.S.R. of the world's first space rocket, now an artificial planet of the solar system, two pennants with the coat of arms of the Soviet Union were placed in the rocket's container.

One pennant is a thin metal strip with the inscription "Union of Soviet Socialist Republics" on one side and the coat of arms of the Soviet Union and the inscription "January 1959 January" on the other. The inscriptions were made by a special photochemical method, ensuring long preservation.

The other pennant is of special shape, symbolising the artificial planet, and the surface is covered with pentagonal elements of special stainless steel. Chased on one side of each element is the inscription "U.S.S.R., January 1959," and on the other the coat of arms of the Soviet Union and the inscription "U.S.S.R."

Network of Measuring Facilities

TO OBSERVE THE FLIGHT of the space rocket and to measure the parameters of its orbit and to receive the readings from aboard the rocket a large network of measuring facilities located all over the Soviet Union was used.

The facilities included a group of automated radio-located equipment for precise determination of the elements of the initial section of the orbit; a group of radio-telemetering stations for recording the scientific information transmitted from the space rocket; a radio system for controlling the elements of the rocket's path at great distances away from the Earth: radio stations to receive signals on frequencies of 19.997, 19.995 and 19.993 megacycles, and optical means for observing and photographing the artificial comet.

Co-ordination of the work of all measuring instruments and collation of the results of the measurements with astronomical time were effected with the aid of special uniform time equipment and a system of radio communication.

Analysis of the data of the path's measurement coming from the regions where the stations are located, determination of the orbital elements and giving co-ordinates to the measuring instruments were carried out by the co-ordination-computing centre by means of electronic computing machines.

Automatic radio-location stations were used to determine the initial conditions of the rocket's movement and to give a long-term forecast of its movement and the data of the co-ordinates to all measurement and observation instruments. The measurements obtained were converted by means of special computers into a binary code, reduced to mean values, collated with astronomical time exact to within a few milliseconds and were delivered automatically to the lines of communication.

To avoid possible errors in transmitting the readings over the lines of communication the measurement data were coded; the use of the code made it possible to discover and correct one error in the number transmitted and to discover and discard numbers with two errors.

The measurement information thus converted was channelled to the co-ordination-computing centre, where the data were automatically punched by the input devices on cards by means of which electronic computing machines processed the measurement data and simultaneously calculated the orbit. As a result of using a large number of trajectory measurements the initial conditions of the rocket's movement were determined by solving the marginal problem, applying the method of minimal squares.

Next the system of differential equations describing the joint movement of the rocket, Moon, Earth and Sun was integrated.

The telemetering stations on Earth received the scientific information from the space rocket and recorded it on film and recording tape. To ensure a wide range of reception of radio signals, extra-sensitive receivers with special aerials of large effective area were used.

The receiving stations operating on frequencies of 19.997, 19.995 and 19.993 megacycles received radio signals from the space rocket and recorded them on magnetic tape. During the process the field intensity was measured and a number of other measurements were taken making it possible to conduct ionospheric studies.

Data on cosmic rays were transmitted by changing the manipulation of the transmitter operating on frequencies of 19.997 and 19.995 megacycles, and the main scientific information was transmitted over

the channel of the transmitter operating on a frequency of 19.993 megacycles by changing the interval between the telegraph-beats.

Control of the rocket's orbit up to distances of 400,000 to 500,000 kilometres (i.e. 250,000-310,000 miles) and measurement of the elements of its trajectory were carried out by means of a special radio system operating on a frequency of 183.6 megacycles.

The measurement data were automatically induced and recorded in a digital code on special devices at strictly fixed moments.

Along with the time in which the readings of the radio system were taken, the data were regularly channelled to the co-ordination-computing centre. The combined processing of these measurements with the data of the radio-location system measurements made it possible to check the elements of the rocket's orbit and directly control the movement of the rocket in space.

By using powerful ground transmitters and super-sensitive receivers, reliable measurement was ensured of the rocket's trajectory to a distance of the order of 500,000 kilometres (i.e. 310,000 miles).

The above-mentioned network of measuring equipment made it possible to obtain valuable data of the observations and reliably to control and forecast the rocket's movement in outer space.

The abundant material on the trajectory measurements obtained during the flight of the first Soviet space rocket and the experience of its automatic processing on electronic computing machines will be very important for launching future space rockets.

Study of Cosmic Rays

ONE OF THE MAIN objectives of the scientific investigations conducted by means of the space rocket is the study of cosmic rays.

The composition and characteristics of cosmic radiation at great distances from the Earth are conditioned by the origin of the cosmic rays and the structure of cosmic space. Until now information on cosmic rays was obtained by measuring the cosmic rays near the Earth. However, due to the effects of a whole series of processes, the composition and properties of cosmic radiation near the Earth differ sharply from those characteristic of the "true" cosmic rays. The cosmic rays observed on the Earth's surface little resemble the particles which come to us from outer space.

When high-altitude rockets, and especially artificial Earth satellites, are used there is no longer any important amount of matter between the cosmic rays coming from outer space and the measuring instruments.

However, the Earth is surrounded by a magnetic field, which partly reflects back the cosmic rays. On the other hand, this same magnetic field makes a kind of trap for the cosmic rays. Once landing in the trap the cosmic-ray particles keep wandering about in it for a very long time, with the result that a large number of cosmic-ray particles accumulate near the Earth.

As long as the instrument measuring cosmic radiation is within the bounds of the Earth's magnetic field, the results of the measurements do not permit studying the cosmic rays which come from the Universe.

We know that of the particles found at altitudes of the order of 1,000 kilometres, only an insignificant fraction (approximately 0.1 per cent) comes directly from outer space. The other 99.9 per cent apparently comes from the decay of neutrons emitted by the Earth (to be more exact by the upper atmosphere). These neutrons, in turn, are produced by cosmic rays bombarding the Earth.

Only when the instrument is set up not merely beyond the Earth's atmosphere but also beyond the bounds of the Earth's magnetic field will it be possible to ascertain the nature and origin of cosmic rays.

The Soviet space rocket had on board various instruments to permit studying the composition of the cosmic rays in interplanetary space from every angle.

Two counters of charged particles were used to determine the intensity of cosmic radiation, and the composition of cosmic rays was studied with the aid of two photo-multipliers attached to crystals.

For this purpose the following measurements were taken:

1. The stream of cosmic-radiation energy in a wide range of energies.
2. The number of photons with an energy of more than 50,000 electron volts (hard X-rays).
3. The number of photons with an energy of over 500,000 electron volts (gamma rays).
4. The number of particles capable of passing through a crystal of sodium iodide (the energy of such particles exceeds 5 million electron volts).
5. Total ionisation caused in the crystal by all categories of radiation.

The counters of charged particles sent impulses over special so-called reconversion circuits. The circuits made it possible to radio a signal when a certain number of particles had been counted.

The photo-multipliers attached to the crystals registered the flashes of light produced in the crystal when cosmic-ray particles passed through them. The impulse value at the output end of the photo-multiplier is, within certain limits, directly proportional to the amount radiated in the crystal at the time the cosmic-ray particle passes.

This latter value is in turn directly proportional to the energy spent by a cosmic-ray particle on ionisation in the crystal. By singling out the impulses of which the value is greater than a certain specific value the composition of cosmic rays can be studied.

A highly sensitive system registers all cases where the energy released in the crystal exceeds 50,000 electron volts. However, at such energies the penetrating capacity of the particles is very small. Under these conditions it is X-rays that will be registered in the main.

The number of impulses is counted with the aid of reconversion circuits similar to those used for counting the number of charged particles.

In the same way are singled out impulses the value of which corresponds to the release of more than 500,000 electron volts in the crystal, and under these conditions it is gamma rays that are registered in the main.

By singling out the impulses of still greater value (corresponding to the release of energy of more than 5 million electron volts) there have been observed cases of cosmic-ray particles possessing great energy passing through the crystal. It should be mentioned that the charged particles which are an organic part of the cosmic rays and fly practically at the velocity of light will pass through the crystal, and the release of energy in the crystal in most cases will equal approximately 20 million electron volts.

Besides measurement of the number of impulses, the total ionisation produced in the crystal by all forms of radiation is determined. Used for this purpose is a circuit consisting of a neon bulb, a condenser and resistors.

This circuit makes it possible, by gauging the number of times the neon bulb ignites, to determine the total current flowing through the photomultiplier and thereby to measure the total ionisation produced in the crystal.

The studies conducted by means of the space rocket permit determination of the composition of cosmic rays, which is of interest to science both from the point of view of analysis of the processes going on in cosmic space, and of the possibility of future space flights by man

Study of the Gaseous Composition of Interplanetary Matter and Corpuscular Radiation of the Sun

UNTIL RECENTLY IT WAS supposed that the concentration of gas in interplanetary space was very low, no more than a few isolated particles per cubic centimetre. However, certain astronomical observations in recent years have jolted this viewpoint.

The pressure of the Sun's rays on the particles of the Earth's upper atmosphere produces what appears like the Earth's "gaseous tail," whose direction is always away from the Sun. Its glow, which is projected against the background of a starry night sky in the shape of a counter-glow, is called zodiacal light.

The results of observations of the polarisation of zodiacal light published in 1953 made some scientists infer that in interplanetary space in the region of the Earth there are some 600 to 1,000 free electrons per cubic centimetre. If this is so, and since the medium is electrically neutral on the whole, it should also contain positively charged particles of the same concentration.

With certain assumptions from the above-mentioned polarisation measurements the deduction was made that the electronic concentration in the interplanetary medium depends on the distance to the Sun, and hence, also the density of the gas, which should be fully or almost fully ionised. The density of interplanetary gas should decrease as the distance from the Sun increases.

Another experimental fact speaking in favour of the existence of interplanetary gas with a density of the order of 1,000 particles per cubic centimetre is the occurrence of what are called "whistling atmospheres"—low-frequency electromagnetic oscillations caused by electrical discharges in the atmosphere.

To account for the propagation of the electromagnetic oscillations from the place where they originate to the place where they are observed, it has to be assumed that they spread along the lines of force of the Earth's magnetic field, over distances of 8-10 of the Earth's radii (that is, of the order of 50,000 to 65,000 kilometres) from the Earth's surface in a medium with an electronic concentration of the order of 1,000 electrons per cubic centimetre.

However, the inference that there is such a dense gaseous medium in interplanetary space is by no means indisputable. A number of scientists have pointed out that the observed polarisation of zodiacal

light could be caused by interplanetary dust and not necessarily by free electrons. Ideas have been expressed that in interplanetary space gas occurs only in the shape of so-called corpuscular streams, in other words, streams of ionised gas ejected from the Sun's surface and moving at a velocity of 1,000 to 3,000 kilometres a second.

The state of astrophysics being what it is, the problem of the nature and concentration of interplanetary gas apparently cannot be solved by means of observations conducted on the Earth's surface.

This problem, which is very important for ascertaining the processes of gas exchange between the interplanetary medium and the Earth's upper atmosphere and for studying the conditions under which the Sun's corpuscular radiation spreads, can be solved by means of instruments installed in rockets moving in interplanetary space.

The purpose of installing in the Soviet space rocket the instruments for studying the gaseous composition of interplanetary matter and corpuscular radiation of the Sun is to conduct the first stage of similar investigations—attempts to detect stationary gas and corpuscular streams in the area of interplanetary space lying between the Earth and the Moon, and to make a rough estimate of the concentration of charged particles in that area.

In preparing the experiment on the basis of data available at the present time the following two models of interplanetary gaseous medium were taken as the most probable:

A. There is a stationary gaseous medium consisting in the main of ionised hydrogen (that is, of electrons and protons—the nuclei of hydrogen) with an electronic temperature of 5,000° to 10,000° K (which is close to ionic temperature). From time to time corpuscular streams with a concentration of 1 to 10 particles per cubic centimetre pass through this medium at a velocity of 1,000 to 3,000 kilometres a second.

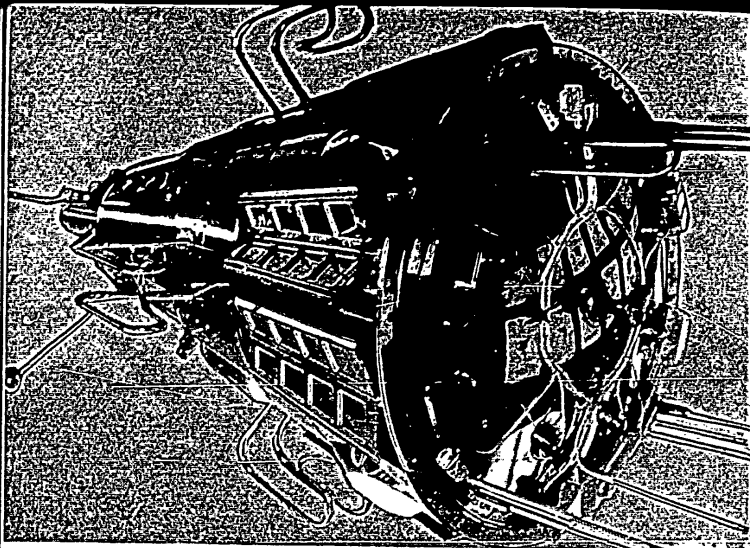
B. There are only sporadic corpuscular streams, which are made up of electrons and protons with velocities of 1,000 to 3,000 kilometres a second and which sometimes reach a maximum concentration of 1,000 particles per cubic centimetre.*

The experiment has been conducted with the aid of proton traps, each trap constituting a system of three concentric semi-spherical electrodes with radii of 60, 22.5 and 20 millimetres.† The two outer electrodes are made of a thin metal netting, and the third, of solid metal, serves as the proton collector.

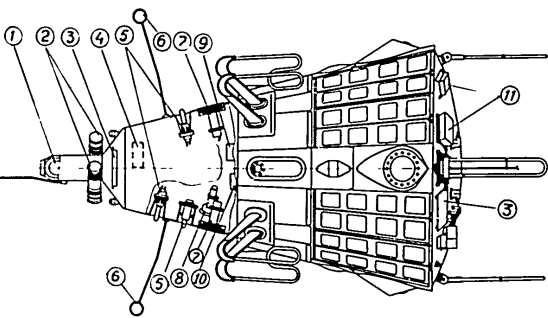
* 1 cubic centimetre = .06 cubic inches.
† 10 millimetres = .39 inches.

The astronauts of tomorrow will probably wear suits something like this one being tried out in a stratosphere flight by a Soviet pilot.



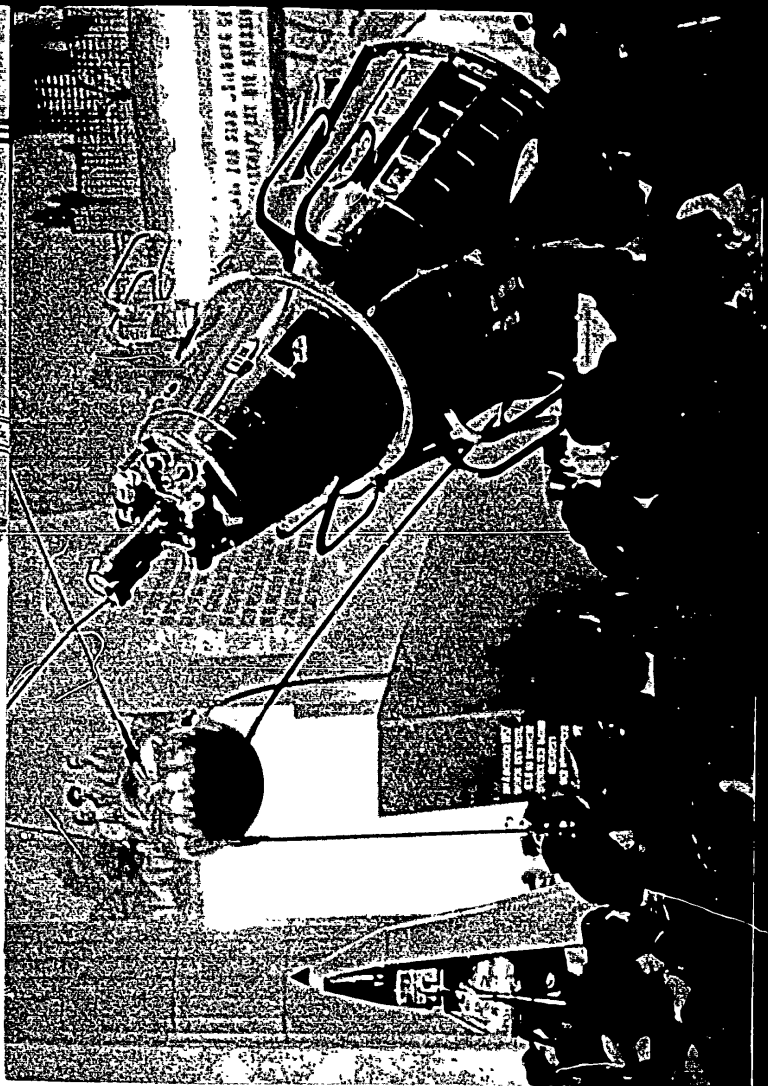


(Above): A rear view of a replica of Sputnik III

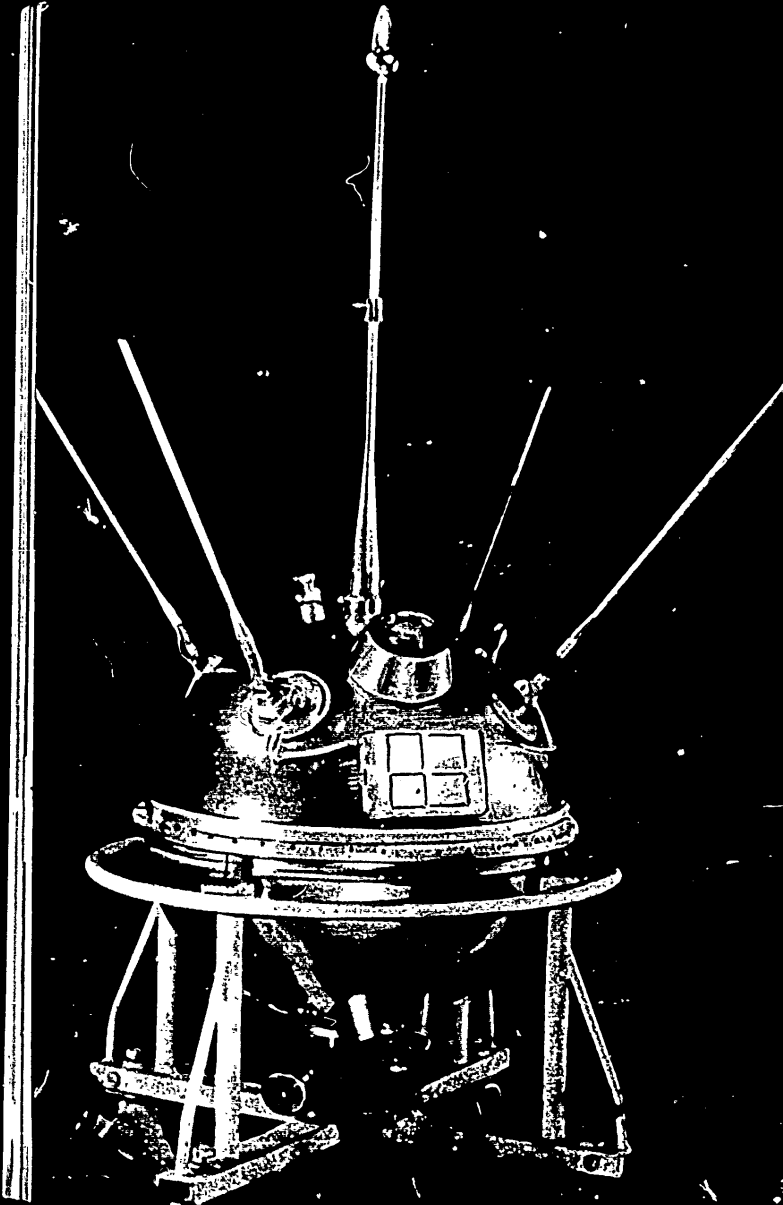


SPUTNIK III

The diagram above lists some of the major items of scientific equipment included in Sputnik III 1 Magnetometer 2 Photo-multipliers for measuring solar corpuscular radiation 3 Solar batteries 4 Instrument recording photons in cosmic rays 5 Ionisation manometers 6 Ion traps 7 Electrostatic fluxmeters 8 Mass spectrometric tube 9 Instrument recording heavy nuclei in cosmic rays 10 Instrument measuring intensity of primary cosmic radiation 11 Transmitter recording micrometeors The sputnik also includes a radio-computing system, a time-programming device and chemical batteries



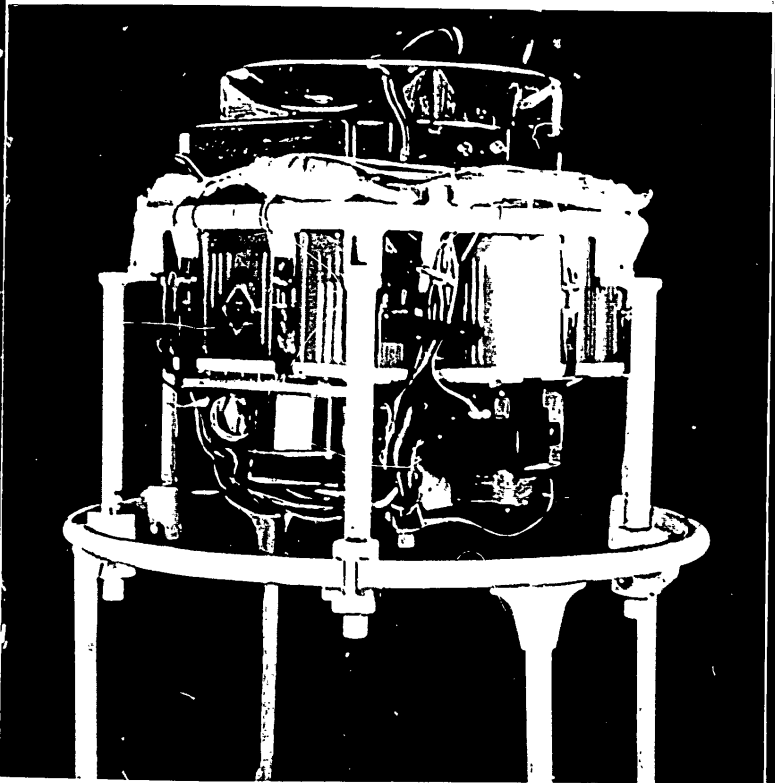
ONE, TWO, THREE Replicas of the Soviet Sputniks displayed in a Moscow science exhibition (centre), Sputnik I, (left), Sputnik II, and (right), Sputnik III



THE SOVIET COSMIC ROCKET

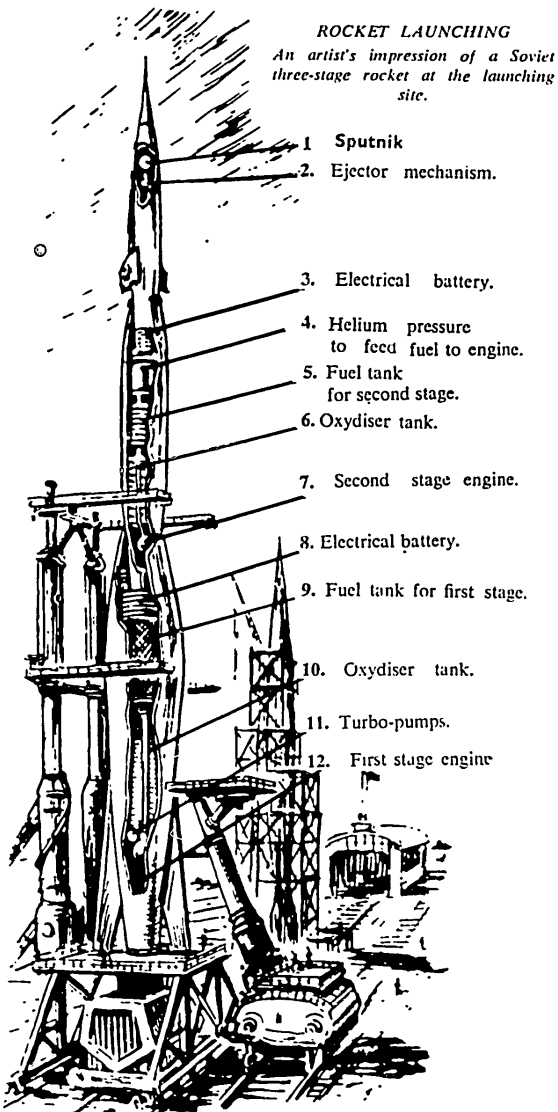
On the left is the instrument-container taken up by the Soviet cosmic rocket on January 2nd, 1959, to become, after passing the Moon, the first artificial planet in orbit round the Sun

Below, the instruments of the cosmic rocket, in its portable cradle, prior to being installed within the sphere on the left



ROCKET LAUNCHING

An artist's impression of a Soviet three-stage rocket at the launching site.



1. Sputnik
2. Ejector mechanism.
3. Electrical battery.
4. Helium pressure to feed fuel to engine.
5. Fuel tank for second stage.
6. Oxydiser tank.
7. Second stage engine.
8. Electrical battery.
9. Fuel tank for first stage.
10. Oxydiser tank.
11. Turbo-pumps.
12. First stage engine

First Results from the Space Rocket

THANKS to the signals sent back by the Soviet space rocket, now in orbit round the Sun, a picture of the radiation levels up to a distance of over 90,000 miles from the Earth has been obtained.

It shows that the level of radiation near the Earth is marked by a double peak (see fig. 2) which represents two bands of intensive radiation acting as haloes round our planet (see fig. 1). Further out in space the intensity of radiation falls off to a comparatively low figure.

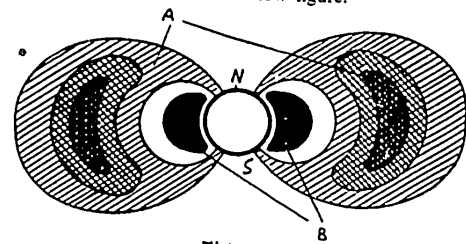


Fig 1

Fig. 1. A "contour map" of radiation levels as they would appear in a cross-section through the centre of the Earth. The zones extend in rings right round our planet—rather like a doughnut

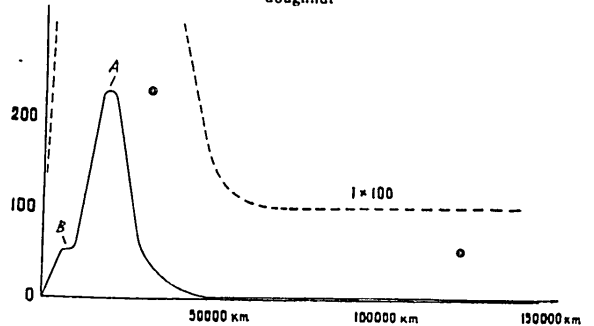


Fig 2

Fig. 2. The continuous line shows the level of ionisation produced by radiation at distances up to 90,000 miles from the Earth's surface. The dotted line shows the lower levels multiplied by 100



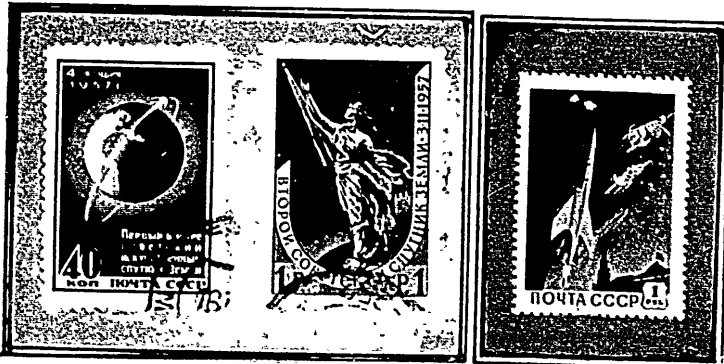
On the left, radio signals from the cosmic rocket are picked up by keen radio amateurs Gennadi Usharov (left) tenth form student at Alma-Ata Secondary School No. 22 and Makhmud Adikov, a geologist

SPUTNIKS ON STAMPS

The Soviet sputniks captured the popular imagination everywhere, and they appeared in every country as symbols of speed and progress, incorporated in stamps, cartoons, advertising, and after-dinner speeches. A new word had entered many languages.

Commemorative postage stamps were issued and below we see the 40-kopeck and the 1-ruble issues, and the 1-ruble stamp marking the 21st C.P.S.U. Congress and depicting the three sputniks and the cosmic rocket.

(below) The 40-kopeck issue showing Sputnik 1 in orbit the symbolic figure speeds the satellite on its way on the 1-ruble stamp



The electrodes' electric potentials in relation to the body of the container are such that the electric fields produced between the trap's electrodes should ensure the collection of all protons and ejection of the electrons landing in the trap from the stationary gas, and the suppression of the photo-electric current in the collector produced by the action of the Sun's ultra-violet rays and other radiations acting on the collector.

The separation of the proton current produced in the traps by the ionised stationary gas and corpuscular streams (where they exist in combination) is effected by the simultaneous use of four proton traps differing from one another in that on the shell of two of them (the outer nets) a positive potential is fed which is equal to 15 volts relative to the shell of the container.

This stopping potential prevents protons from the stationary gas (which have an energy of the order of one electron volt) from landing in the trap, but cannot hinder the protons of the corpuscular streams possessing much greater energies from landing in the collector. The other two traps should register the aggregate proton currents produced by both the stationary and corpuscular protons. The outer net of one of the traps is under the potential of the container's shell, and the other has a negative potential equal to 10 volts relative to the same shell.

The currents in the circuits of the collectors, after amplification, are registered by means of a radio-telemetering system.

Study of Meteoric Particles

BESIDES THE PLANETS and their satellites, asteroids and comets, the solar system has a large number of small solid particles which move at velocities of from 12 to 72 kilometres per second relative to the Earth and which taken together are called meteoric substance.

So far the principal information about meteoric substance which breaks into the Earth's atmosphere from interplanetary space, has been obtained by means of astronomic and radio-location instruments.

Relatively large meteoric bodies plunging at tremendous velocities into the Earth's atmosphere burn up completely in it, causing a glow, which is observed visually and by means of telescopes. The smaller particles are traced by radio-locators following the track of the charged particles—electrons and ions—produced during the movement of the meteoric body.

These studies have yielded data on the density of the meteoric bodies near the Earth, their velocity, and the mass, from 1/10,000 gramme and up.

The data on the small and most numerous particles which are a few microns in diameter have been obtained by observing the play of diffused sunlight only on a vast cluster of these particles. The study of individual micrometeoritic particles can be made only with the aid of equipment installed in artificial Earth satellites or in high-altitude and space rockets.

The study of meteoric substance is of great scientific value for geophysics and astronomy, and for the solution of the problems of evolution and the origin of planetary systems.

In view of the development of rocketry and the beginning of the era of interplanetary flights, an era ushered in by the first Soviet space rocket, the study of meteoric substance is of great practical value. For through this study will be determined what danger meteors present to space rockets and artificial Earth satellites in long flights.

In collision with a rocket meteoric bodies can affect it in various ways: they may destroy it or pierce the shell, thereby leaving the cabin no longer airtight. Micrometeoritic particles striking the rocket's shell over a considerable period may change the nature of its surface; as a result of collisions with micrometeoritic bodies transparent surfaces of optical instruments may become opaque.

We know that there is little likelihood of a collision between the space rocket and meteoric particles capable of damaging it; however, the likelihood does exist and it is important to estimate it correctly.

To study meteoric substance in interplanetary space two ballistic piezo-electric ammonium-phosphate pick-ups were installed in the rocket's instrument container to register the impacts of micrometeoritic particles.

The piezo-electric pick-ups convert the mechanical energy of the striking particle into electric energy, the value of which depends on the mass and velocity of the striking particle, and the number of impulses is equal to the number of particles colliding with the pick-up's surface.

Electrical impulses from the pick-up, which are brief fading oscillations, are fed to the input end of the amplifier-transformer, which separates them into three ranges according to amplitude and counts the number of impulses in each amplitude range.

Magnetic Measurements

THE PROGRESS MADE by Soviet rocketry has opened up great possibilities for geophysicists. Space rockets will permit measurements to be made of the magnetic fields of planets directly by special magnetometers or by detecting planets' fields owing to the fields' possible effect on the intensity of cosmic radiation directly in the space surrounding the planet.

The flight of the Soviet space rocket equipped with a magnetometer in the direction of the Moon was the first experiment of this kind.

Of great importance, besides the studies of the magnetic fields of cosmic bodies, is the problem of the intensity of the magnetic field in outer space in general. The intensity of the Earth's magnetic field at a distance of 60 terrestrial radii (the distance of the lunar orbit) practically equals 0.

There is good reason to believe that the Moon's magnetic moment is insignificant. The Moon's magnetic field, if magnetisation is uniform, should diminish in accordance with the law of the cube of the distance from its centre. If the magnetisation is not uniform, the field's intensity will decrease even faster, and it will therefore be detected reliably only in the immediate proximity to the Moon.

What is the intensity of the field in the space within the Moon's orbit far enough away from the Earth and the Moon? Is it determined by values calculated from the Earth's magnetic potential, or does it depend also on other causes?

The Earth's magnetic field was measured with the aid of the third Soviet sputnik within a range of altitudes of 230-1,800 kilometres, in other words, up to one-third of the Earth's radius.

The relative contribution of the possible non-potential part of the permanent magnetic field and the influence of the variable part of the magnetic field, will be greater at a distance of several radii of the Earth, where the intensity of its field is sufficiently small. At a distance of five radii, the Earth's field should be approximately 400 gamma (one gamma equals 1/100,000 oersted).

The installation of a magnetometer on a rocket flying in the direction of the Moon has the following purposes:

1. To measure the Earth's magnetic field and possible fields of current systems in the space within the Moon's orbit.
2. To detect the Moon's magnetic field.

The question of whether the planets of the solar system and their satellites are magnetised like the Earth, is an important question for astronomy and geophysics

A statistical analysis of the large number of observations conducted by magnetologists with the aim of detecting the magnetic fields of the Moon and other planets through the field's possible effect on the configuration of corpuscular streams ejected by the Sun has yielded no definite results.

The attempt to establish a general connection between the momentums of cosmic bodies known for most of the planets of the solar system and their possible magnetic moments was not substantiated experimentally in a whole series of ground experiments conducted on the basis of this hypothesis.

Used most often today in various hypotheses of the origin of the Earth's magnetic field is the model of regular currents flowing in the liquid conductive core of the Earth and giving rise to the Earth's main magnetic field. The Earth's rotation around its axis is drawn upon to explain the singularities of the Earth's field.

According to this hypothesis, therefore, the existence of a liquid conductive core is an indispensable condition for the existence of a magnetic field in general.

We know very little of the physical state of the Moon's interior strata. Until recently, because of the shape of the Moon's surface, it was believed that even if its mountains and craters were of volcanic origin, volcanic activity on the Moon had ceased long ago and it was unlikely that the Moon had a liquid core.

From this point of view it must be assumed that the Moon has no magnetic field, provided the hypothesis of the origin of the Earth's magnetic field is correct. However, if volcanic activity continues on the Moon, the possibility is not excluded that there is non-uniform magnetisation on the Moon and even general uniform magnetisation.

The sensitivity and range of measurements of the magnetometer and the programme of its performance for the Soviet space rocket were chosen to meet the need of solving the problems mentioned above.

Since the orientation of the measurements transmitters, in relation to the magnetic field to be measured, constantly changes due to the rotation of the container and of the Earth, a three-component magnetometer of a complete vector with magnetic-saturation transmitters were used for the experiment.

Three mutually perpendicular sensitive transmitters of the magnetometer were fixed, relative to the container's body, to a special non-magnetic support more than a metre long, but the effect of the magnetic parts of the container's equipment amounts to 50-100

gamma, depending on the orientation of the transmitter. In measuring the Earth's magnetic field, fairly accurate results can be obtained within distances of 4 to 5 terrestrial radii.

The scientific equipment installed on board the rocket functioned normally. Many records of readings were obtained and they are now being analysed. A preliminary analysis has shown that the results of the investigations are of great scientific importance.

Artificial Comet

IN ORDER TO DETERMINE the orbit of a space rocket it is necessary to be able to observe its position in outer space. In principle, the problem can be solved in two ways, by a radio-physical or an optical method. The former makes it possible to determine the distance to the rocket with great precision, and its angular co-ordinates in the heavenly sphere with less precision. An analysis of a large number of such observations makes it possible to determine the orbit of the space rocket fairly accurately.

The other, more "common" method used by astronomers to solve this problem is the optical method. However, optical observations of a space rocket involve considerable difficulties. The thing is that at very great distances from the Earth a rocket reflecting the Sun's rays will look like a very faint star.

To give an idea to what extent the brightness of the rocket will wane at a great distance we offer the following example. When Soviet Sputnik No. 3 is some 300 kilometres distant from the observer it looks like a star of approximately the fourth magnitude. If it were 300,000 kilometres distant, that is, a thousand times farther away, the stream of reflected sunlight (which is inversely proportional to the square of the distance) would be a million times less.

This means that the satellite would appear to us like a star of the nineteenth magnitude, or of insignificant brightness.

At a distance of 100,000 kilometres from the Earth, the stellar magnitude of the sputnik would be about 16.5. Calculations permit estimating the expected brightness of the rocket during its movement in outer space.

At a distance of some 100,000 kilometres from the Earth a rocket's brightness is fainter than that of a star of the fourteenth magnitude.

It is very difficult to observe such faint optical objects. Besides, allowance should be made for the fact that the space rocket had to be

observed against the background of a fairly bright sky, since it was near the Moon, which was in its last quarter.

The rocket's flight could be observed only through the largest telescopes, which are found only in the bigger observatories. However, even these observations would have involved a number of specific difficulties in photographing faint objects by means of instruments with a small field of vision when the sky is very bright.

In the particular situation it became necessary to devise a method which would permit increasing the brightness of the space rocket many-fold, even if only for a comparatively brief time.

This idea was suggested by nature itself. Everybody knows the phenomenon of comets. In February and August of 1957 quite bright comets could be observed with the naked eye. Some of the comets at times became extremely bright, considerably exceeding the brightness of the brightest stars and planets.

What makes comets luminous?

A comet is made up of a fairly large amount of cold rock and dust. When a comet gets relatively close to the Sun the rock and dust grow very hot, and in the process they begin to emit various gases some of which possess the capacity of diffusing sunlight very intensively into separate spectral lines and bands.

That is why the spectra of comets contain bright lines and bands belonging to the molecules of cyanogen, carbon, the ionised molecules of nitrogen, and so on.

Sometimes the bright yellow lines characteristic of sodium can be observed in the spectra of comets. Later on these gases are thrown back from the Sun by the pressure of light, which leads to the formation of the comet's tail.

The phenomenon of intense diffraction by some gases of certain spectral lines and bands (characteristic of the given gas) has long been known in physics and is called resonance fluorescence. What is this due to? We may regard each atom or molecule of such gases as a miniature aerial, attuned to a particular wavelength. The falling radiation, if it contains rays of the wavelength to which the atom is "attuned", "shakes up", so to speak, the electrons in the atom.

Such an atom "aerial" begins to radiate electromagnetic waves of the same length in all directions.

What is the mass of the gases contained in the comet which cause its luminescence due to resonance fluorescence? It appears that this mass is amazingly small, by astronomical standards, of course. The mass of the gases of an "average-size" comet approximately 100

million kilometres from the Earth and easily visible with the naked eye, is only about 1,000 tons.

Here, naturally, the question arises: how much gas must a comet have to be visible with the naked eye at a distance of, say, 100,000 kilometres? Since the radiation stream is inversely proportional to the square of the distance, it is easy enough to figure out that about one kilogram would be enough.

It follows from this that even if a small amount of vapour of a suitable substance is to be realised from the space rocket, a cloud will be formed which will be fully visible. Sodium could conveniently be used as such a substance.

As was mentioned earlier, the characteristic yellow lines of sodium are observed in the spectra of comets. Calculations have shown that a cloud of sodium vapour with a mass of one kilogram at a distance of 100,000 kilometres from the Earth will appear as a star of approximately the sixth magnitude. This magnitude is the smallest that can be seen with the naked eye in a moonless night. The sodium cloud which diffuses sun rays is an extremely powerful source of light.

It can be shown by calculation that the power of this source with the sodium vapour having a mass one kilogram is roughly 7,000 kw. It should also be borne in mind that the "light efficiency" of this source is close to 100 per cent, thus affording a real possibility to increase the brightness of the space rocket several thousand times. Such an increase, however, is possible for only a brief time, as in a minute or two the cloud will expand so much that the surface brightness will grow very small and optical observations will become impossible.

An extremely valuable merit of the sodium cloud is that it diffuses light of a strictly defined wavelength, namely, 0.589 microns (the yellow-orange part of the spectrum). This makes it possible by using suitable light filters to observe the sodium cloud even if it is projected against the background of a fairly bright sky. Such light filters reduce the brightness of the sky many times over and do not diminish the radiation of the sodium cloud.

Such a "comet" was produced on board the Soviet space rocket.

In producing the comet it was necessary to ensure the evaporation of sodium in atomic state in a brief time, since the molecules of sodium and its compounds and also ions do not possess the capacity of intensively diffusing sunlight.

The installation (evaporator) for producing the cloud of atomic sodium evaporates the sodium with the aid of thermite, which is

ignited at the instant fixed in advance by the programme device.

Preliminary tests of the work of the evaporator were conducted on high-altitude geophysical rockets. Sodium was evaporated on a rocket sent up to an altitude of 430 kilometres, forming a golden-orange cloud of remarkable beauty, which dissipated in the atmosphere fairly slowly.

The cloud was observed on a very large part of Soviet territory. An analysis of the measurements of the cloud's brightness made it possible to determine the quantity of evaporated sodium atoms, which proved fairly close to the quantity theoretically expected on full evaporation.

An analysis made simultaneously of the velocity at which the cloud dissipated made it possible to determine with a great degree of accuracy the density of the Earth's atmosphere at that great height. The value of the density obtained well accorded with the value deduced from an analysis of the braking of the sputniks by the air. It will be remembered that these density values proved unexpectedly high.

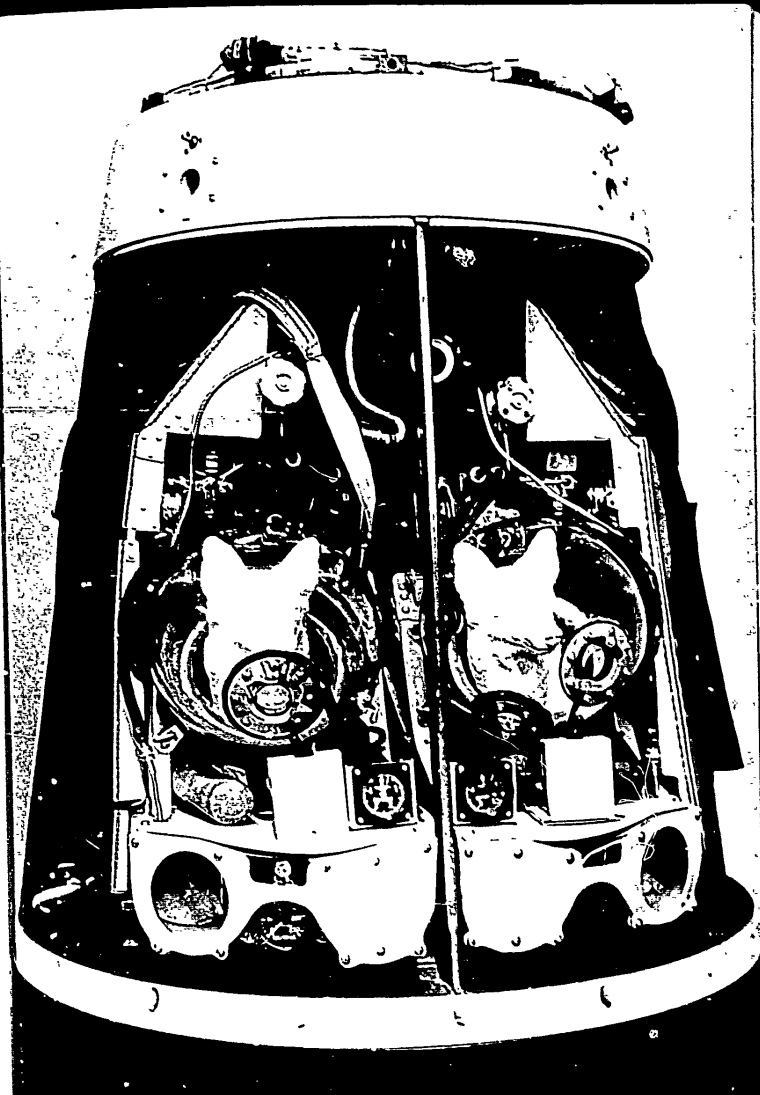
Experiments in evaporating sodium in the atmosphere have been conducted in the United States since 1955, but the purpose of these experiments, conducted at altitudes of from 70 to 140 kilometres (i.e. 44 to 88 miles), was to study the winds at those altitudes and chemical reactions of the gases in those layers of the atmosphere with sodium.

The first experiment conducted by Soviet scientists by means of a high-altitude geophysical rocket at a considerably greater height—430 kilometres (i.e. 270 miles)—yielded substantially new results and made it possible for the first time to study these phenomena in a rarefied medium.

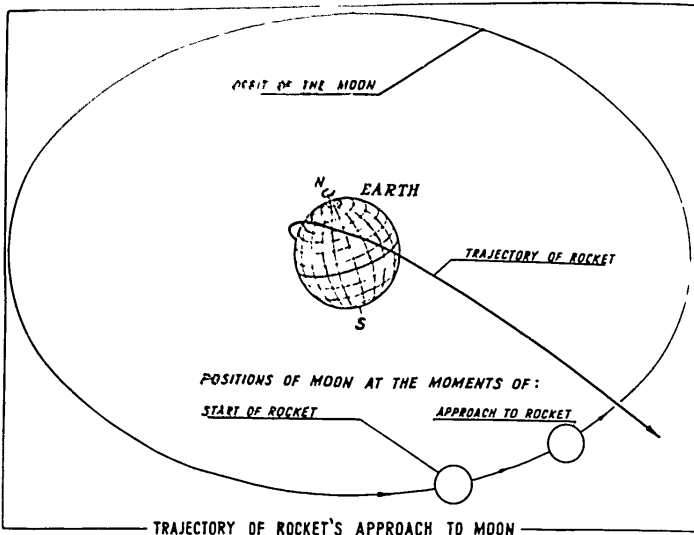
Another important part of the project for producing an artificial comet was to design and build special cameras for conducting observations of the flare of the sodium cloud. For this purpose two series of speed cameras—photographic and electron-telescopic—were built. The cameras were equipped with high-grade interference light filters and placed at a number of points in the Soviet Union.

When the first Soviet space rocket, having on board, among other equipment, apparatus for producing an artificial comet, began its history-making flight, the network of ground observation stations, equipped with special outfits, was fully ready to conduct observations.

At 3:56:20 a.m. Moscow time on January 3rd, 1959—exactly at the time envisaged by the programme—the evaporator started working



SPACE RESEARCH: A section of a Soviet rocket which can take animals to great heights, and bring them back safely in catapulted containers on parachutes. The instruments and their recordings return with invaluable data.



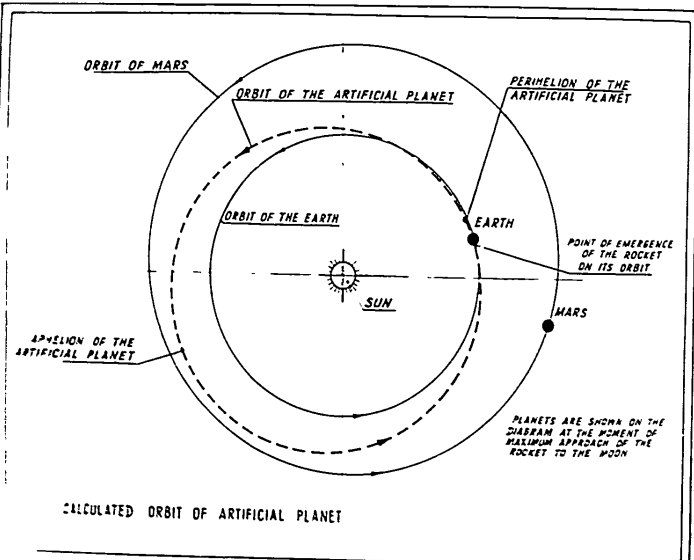
TRACKING THE COSMIC ROCKET

Radio engineers Constantin Maltsev and Evgeny Sobolevsky are recording the signals from the cosmic rocket at a Moscow suburban radio station



PRESS CONFERENCE

Leading Soviet scientists addressed a Press Conference in Moscow following the launching of the cosmic rocket Below, Alexander Topchuev, Vice-President of the U.S.S.R. Academy of Sciences, addresses the Conference. On the left sits Academician Anatoli Blavonravov





(left) Tomorrow's aeronauts found rockets and the man in the moon a topical subject for New Year decorations in January, 1959

Below, we see the interest generated in the Moon by the Soviet cosmic rocket. They young people are consulting lunar maps and charts at the Lenin Library in Moscow on the morning following the launching of the rocket



and within a couple of score seconds the artificial comet was formed—a sodium-vapour cloud 100 kilometres (62½ miles) in size. At that time the rocket was 113,000 kilometres up (i.e. 70,625 miles).

Visibility conditions for its observation were best in Central Asia, the Caucasus and the Crimea. Although the sky was overcast in the localities of most of the stations conducting the observations, in some localities the artificial comet was observed well.

The photographs obtained make it possible to determine very precisely the angular co-ordinates of the space rocket and to trace the trajectory of its flight with greater exactitude.

There can be no doubt that the methods used for producing artificial comets will be improved as time goes on. Concrete ways for improving it have already been indicated.

The creation by Soviet scientists of an artificial comet opens up a fundamentally important possibility of making future interplanetary rockets "tracer" rockets. It will then be possible to observe them optically from very great distances, which is of great importance for the future of astronautics.

The World Applauds

THE GREAT scientific exploit of Soviet scientists and engineers in launching the world's first space rocket evoked a lively interest and admiration among the most diverse people in every corner of the globe.

This epoch-making event is regarded by prominent statesmen and other public figures, plain workers and peasants throughout the world—irrespective of their views and attitude towards the Soviet Union—as indisputable proof of the superiority of Soviet science and technology.

The construction and launching of the Soviet space rocket is the apex of present-day development of Soviet industry, the result of the creative activity of many thousands of workers, technicians, engineers and scientists. The new planet once again shows how Soviet people make Nature do their bidding and how they find the clue to the age-old riddles of the Universe.

People of all walks of life have sent them their congratulations, among them Premier Chou En-lai of China, Prime Minister Nehru of India, President Eisenhower of the United States, and Prime Minister Macmillan of Great Britain.

The British Prime Minister, Harold Macmillan, wrote: "Please accept my congratulations on an outstanding achievement. It will, I am sure, make an important contribution to man's scientific knowledge. British scientists join me in congratulating their Soviet colleagues and all those concerned in this project."

The message from the President of the United States ran: "The successful launching as announced by the Soviets of a vehicle designed to pass near the Moon represents a great stride forward in man's advance into the infinite reaches of outer space. To the scientists and engineers assigned to the undertaking a full measure of credit is due and we congratulate them on this achievement."

Today everybody admits that the building of the artificial planet is a result of the high level of development of Soviet industry, engineering and science.

"Only idiots can ignore or fail to admit the brilliant progress the Soviet Union has made in science and in other spheres," the Canadian newspaper *Journal* said in an editorial. "Indeed," it went on to say, "one of the wonders of our time is where the Russians find the time, energy, skill and scientists to do all these extraordinary things, which they are doing simultaneously. Only ten years ago," the newspaper continued, "the Russians were behind in nuclear energy, and today they have not only caught up with the West, but have outstripped it. The Russians are ahead of us in rocketry, the conquest of space, jet planes and atomic submarines. The Soviet Union is way ahead of the West in growth of industrial output and turns out more engineers and scientific workers than all the Western countries put together." (Retranslated from the Russian).

Commenting on the launching of the space rocket, Max Lerner, *New York Post* columnist, wrote that the Soviet people had every right to feel triumphant about their achievements. The very attempt to build a space ship, he continued, to equip it with mechanisms and a power supply for launching it, to find the highly complicated ways of automatically igniting its four stages successively, to provide a payload of instruments which would be able to collect and transmit information on the universe around us and send it all over a set course of hundreds of thousands of miles—is an exploit which grips your imagination; and carrying it out is a truly epoch-making event.

The Milan newspaper *Giorno* devoted two columns to the rocket's flight. "This is the most outstanding attainment of engineering by man," the newspaper said. "It has paved the way to cosmic space."

The successful launching of the Soviet space rocket probably made

the greatest impression on scientists. The British newspaper *Observer* said: "The size of the rocket and the accuracy of the shot have deeply impressed Western scientists. The scientific measurements made by the rocket will be eagerly awaited."

Today, the newspaper underscored, Soviet scientists are in a position to effect a rocket flight around the Moon and drop scientific equipment and instruments on its surface for studying the space in the region of other planets.

Professor Sheppard, President of the British Interplanetary Society, said: "What the Russians have now demonstrated shows that the ordinary rocket we know today can deliver a considerable amount of equipment to the Moon's surface. This rocket the Russians have built is only a starter. The Russians will now build much larger space ships."

"The rocket built by the Russians," the Secretary of this society added, "will probably be fully capable of making a flight with instruments to Mars and Venus."

Professor Lovell, head of the Jodrell Bank Observatory, said in reply to a question about the significance of launching the rocket: "Of course, it is a magnificent undertaking. The rocket's weight is altogether startling. The scale on which the Russians can carry on scientific research is a striking index of the progress of Russian science and technology."

Professor Tito Nicolini, director of the Naples astronomical observatory, Professor Carrara, director of the Microwaves Research Centre in Florence, and Professor Crocco, President of the Italian Astronautical Association, noted in statements to the press the colossal importance of the launching of the Soviet space rocket for the development of science and technology.

Academician Beniamino Segre, professor of Rome University said "The success of the new and wonderful project makes us proud that we are living in the historic moment of the triumph of human genius. This triumph can be tersely expressed in the words of the famous Russian poet Blok: 'And the impossible is possible.' The launching of the space rocket has blazed new trails and stimulates us to undertake new studies. And I wholeheartedly share the joy of the Soviet scientists, technicians and workers who have won this triumph, overcoming difficulties which many people thought would require tremendous efforts."

The Soviet interplanetary rocket was the focus of attention of the French scientific community too. M. Denis, prominent astronomer

and president of the International Radio Astronomers' Union, declared:

"I am very glad that my Soviet colleagues have been successful in this difficult undertaking. I know that it is not easy to launch a rocket into outer space, and Soviet scientists, and all Soviet people, can be congratulated on this great achievement. It is simply marvellous!"

Another outstanding French scientist, Professor Evry Schatzmann, astrophysicist, said:

"I hail the new success of my Soviet colleagues in experimental astronomy. We may now expect the discovery of new qualities in matter in terrestrial and interplanetary space, fresh progress in the study of the Sun, and fresh views on the origin of our solar system, as well as the early possibility of understanding the exact nature of the relation between solar activity, the condition of the upper atmosphere and climatic conditions.

"I heartily congratulate my Soviet colleagues who have placed the most advanced technical methods at the service of fundamental research. I hope that the conquest of outer space will serve the cause of peace among people."

Scientific circles in Vienna, too, have hailed the launching of the Soviet space rocket.

"The launching of the space rocket," said Professor Hoppman, well-known Austrian scientist and director of the Vienna Observatory, "is a brilliant achievement, equal in importance to the launching of the first Soviet sputnik. I deeply respect the Soviet scientists who, unlike the Americans, did not act from considerations of publicity but acted in the spirit of true science. I should like to express my best wishes. They may be proud of the accomplishment."

The launching of the Soviet space rocket is evidence of the Soviet Union's peaceful aspirations. And this is why, immediately after the rocket was launched, the Soviet Peace Committee began getting messages of congratulation from all over the world, from national peace committees, and from prominent statesmen and other public figures, scientists and working people.

The World Peace Council's secretariat, then meeting in Sofia, sent a telegram in which it said: "This remarkable event in the history of mankind is striking proof of the unlimited possibilities which exist for peaceful and constructive labour and is an important contribution to the cause of peace. We heartily congratulate the Soviet scientists, designers, workers and technicians on their outstanding

success in the name of the triumph of peace and happiness of the peoples."

The President and General Secretary of the All-India Peace Council sent a telegram to N. Khrushchov, in the course of which they said:

"With this notable victory your great people has again come to the forefront, showing all mankind the tremendous power which science has given to the world. Used for peaceful purposes, this power can change the face of the Earth and abolish poverty for ever.

"And it is precisely in line with the policy of peace your government has always pursued that you have promised of your free will that all the valuable information to be obtained from the new planet will be made available to all peoples. Wonderful vistas open up before mankind, provided there is international co-operation and an end to the cold war.

"We also believe that this fresh contribution by the Soviet people to mankind's knowledge will help to the greatest possible degree to turn the minds of people to the ways of peace. In this way it will strengthen the movement for the prohibition of war and the establishment of a united world in which all nations will be guaranteed independence, happiness and prosperity."

This thought of the contribution made by the Soviet space rocket to world peace has been echoed by the eminent Soviet scientist, Academician D. Skobeltsyn: "The launching of artificial Earth satellites and rockets under the International Geophysical Year programme symbolises the spirit of international co-operation by scientists.

"We hope that it will also usher in a new era in the development of this co-operation and lead to the termination of the 'cold war' and the triumph of the cause of world peace."

Throughout the world many people, greatly impressed with the Soviet achievement in being the first to send a rocket into cosmic space, have asked: "How did it happen? What was the force which lifted the Soviet planet and launched it into space?"

The famous Soviet scientist, Academician A. Blagonravov, has given the answer: "The world has known this force for forty-one years now.

"It was the grip on the rifle in the hand of the soldier of the revolution worn by starvation and typhus.

"It reared factories on waste land and towns in the taiga.

"It carried red-starred planes over the Arctic ice-fields.

"And it saved the world from the savage hordes branded with the spiders of the swastika.

"This force is the invincible spirit of my people, their lucid mind illumined by the unfading light of Leninism."

The time is not far off when interplanetary ships will be moving through cosmic space along the trail blazed by the Soviet space rocket, to the most distant corners of the solar system. Mankind has entered the epoch of direct penetration of the universe, and the Soviet people are proud to have taken the first step in this direction.

First Results from the Space Rocket

THERE IS NO particular reason for fearing that space-travellers bound for other planets will suffer from radiation sickness. With the Sun in a quiet state, undisturbed by explosions causing an increase in the streams of death-dealing cosmic rays, the road will be open for future space-travellers.

This statement is made by Soviet scientists Sergei Vernov and Alexander Chudakov in a *Pravda* article published on March 6th, describing the initial results of the research carried out with the Soviet space rocket.

In their article the scientists point out that cosmic rays were discovered by means of balloons.

"Ever since then", they write, "everything related to the study of cosmic rays has been very intimately connected with high-altitude flights. It was only natural that advantage should have been taken of the exceptional opportunities for studying cosmic rays with which Soviet rocket designers have provided science.

"As *Pravda* reported on January 12th, the Soviet space rocket carried many different instruments for studying cosmic rays. These instruments were counters of charged particles and luminescence counters. They were used in order to record X-rays, gamma-rays and electrically-charged particles of various energies.

Important Question

"The ionisation produced by all categories of radiation was measured, and the amount of harm that could be done by radiation at various distances from the Earth was ascertained. Apart from its importance in the domain of theory, this last question is also very important from the practical point of view. The fact is that cosmic

radiation must be thoroughly studied in order to make space travel successful.

"Already we can set out the results of the study of cosmic rays carried out both near the Earth and fairly far away, that is to say, at distances of more than 100,000 kilometres* away from the Earth's centre."

With the article *Pravda* publishes a diagram with graphs showing the relation between radiation intensity and distance from the Earth's surface, as obtained during the flight of the Soviet space rocket. The altitude is marked off horizontally, and the intensity vertically (the latter being given in two scales, of which the second is a hundred times more than the first). The unit of measurement is the ionisation produced by primary cosmic rays.

It can be seen from this diagram that at distances exceeding nine times the Earth's radius† there is practically no change in intensity as distance from the Earth increases.

Protection from Radiation

"The various instruments used for research have enabled us to analyse the composition of cosmic rays in outer space", say Vernov and Chudakov. "It has been found that practically all the particles possess great energies of the order of hundreds of MEV and even substantially more. Conditions near the Earth are quite different. In this connection we mean by 'near the Earth' the space within a distance of a few times the Earth's radius. As the curve shows, the degree of harm from radiation is hundreds of times greater here than in interplanetary space itself. An analysis of the composition of radiation here has shown that there were X-rays produced by electrons bombarding the container housing the scientific instruments.

"It has thus been found that a large number of electrons are circling the Earth at distances of up to 50,000 kilometres. What is their energy? The instruments on the Soviet space rocket show that this is not very great, being between 30,000 and 100,000 electron volts. Since the energy of these electrons is relatively small, they can be absorbed by layers of substance that are not very thick and consequently it is quite possible to obtain protection from the injurious effects of this radiation.

* About 62,000 miles. One kilometre=0.621 miles.

† The Earth's radius from the centre to the poles is about 3,950 miles.

Lethal Rays

"As the curve on the diagram shows, the intensity of cosmic radiation at great distances from the Earth is negligible. Only two particles pass through one square centimetre every second. Consequently there is no special reason to fear that living creatures travelling to other planets will fall victim to radiation sickness. It must not be forgotten, however, that explosions do occur on the Sun, even though they are few and far between. Then the Sun becomes a source of cosmic radiation and the entire solar system is filled with lethal rays. The Soviet space rocket took off when the Sun was in a relatively calm state. In such circumstances the road for future space voyages is open."

Two Zones

The scientists point out that a number of important conclusions can be drawn from a comparison between the new results obtained from the Soviet space rocket and the earlier study of cosmic rays made by means of sputniks. Last summer Soviet scientists reported to the I.G.Y. Assembly the results of the study of cosmic rays by means of sputniks. It was demonstrated that the Earth was enveloped in two zones of intensive radiation.

With the article *Pravda* also publishes a diagram showing how these two zones are situated around the Earth. There is a space between them in which the intensity of radiation is very much less than it is in the zones themselves.

The scientists say that the radiation in the two zones differs greatly in composition. The electrons of the outer zone possess energies which are relatively small. In the inner zone there are mainly particles of high energies. There are grounds for assuming that these high energy particles are protons.

"According to the laws governing the motion of particles with electric charges", say Vernov and Chudakov, "these particles, when in the Earth's magnetic field, travel along closed trajectories which spiral round lines of force of the magnetic field. The sputniks and the space rocket have made it possible to observe these particles at various distances from the Earth and on different lines of force. The sputniks, for instance, recorded the number of particles at altitudes of 400 and 1,800 kilometres.

Magnetic Trap

"The space rocket considerably extended the scope of research. It

was found that the number of particles sharply increases the further we get away from the Earth. At a height of 15,000 kilometres there are 700 times more particles than at a height of 400 kilometres (on the same line of force). This means that of the 700 particles at the height of 15,000 kilometres, only one travels down to a low altitude. All the other 699 go backward and forward along lines of force, going from one hemisphere to the other and back again, and do not travel down to a low altitude.

"It has thus been proved experimentally that the electrons moving round the Earth have an oscillating motion. They wander for a very long time while 'locked' in the magnetic trap created near the Earth by our planet's magnetic field. These phenomena are similar to what takes place in installations in which physicists are trying to produce a thermonuclear reaction.

Halo of Particles

"Thus, the Earth has around it a kind of halo of particles which we have called terrestrial corpuscular radiation. How does this radiation originate? Processes resulting in its formation are now being intensively sought for. At the I.G.Y. Assembly, together with A. I. Lebedinsky, we postulated the following: Under the action of cosmic radiation the Earth becomes a source of neutrons; when they travel away from the Earth these neutrons partially disintegrate. That is how the electrons and protons caught in the magnetic trap 'near' the Earth originate.

"It will be necessary through further investigations to give a complete picture of the phenomenon taking place in outer space and in that part of space which is near the Earth and which changes under the effects of the Earth's magnetic field. It would appear that similar haloes of particles also exist around other celestial bodies possessing a magnetic field. Space rockets must show whether or not that is so."

Moon to be Explored by 1965

"THERE is no doubt that such gigantic tasks as reaching and exploring the Moon will be accomplished before the present seven-year period comes to an end; and, subsequently the nearest planets will be reached, too."

This was said by Academician Alexander Nesmeyanov, president of the U.S.S.R. Academy of Sciences, when he opened the Academy's

annual general meeting in Moscow on March 26, 1959. At the closing session on March 28 Alexander Nesmeyanov gave a 90-minute report on the study of cosmic space with the help of rockets and artificial satellites.

"The products of atomic explosions reaching high altitudes can form intensive fluxes of charged particles there and thus contaminate the layers of outer space closest to the Earth", he said, adding that two vast belts of increased radioactivity exist close to the Earth which can be replenished by nuclear fall-out.

"One of these belts, discovered by Soviet physicists with the help of Sputnik III and the space rocket", Nesmeyanov said, "extends for a distance ten times that of the Earth's radius. This 'halo', so to speak, around the Earth is formed by electrons with energies running into scores and hundreds of thousands of electron volts. It descends toward the Earth's surface in the form of a huge horseshoe, with the ends facing the North and South geomagnetic poles."

Magnetic Measurements

Nesmeyanov went on to say that a much more intensive belt of radioactivity had been discovered at an altitude of some 1,000 kilometres (a little over 600 miles). In the western hemisphere it started somewhat lower—at an altitude of some 600 kilometres (about 370 miles). That second zone extended over the Equator between latitudes 45 degrees North and 45 degrees South.

In his report Academician Nesmeyanov spoke only about those experiments whose results have already been fully analysed.

He said that extremely important results had been obtained in the sphere of magnetic measurements. It had been proved for the first time that the East Siberian Magnetic Anomaly had its sources deep inside the Earth.

He also said that systems of electrical currents accounting for variation in the Earth's magnetic field had been discovered.

Moon Rocket

He described as a most important result in the sphere of magnetic measurements the discovery by means of the space rocket of a system of currents outside the ionosphere at a distance of three or four times the Earth's radius. That discovery would be of tremendous importance in explaining the nature of magnetic storms and the auroras, he said.

Speaking of the launching of the Soviet space rocket in the

direction of the Moon, Academician Nesmeyanov pointed out that it was much more difficult to do that from the territory of the Soviet Union than it would have been from more southerly latitudes.

"The territory of the U.S.S.R.," he stressed, "has no intersection with the plane of the lunar orbit, which lies between latitudes 18 degrees North and 18 degrees South."

He said that this had ruled out the possibility of using for lunar flights trajectories which lay in the plane of the Moon's orbit and which were therefore the most convenient. Those trajectories made it possible to impart the required velocity to a space rocket under the most favourable conditions in which the direction of its flight helped to cut down to a minimum the thrust required to overcome the Earth's gravitational pull.

He also emphasised that when a rocket moved in the plane of the Moon's orbit the calculation of the velocity and direction of flight near the Moon did not need to be as accurate as in the case of a launching from the territory of the U.S.S.R. At the same time he pointed out that the best conditions possible on the territory of the U.S.S.R. had been chosen for the launching of the Soviet space rocket.

Valuable Information

Describing the major results of space studies by means of artificial satellites and the space rocket, Nesmeyanov said that Soviet scientists had obtained valuable information on the heavy nuclei component in cosmic radiation.

"We have established", he said, "that the flux of heavy nuclei in this radiation is extremely low."

Soviet scientists, he added, had completely disproved the earlier conception that the upper boundary of the Earth's atmosphere was at a height of a mere 1,000 kilometres.

"At the present time we have grounds for saying that it lies at a distance several times greater", he declared.

The space rocket, he pointed out, had provided the first experimental data on the density of interplanetary gas.

"We have obtained", he said, "initial data on the density, temperature and concentration of electrons and positive ions in the upper layers of the atmosphere at a height of between 225 and 1,000 kilometres."*

He drew attention to the variety of methods used, and in particular the measurements of the rocket's drag and of the speed at which the

* Between 135 and 620 miles approx.

artificial sodium "comet" had decayed. Those measurements had been carried out by radio instruments and manometers.

He emphasised the way in which the data obtained by these different methods had coincided and pointed out that latitudinal and diurnal changes had been discovered in the density of the atmosphere.

He added that experiments with the third Soviet artificial earth satellite had made it possible to ascertain the chemical composition of the upper atmosphere. It had been established that the principal gas component in the atmosphere between 226 and 800 kilometres upwards was atomic oxygen.

"It is precisely this gas that is responsible for the existence of the ionosphere", he said. "Atomic nitrogen ions have also been registered along with oxygen ions."

Early news of the Sputniks and the planet, and week by week news of their progress, with many photographs and diagrams, was given in

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MOON'S
ORBIT

passing near the
Moon 2.59 a.m. G.M.T.
4 January 1959 after
32 hours, 220,000 miles of space-flight

possible radio contact
lost at 7 a.m. G.M.T. 5 January
after 62 hours, 380,000 miles
of space-flight

entry into periodic orbit
7 January 1959 after
9,000,000
miles of space-flight

EARTH

MOON

4,660 miles

THE
PERIHELION
14 January 1959