\$435 million Federal program for retraining workers whose jobs have disappeared because of automation has been launched by this Congress. A distressed area bill was also enacted which will aid great numbers of unemployed to jobs and a more abundant life.

INTERNATIONAL TRADE

The President's program to regulate tariffs on certain goods and to reduce or raise tariffs on other items, and to provide Federal aid to United States firm and workers damaged by imports was a step in the right direction to increase prosperity and combat unemployment.

AGRICULTURE

The President's program on agriculture although crippled by amendments will greatly reduce surplus and the ridiculous grain storage cost of over a billion dollars a year. The farmers of the Nation suffered greatly under the impracticable surplus program created under former Secretary of Agriculture The Benson farm program Benson. aided greatly in bringing about four depressions under the Eisenhower administration. When the American farmer is prosperous and possesses purchasing power, he is indirectly creating demand for steel, oil, and numerous manufactured products in American cities and towns.

TAX CUT

This Congress repealed 10 percent tax on railroad, bus, water travel, and cut tax to 5 percent on airline tickets effective November 15.

WELFARE

Revised and extended Federal benefits and State-operated public assistance programs by rehabilitation and help for the needy, aged, blind, and disabled.

Enacted legislation giving increases of 9.4 percent to veterans drawing compensation for injury or ailment resulting from military service.

PUBLIC WORKS

The House of Representatives authorized the outlay of \$900 million in Federal matched grants to launch public works projects or accelerate existing projects in areas of heavy unemployment.

PEACE CORPS

Congress authorized the Peace Corps in 1961 and enlarged it in 1962. It is unfortunate that this program was not inaugurated 15 years ago as the Peace Corps would have expanded each year and by today, we could have an international organization to combat false communistic propaganda in backward nations and new governments throughout the world. Members of Congress who opposed the Peace Corps a year and a half ago are today enthusiastic supporters of this program.

DEFENSE

This Congress has made outstanding progress in our much delayed space program. Through the outstanding ability and leadership of Secretary McNamara and Vice President Johnson, our Nation once again has been placed as the world's only military citadel that keeps the Communist dictators of Russia and China

from aggressing in their mad conquest to enslave mankind. Taxpayers should remember that approximately 84 percent of every tax dollar is applied to expenses of past wars, the present cold war operation, and the protection against future wars. Approximately \$11 billion is appropriated annually as interest on our national debt coupled with Veterans' Administration cost incurred by past wars.

MEDICAL CARE

The much needed legislation known as medicare which includes hospitalization, nursing, and medical costs for the aged was killed in the Senate by the same political coalition which defeated the education program.

Millions of our pioneer citizens throughout the Nation are living on social security checks or small income and are barred from receiving proper and needed medical care unless legislation is enacted to relieve this deplorable situation. In 90 percent of the States the Kerr-Mills bill is not functioning, and in the remaining States, it is a replica of the ancient poorhouse operation.

Legislation for medical care for the aged will be a No. 1 campaign issue, and I am satisfied that when the people speak from the ballot boxes we will next session, enact a suitable medical care program for our pioneer citizens.

URBAN AFFAIRS

The President recommended legislation to create a Department for Urban Affairs which was defeated by the coalition. Almost two-thirds of our population now reside in cities and towns throughout the Nation. Legislative apportionment of 50 years ago still exists in most States and especially in Indiana. I hope the next Congress and State legislators enact legislation giving our metropolitan areas fair representation in the legislative halls of our States and Nation.

CIVIL RIGHTS

This Congress passed the first Federal legislation in history completely outlawing poll tax laws still remain in five States. Legislation making the sixth grade a test for proof of literacy for voting qualification, was defeated by filibuster in the other body.

EXPOSE COMMUNISM WITH TRUTH

For the last dozen years, I have consistently fought for an education program which would send qualified educated experts to South America, Africa, and other nations to tell the uninformed the real truth on how the Soviets enslaved Poland, Hungary, Rumania, Slovakia, the Balkans, and other nations, through infiltration, force, slave labor camps, and mass executions. constantly fought to get action on a number of pending resolutions to investigate the Soviet takeover and continued enslavement of captive nations. The Communist tyrants one great fear is to have millions in neutral and new governments learn the true facts concerning Communist methods in taking over and enslaving small nations.

CUBA

Mr. Speaker, I now wish to insert in the RECORD my remarks to the Congress in opening the debate on the Cuban resolution on September 26, 1962:

When Castro's regime came into power in January 1959, the Eisenhower administration looked upon it with sympathy and welcome its promises of political freedom and social justice for the Cuban people. Even before Castro came to power, he and his followers were engaged in anti-American activities in their underground war against the then-established Cuban Government. Castro's brother who some stated was a card-carrying avowed Communist was the real power in Cuba.

the real power in Cuba.

Back in 1960, Cuba established close political, economic, and military relationships with the Chinese-Soviet bloc and continued violent measures and verbal attacks against the United States. On June 11, 1959, when it was apparent that the Castro government was Communist controlled, our Government expressed sympathy with agrarian reform and raised no remonstrance against the Cuban Communist government confiscating American property.

During the month of October 1959, Castro government officials seized land, capital, equipment, and timber belonging to U.S. citizens.

On January 26, 1959, President Eisenhower reaffirmed the adherence of the United States to the policy of nonintervention in the domestic affairs of other countries, including Cuba. In so doing, he stated that we recognize the right of the Cuban Government and her people to undertake social, economic, and political reforms. This statement was made by the former administration when almost a year after, the Castro Communist government was well-entrenched in our neighboring land.

During 1960, Cuba signed trade and economic pact agreements with the Soviet Union and most of the Communist satellite nations, including China. On March 19, 1960, the first shipment of Soviet crude oil arrived in Cuba on the Soviet trade of the S

on the Soviet tanker Vishinsky.

In 1960 Cuba committed offenses against our Nation by confiscating U.S. property; attacks on U.S. sugar plantations; air incursions and LaCoubre and Pocher incidents. On June 10, 1960, the Cubans seized four U.S.-owned hotels in Havana. On June 29, they seized the Texaco-Esso refineries. On July 21, 1960, Castro stated in Moscow that Cuba "is grateful for the political and moral support from the Soviet Union."

I merely mentioned these facts because already in Indiana certain politicians and a candidate for U.S. Senator would have the people believe that all our troubles started with the Cuban Communist Government since January 1961. Some Republican politicians say that armed intervention and taking over Cuba are necessary now. Why were they so quiet several years back before the Soviet military buildup became entrenched within 90 miles of our shores.

Mr. Speaker, all American citizens should realize that we are living in a scientific and space travel age. The same yardstick of solving international problems of 25 and 50 years ago cannot apply today.

All Americans should devote extra time and study on details and facts concerning domestic and international problems. Your Congressman and other elected officials merely reflect the opinions of the majority back home. It is your opinions that will guide the destiny of our Nation and the free world for future generations.

ACTION WITH RESPEC

The SPEAKER pro tempore. Under previous order of the House, the gentleman from Kansas [Mr. Ellsworth] is recognized for 10 minutes.

time. In the 83d Congress, Mrs. Church sponsored and pushed to successful enactment H.R. 116—Public Law 385—a national law bearing her name, prohibiting bootleg fireworks, which presented such a grave menace to children.

In the 84th and 85th Congresses, she took the lead in introducing legislation to implement the new plans for re-organization, for efficiency and economy in government, proposed by the Second Hoover Commission. She worked extremely hard on this and proved to be most valuable in these plans. In the 85th Congress, Mrs. Church was highly instrumental in the successful House passage of H.R. 8002, a bill to place the budgeting system of the Federal Government on an accrued annual expenditures basis, which incorporated the provisions of H.R. 3961, introduced by Mrs. CHURCH early in the session. She has constantly fought for economy in government. She sought to put Government operations on the same footing of efficiency and economy that she felt prevailed in private industry.

She has, over the years, taken an active. part in many civic and welfare organizations, including the Family Welfare Association of Evanston, the Illinois Children's Home and Aid Society, the Infant Welfare Society, et cetera. She also served as president of the Congres-sional Club in Washington, and as president of the National Alumnae Association of Wellesley College. She is a member of the League of Women Voters, the Business and Professional Women's Clubs of America, the American Association of University Women, Phi Beta Kappa Associates, Zonta International, Delta Kappa Gamma, Illinois Women's Press Association, et cetera, and is an international honorary member of Beta Sigma Phi and other organizations. She is also a member of the Woman's Advisory Committee of the National Safety Council, the National Advisory Council of the Girl Scouts of the United States of America, and the Woman's Board of the University of Chicago.

In August 1960, the gentlewoman from Illinois [Mrs. Church] was honored with a merit award for service in behalf of economic and political freedom, from the Civic Affairs Associates, Inc., and also, that year, was recipient of the VIP Award of the Illinois Club for Catholic Women, and in 1962, of the Founders' Day Award of Loyola University of Chicago.

This, Mr. Speaker, is the story of a lifetime in which every minute was put to some use for people, for her neighbors, for her fellow women, for her fellow citizens, for her district, her State, her country, and for her college and its alumnae.

with yet ahead that I know will do, and I and all of us lith and opportunity. She life so that all of us in this a very special benefit from the charm, the dignity—intestige—she has, by her work reduct, bestowed upon it. She for international peace. The far personality, through her jusands of miles of travel, has

been felt in the Middle East, and the Far East, in Asia and in Africa, and of course on this continent. She gave the image of the United States the impressive and enlightened aspects of a portrait that wins us respect, admiration, even love in the far corners of the earth.

Recently, I had a part, along with others, in forming for the first time, a U.S. Capitol Historical Society.

It is significant and of interest to note that Mrs. Church was one of those who cooperated, encouraged, and helped immeasurably to bring about the realization of this organization.

Her eloquence, her deep feeling, her understanding is revealed in the fact that she had a major part in writing the statement of purpose and objectives of the organization and her attention to detail and development of the constitution and bylaws was of great help. She was very helpful with suggestions at every meeting and attended every meeting that had to do with the initial and final planning of the organization.

Nowhere, I like to think, is she more appreciated than she is right here in this Chamber among her colleagues who have been so close to her work. I bow in homage and admiration, in affection and tribute, to MARGUERITE STITT CHURCH, for 12 years a Member of this House.

REPORT ON THE 1962 SESSION OF THE CONGRESS

The SPEAKER pro tempore (Mr. Albert). Under previous order of the House, the gentleman from Indiana [Mr. MADDEN] is recognized for 20 minutes.

(Mr. MADDEN asked and was given permission to revise and extend his remarks.)

Mr. MADDEN. Mr. Speaker, during my service in Congress, I have endeavored to give the citizens of Lake County a true and factual review of our accomplishments and omissions after each session. This will be a brief report on some of the more important issues considered in the 1962 session now close to adjournment.

COMMUNISM EXPANSION NO. 1 PROBLEM

The dark cloud of international communism covers the horizon of all free nations throughout the globe. As your Representative under four Presidents: Roosevelt, Truman, Eisenhower, and Kennedy. I have made every effort to support the Commander-in-Chief on all foreign policy programs which each administration has recommended for the best interest of our Nation and the free world.

Presidents Truman and Eisenhower have publicly stated that the Executive Department possesses all information and confidential knowledge on conditions over the globe and their decisions on international matters are often based on facts not known to the general public. World conditions today demand that the American people must be united and all differences on international problems should stop at the oceans' shoreline.

The braintrust behind Stalin and his successor Khrushchev is the most dan-

gerous and intelligent crowd of superbly organized criminal conspirators to threaten mankind in all world history. The free world has failed to realize the magnitude of their organized success toward global enslavement.

EDUCATION, COMMUNIST GREATEST WEAPON

For 30 years the Soviets' greatest project has been the wholesale education of selected youths to become scientists, language experts, technicians, teachers, and skilled workers in all crafts. These graduates have been sent to other lands for infiltration and the spreading of Communist propaganda. The Soviets are now reaping benefits of this educational program in Asia, South America, Africa, Cuba, and other neutral or recently established governments.

News reports from Cuba in 1961 reported the graduation of large classes from two universities where the speaker at each ceremony was a Soviet professor from Moscow. I mention this because in the last 12 years our Congress has on several occasions, by close votes, defeated legislation which would have expanded our critical deficient educational facilities. General Hershey's Selective Service Department reveals that in World War II in 10 States 28 percent to 33 percent of draftees were rejected on account of illiteracy. One State had 33 out of every 100 boys whose mental IQ's prevented them from serving their country in wartime. Montana was the banner State with but 134 percent rejections.

I am proud to report that I have supported all legislation for educational expansion: scientific, medical, elementary, and for much-needed school construction. Most citizens in my congressional district know that these programs on educational expansion have been defeated by the coalition of Republican leaders aided by a large percentage of Southern Democrats. Powerful special interests lobbies defeated Federal legislation which would give millions of American youth greater opportunities to meet the problems of this scientific space age. In Indiana these interests substituted special State laws for school construction which today have taxpayers burdened with high interest rates and 30-and 40-year bonds. In my congressional district, school construction cannot keep pace with the yearly increase of student applications.

In this session a bill for Federal help to aid students in the higher education bracket has been pigeonholed by the same above-named political coalition. This bill would aid public and private schools and help us compete more easily with the Soviet aggression and propaganda program throughout the free world.

UNEMPLOYMENT PROBLEM

Regardless of political speeches misrepresenting the legislative record, this Congress has made remarkable progress in carrying out the much-needed New Frontier program of President Kennedy. Automation and the entrance of a million young job applicants every year have made unemployment the number one domestic problem facing our Nation. A

Mr. ELLSWORTH. Mr. Speaker, the administration's handling of the situation in Cuba remains ineffective and without form or substance. Along with many others, I have long urged the adoption of a positive, decisive policy of ac-

tion with respect to Cuba.

In May of 1961, in my weekly questionand-answer column in the newspapers of my district, I urged a course of action that would enforce the Monroe Doctrine.

In June of 1961, in my weekly columns, I opposed the paying of ransom to Castro for the Cubans he had kidnapped, and denounced the involvement of the ad-

ministration in the deal.

In January of this year I stated publicly that Communist Cuba posed a virulent threat to us and to our hemisphere, and deplored the confusion, lack of coordination, and lack of purpose on the part of national leaders in Washington which resulted in there being, in effect, no national policy at all toward Cuba. At that time I reviewed the entire Cuban situation and pointed out that Castro was 100-percent Communist, devoted to the overthrow and destruction of the United States and all Western civiliza-

I concluded by urging a policy looking toward the overthrow of the Castro re-

gime in Cuba.

In a speech here in the House of Representatives, on May 9 of this year, I stated we had lost an opportunity in Cuba and that all Latin America was paying for that loss. I joined with three other first-term Republican colleagues from across the Nation in sharp criticism of the administration's handling of the Cuban flasco of April 1961, and urged a shift from a policy of surveillance, to a policy of positive, creative decisiveness.

And just last week, on September 25, in debate on the Cuban resolution, I made it clear in my support of the resolution that the time for decision is now.

Actually, Mr. Speaker, there are a number of alternatives available to the administration for dealing with the situ-

ation in Soviet Cuba.

For one, the administration could go ahead and let the Soviet arms build-up proceed, saying—as they have—that the weapons, manpower, and Communist missile and naval bases are merely defensive in nature, but that if it turns out otherwise we will do something. That is a little like saying there is no real trouble but we will take action in case it doesn't come to a stop.

This kind of a so-called policy will be interpreted throughout the world as a sign of weakness and irresolution. Added on top of the Bay of Pigs fiasco and the building of the Berlin wall, it can only reinforce the feeling that a vein of indecisiveness is embedded in the present administration. Let us hope

this is not true.

Another kind of policy would be a military invasion by the U.S. armed forces. This would be as profitless to the United States as it would be dangerous to the stability of Latin America and Berlin.

A third alternative would be to provide material support and encouragement to free Cubans both within and outside

Cuba, so that the Castro regime could be overthrown by those Cubans who have the most at stake.

Our Government could take the lead, for example, in getting all the friendly governments of this hemisphere to express their readiness to come to the immediate aid of any uprising that takes place in Cuba against the Soviet regime there. Surely those nations of the Western Hemisphere who are benefiting so greatly from partnership in the Alliance for Progress would be eager to join in a partnership for the rebirth of a free Cuba.

In any case, surely the time for leadership, decisiveness, and effective action on the part of this administration, is

Luis Aguilar Leon, a Cuban, put it rather well when he wrote recently:

Of all the lessons Fidel Castro has taught us, the bitterest and most obvious is this: He who proclaims himself a Communist can count on help from the Soviet Union even through he is 9,000 miles away from its borders, while he who proclaims himself a democrat can fight and die 90 miles from the shores of the United States and no one will come to his aid.

Mr. Speaker, this is true; and we in North America are deeply disappointed and profoundly frustrated with the quality of leadership in our own administration that has made it so.

The time for effective action is now.

FRIENDLY RELATIONS BETWEEN PORTUGAL AND THE UNITED STATES-A VICTORY FOR FREE-

The SPEAKER pro tempore. Under previous order of the House, the gentleman from Massachusetts [Mr. O'NEILL] is recognized for 60 minutes.

(Mr. O'NEILL asked and was given permission to revise and extend his remarks.)

GENERAL LEAVE TO EXTEND

Mr. O'NEILL. Mr. Speaker, I ask unanimous consent that all Members may have 5 legislative days in which to extend their remarks following my remarks on the subject on which I am about to address the House.

The SPEAKER pro tempore. Without objection, it is so ordered.

There was no objection.

Mr. O'NEILL. Mr. Speaker, the district I represent in Massachusetts is one of the most cosmopolitan areas in the world. We have people of 50 different ethnic groups who are represented in an area of about 10 square miles, all living together in peace and harmony.

Among this group I have gotten to know very, very well are people of American-Portuguese extraction. They are proud Americans, proud of their heritage in Portugal, but immensely proud that

they are U.S. citizens.

Naturally they have nostalgic memories when they think of the land of their birth or the land of their ancestors, and it has been with pride through the years that they have always considered the great feeling that has existed between the United States and the Government of Portugal. The feeling between the

two countries has been one of mutual affection, mutual love, an inextricably interwoven and intertwined feeling that we have always been on the same side regardless of what conflict may have occurred through the years.

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But during the past year there has been somewhat of a break in the relationship between the United States and Portugal, and it has been over her colonies in Africa and because of the policy that we have followed at the United Nations. I personally believe that the policy we have followed has been a wrong one. I have talked with the people of Portuguese extraction in my They are greatly upset by the area. policy we have followed. Consequently I have made a study of the situation.

I am convinced that the situation calls for better relations between the United States and Portugal and that the rift between these two allies will be and should

be mended.

The controversy and ill feeling between the two originated over anticolonialism. The United States, consistently and vigorously has opposed colonialism. Our policy is responsible for the rapid withdrawal of European rule in many African and Asian areas. The creation of many new nations has followed.

Portugal holds extensive areas in Africa, notably the huge province of Angola in West Africa and Mozambique on the east coast. Last year, the United States sided with the Afro-Asian nations, and incidentally, the Soviet Union, in resolutions aimed at Portuguese rule in Angola and Mozambique. The United States voted for inquiries into the situation in these provinces and also voted to condemn the Portuguese for repressive measures in opposing an outbreak in Angola last March. During this uprising, or invasion as the Portuguese claim, the dissidents were guilty of horrible atrocities. The Portuguese feel that this country voted to condemn them for defending themselves against outlaws and terrorists.

Since last March a good many events have taken place. The example of the Belgian Congo indicates that freedom for a former colony is by no means the solution of that colony's difficulties. In fact, events in the Congo have convinced many persons that independence should not be given to a colony under circumstances and conditions which finds it unable to govern itself.

The developments in the Belgian Congo are familiar to most of you. The termination of Belgian rule, for which many Belgians blame us, was followed by disorders which resulted in a mass exodus of the whites. The politicians in the Congo began a struggle for power which still continues. We have taken part in that struggle and so has the United Nations. In fact, as you know, United Nations troops have attacked the forces of Moise Tshombe, leader in the Katanga Province of the Belgian Congo. We also heartily disapprove of Mr. Tshombe, for reasons which are complicated and need not be detailed here. In any event, the U.N. venture has created a huge deficit in that organization's I am citing the Congo situation to emphasize the fact that premature independence for a colony may be the worst thing which could happen to the people in the area. The Congo is in much worse shape now than it was before the Belgians withdrew. Cyrille Adoula, the Congo leader outside Katanga, has submitted a budget which shows a deficit of \$222 million for 1962, and the actual deficit may be much higher. Industry and agriculture are deteriorating rapidly in the Congo; lawlessness and unemployment have risen rapidly and the conflict between rival politicians certainly does not help.

The Portuguese claim that Angola and Mozambique are integral parts of Portugal, just as we regard Hawaii and Alaska as integral parts of this country. I do not intend to discuss this matter today but I would like to point out that. admittedly, Angola and Mozambique are not ready for self-government. If Portuguese rule were to end tomorrow, the Congo would be repeated all over again. Already, the groups which are fighting the Portuguese in Angola have fallen out among themselves. One faction is led by a man called Holden Roberto, who has been widely quoted as admitting he ordered the slaying of Portuguese women and children during the fighting in Angola last March. Another faction is led by Mario de Adrade, who is reported to have close Communist ties. There are still other factions.

In Angola, there are approximately million natives, almost all Negroes, and about 500,000 whites, mulattoes and Negroes who regard themselves as Portuguese. Portugal has an enlightened multiracial policy. Intermarriage between the races is fairly common in Angola and Mozambique. Many Negroes and mulattoes hold high positions. The racial feeling, which is such a barrier to progress elsewhere in Africa is absent in Angola and Mozambique. These 500,000 constitute the upper classes. Most of the natives are primitive and, in fact, most of them maintain the tribesmen status they had when the whites first invaded Africa. As I have said, everyone familiar with Angola and with Mozambique admits that these areas would deteriorate rapidly if the Portuguese should be forced out.

The enemies of the Portuguese say the backwardness of the masses is the fault of the Portuguese, this is debatable. I do not doubt that Portuguese rule has left a good deal to be desired. Few goyernments are perfect and unfortunately. exploitation of backward people has been a familiar pattern throughout human history. But, the Portuguese are aware of their faults. After the fighting in Angola last year, the Portuguese Government instituted sweeping reforms, expanding greatly the privileges of suffrage, and local autonomy. The programs for educational and material development were accelerated. Amazingly enough, Angola progressed rapidly in 1961, despite the fighting in the northern part of the country. A pamphlet issued by the U.S. Department of Commerce "Economic Developments in Angola in 1961," states that many

records were established. The report states:

Industry was largely unaffected by the political situation, production increased and some significant new industries were inaugurated or reached the plant construction stage.

One of the aims of the terrorists under Roberto was to prevent the harvesting of the coffee crop, coffee being one of Angola's principal export commodities. But for the fifth year in a row, record crop was harvested.

In contrast to most of the new African states, both Angola and Mozambique are making rapid material progress. The political situation in Mozambique has remained stable and, after the first flurry, the Portuguese regained control of most of northern Angola. Apparently, only pockets of terrorist resistance are left. This seems to substantiate the Portuguese claim that the so-called rebels have little support inside Angola, itself. Even in the name of anticolonialism, it would seem unwise to throw Angola and Mozambique into chaos at this time.

The real question, of course, is whether the people of Angola and Mozambique are to have anything to say about their political and economic destinies. If Portugal insists that Angola and Mozambique are to remain Portuguese, regardless of the attitude of the majority in both countries, the differences between this country and Portugal may be hard to compose. For this country is firmly committed to an anticolonial policy and seems likely to adhere to this principle.

But the Portuguese are reasonable and flexible on this matter. In an interview given to Life magazine in May 1961, Premier Salazar of Portugal said he was not opposed to independence for Angola and Mozambique, but only to independence granted too hastily and, in response to force from the outside. He said:

The fact of a territory proclaiming its independence is a natural phenomenon in human society and, therefore, it is a hypothesis that is always admissible. But indeed no one can or ought to set a time limit for it. What is being subjected to time tables is the inconceivable politics of our time, which claims that states should set a time limit to destroy their unity and break up.

The Portuguese Ambassador to the United States, the Honorable Pedro Theotonio Pereira, stated the policy of his Government with regard to independence for Angola and Mozambique in an excellent speech before the Commonwealth Club of San Francisco last March. He said:

I would like to remind you that we have never said that we oppose self-determination. We regard our great provinces of Africa as an integral part of Portugal, just as the United States regards Alaska and Hawali as integral parts of the United States.

We hope to develop these provinces, to raise the standard of living, and to use their rich resources in the interests of all. We are, however, determined that self-determination must be a process of political evolution from within and must rest in the hands of the people concerned and not with outside terrorists and agitators.

What we bitterly resent and will oppose with all our strength is for outside violence to tear these provinces away from Portugal.

What we protest is the cynicism which uses the cry of anticolonialism and the disguise of a nationalist movement to further racism and communism. We have fought the invaders and the murders, and we will continue to fight them. If we lose, it is not our loss alone. All the West will lose with us.

It seems then to me that the Portuguese attitude is a sensible one and one which can be accepted by our own Government and by all fair-minded men. I need not remind you that Portugal has been an ally for a long time and that the country is a member of NATO, our principal defense against the Communists. Under Premier Salazar, Portugal has been stanchly anti-Communist. Soviet Union has gone along enthusiastically at the U.N. with the resolutions aimed at Portugal. If we continue pressure against the Portuguese Government, it could fall and we could find ourselves confronted with a government along the lines of the Castro regime in Cuba.

Moreover, Portugal since 1943 has given us invaluable air bases in the Azores. These bases were turned over to us, free of charge, at a time when World War II was in doubt. They were invaluable then; they are invaluable now. The lease is up for renewal in 1962 and negotiations with regard to it now are going on. Understandably, the Portuguese are upset over our attitude toward them and are reluctant to renew the Azores lease if we continue to be hostile on the Angola and Mozambique questions.

It would seem in the interests of all concerned for Portugal to continue its work of developing Angola and Mozambique. Portugal has received little in the way of foreign aid from us since World War II, the total, aside from military aid under NATO, being less than \$100 million. Premier Salazar did not ask for Marshall plan aid, stating that other countries needed it more than his country. If the aid is needed now to develop the provinces, some program should be worked out.

There is another reason for a better understanding between the United States and Portugal at this time. Many persons are concerned with the race feeling which is so manifest in Africa today. If the continent is to make any real progress, this progress must come from cooperation between the whites and other races, including the predominant Negro Otherwise, there will be chaos race. and deterioration, as is evident in many of the new states. The only way the Communists can take over will be through chaos which will necessitate order, if it even means a Communist dictatorship.

The Portuguese have an excellent record on the race question. Long ago, they dismissed skin color as a basis for exploitation and discrimination. If Angola and Mozambique develop as they should, they can furnish an example to the rest of the continent, an example which will be in the interests of Portugal, the United States, and the entire Western World.

I am hopeful then that the negotiations between the United States and

Thus the low-income white population would also benefit and a more equal income distribution among whites would result.

Finally, the community responsibilities of taxpaying and of military service could be more equitably shared among all the citizens of the Nation. The essential characteristic of such gains is that they are related to allocation and distribution problems rather than to output considerations. But by improving allocation and distribution they do increase the total welfare of the society While they cannot be added to the GNP gain measured above, they are significant and should not be ignored.

APPENDIX ON DERIVATION OF ESTIMATES

The key figures in the foregoing memo are the percentages by which wages and salaries are assumed to rise in the two cases of (a) no change in education, and (b) a change in education.

For (a) the following method was used, based on 1949 data for individuals. (The 1959 data will not be available for several months, and only decennial census data give the necessary breakdown of income by edu-cational level by age and sex by color.) For each age-sex group the income of nonwhites was changed to the income of whites having identical education. These changes amounted to a 3.1-percent rise in total money income. This 3.1-percent figure was applied to wages and salaries. Since wages and salaries are 58 percent of GNP, this would mean a 1.8-percent gain in GNP. This estimate was raised to 2.5 percent for the reasons given in the text.

For (b) the following method was used, based on 1960 data for families and unattached individuals. Total money income per consumer unit for first, nonwhite families, and second, nonwhite unattached individ-uals, was assumed to change to equal that of the appropriate white groups. Then wages and salaries were assumed to rise by the same percentage that total money income rose; namely, 4.0 percent. Since wages and salaries are 58 percent of GNP, the rise in GNP is 2.3. The final GNP increase was estimated to be perhaps 1-percent higher, or 3.2 percent, because of the additional gains, discussed earlier, due to increasing capital and entrepreneurial income.

The income data required for this study are available in terms of the standard census classification, "white," "nonwhite." The nonwhite classification includes, in addition to Negroes, American Indians, Japanese, Chinese, and others. The Census Bureau estimates that, of the 20.5 million persons in the nonwhite category in the 1960 census, 18.9 million persons (or 92 percent) were Negroes.

DESIGNATION OF CERTAIN CAR-RIERS AS CARRIERS OF BONDED

MERCHANDISE

The PRESIDING OFFICER (Mr. Burdick in the chair) laid before the Senate a message from the House of Representatives announcing its disagreement to the amendments of the Senate to the bill (H.R. 5700) to amend the Tariff Act of 1930 to permit the designation of certain carriers as carriers of bonded merchandise, and requesting a conference with the Senate on the disagreeing votes of the two Houses there-

Mr. BYRD of Virginia. I move that the Senate insist upon its amendments and agree to the request of the House for a conference, and that the Chair appoint the conferees on the part of the Senate.

The motion was agreed to; and the Presiding Officer appointed Mr. Byrn of Virginia, Mr. KERR, Mr. Long of Louisiana. Mr. Williams of Delaware, and Mr. Curris conferees on the part of the Senate.

AMENDMENT OF INTERNAL REVE-NUE CODE OF 1954 RELATIVE TO CERTAIN MANUFACTURERS EX-CISE TAXES

The PRESIDING OFFICER BURDICK in the chair) laid before the Senate a message from the House of Representatives announcing its disagreement to the amendments of the Senate to the bill (H.R. 8952) to amend the Internal Revenue Code of 1954 with respect to the conditions under which the special constructive sale price rule is to apply for purposes of certain manufacturers excise taxes, and requesting a conference with the Senate on the disagreeing votes of the two Houses there-

Mr. BYRD of Virginia. I move that the Senate insist upon its amendments and agree to the request of the House for a conference, and that the Chair appoint the conferees on the part of the Senate.

The motion was agreed to; and the Presiding Officer appointed Mr. Byrd of Virginia, Mr. Kerr, Mr. Long of Louisiana, Mr. Williams of Delaware, and Mr. CURTIS conferees on the part of the Senate.

INCOME TAX TREATMENT OF TER-MINAL RAILROAD CORPORATIONS AND THEIR SHAREHOLDERS

The PRESIDING OFFICER (Mr. Bur-DICK in the chair) laid before the Senate a message from the House of Representatives announcing its disagreement to the amendment of the Senate to the bill (H.R. 12599) relating to the income tax treatment of terminal railroad corporations and their shareholders and requesting a conference with the Senate on the disagreeing votes of the two Houses thereon.

Mr. BYRD of Virginia. I move that the Senate insist upon its amendment and agree to the request of the House for a conference, and that the Chair appoint the conferees on the part of the Senate.

The motion was agreed to; and the Presiding Officer appointed Mr. Byrn of Virginia, Mr. Kerr, Mr. Long of Louisi-ana, Mr. Williams of Delaware, and Mr. Curtis conferees on the part of the

STATE DEPARTMENT DESERVES COMMENDATIONS BLOW TO CUBAN TRADE

Mr. PROXMIRE. Mr. President, I congratulate Secretary of State Rusk and the State Department on their ingenious action in planning to put into effect 2 weeks from now a program which will put real pressure upon our allies and other countries to stop trad-ing with Cuba. This action comes at an appropriate time. The Senate has just watered down its proposal in the appropriation bill that came from the House which would have, outright, prevented aid to countries whose ships supplied Cuba with goods, munitions, and

The proposed action on the part of the administration will be much stronger and much more effective. It is a 4-point This is what the program program.

First, it will threaten any foreign shipowner with the loss of all cargo owned or financed by the U.S. Government if one of his vessels engages in the Sovietbloc Cuban trade.

Second, the United States will close its ports to all shipowners of a country if any vessel under the flag of that country carries military goods or equipment to Cuba. Such pressure was provided in the House language of the appropriation bill; but it was an academic provision, because the administration's intelligence reports disclosed that only Soviet ships have been carrying supplies to Cuba, and that for years no Soviet vessel has docked at a U.S. port.

Third, the program will also ban from U.S. harbors any ship which, on the same continuous voyage, has delivered nonmilitary Communist cargoes to Cuba. This will be a very effective embargo provision.

Finally, the Presidential order forbids U.S.-flag ships or U.S.-owned ships to carry goods to or from Cuba.

Without taking warlike action, the Secretary of State has accomplished a real diplomatic coup, and his very effective action deserves high commenda-

I ask unanimous consent to have printed at this point in the RECORD an article entitled "Reprisals for Cuba Trade Tougher Than Expected," written by Ted Szulc, and published in the New York Times of October 5, 1962.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

REPRISALS FOR CUBA TRADE TOUGHER THAN EXPECTED

(By Tad Szulc)

Washington, October 4.—The administration's plan to penalize all shipowners who transport Soviet-bloc supplies to Cuba is transport than was at first expected. Officials disclosed today that the plan, in the form of a four-point program, would be set in motion in 2 weeks.

The program will threaten any foreign shipowner with the loss of all cargo owned or financed by the U.S. Government if one of his vessels engages in the Soviet-bloc Cuba trade.

Under another provision, the United States will close its ports to all the ships of a country if any vessel under the flag of that country carries military equipment to Cuba. It will also ban from its harbors any ship that on the same continuous voyage has delivered nonmilitary Communist car-

goes to the Cubans.

COMPLETE BAN ON U.S. SHIPS

Finally, the Presidential order, forbid U.S.-flag ships or U.S.-owned ships to carry goods to or from Cuba.

As another part of its plan to put pressure on Cuba, the United States prepared to seek

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action next week in the Council of the Organization of American States. American countries will be asked to carry out antisubversive measures discussed in last night's communique from the hemisphere's foreign ministers.

U.S. diplomats, who are pleased with the results of the informal 2-day ministerial conference here, expect to open consultations immediately on steps against Communist and

Cuban subversion.

The ministers agreed yesterday that it was urgent to study "the transfer of funds to the other American Republics for subversive purposes, the flow of subversive propaganda. and the utilization of Cuba as a base for training in subversive techniques."

STUDY BY SPECIAL GROUP

It was expected that the Council would instruct the special consultative committee on security, created in January by the American foreign ministers' conference at Punta del Este. Uruguay, to start the studies and

present recommendations.

The United States as well as many Latin-American governments believe that one of the principal dangers presented by Cuba is training in subversion—offered to thousands of visiting Latin American youths—the export of revolutionary propaganda and the transfer of Cuban and Communist funds to revolutionary groups in other countries.

Perhaps the most difficult job facing the committee will be finding a way to prevent travel to Cuba. Many governments believe it may be politically impossible for them to forbid students to accept "scholarships" offered by the Havans regime, even though

they lead to subversive training.

In general, U.S. officials believe that
the tenor of the communique—which said the Chinese-Soviet "intervention in Cuba" was the hemisphere's most urgent problem—represented another step in Washington's long campaign to persuade the Latin Americans of the seriousness of the Cuban problem.

The ministerial statement said that Soviet intervention in Cuba required individual and collective action in the sconomic field, such as extending to other items the sus-• pension of trade in strategic goods.

PROVISION OMITTED

A provision that the United States was par ticularly eager to insert in the communique was inadvertently dropped from the text of the document when it was distributed by the

State Department last midnight.

It was a call upon "all other independent countries" to refrain from making ships available for the trade between the Soviet bloc and Cuba. Today, the Department issued a corrected text.

Many Letin American diplomate believe

Many Latin American diplomats believe that the U.S. success in obtaining what amounted to a condemnation of the Soviet-Cuban alliance and in paving of the way for further measures was due largely to personal effort by Secretary of State Dean Rusk. Some diplomats said that under the Sec-

retary's direction, the meeting had gone much further than the ministers had planned

when they arrived.

Although the bases of the new policy have been settled by the administration, officials indicated today that many of its details were still to be worked out.

It was emphasized that for the time being the restrictions will not apply to ships bringing cargo to Cuba from non-Communist countries. Such routes account for 25 percent of Cuba's imports; the rest comes through trade with the Soviet bloc. But the possibility of extending the sanctions was not ruled out.

CARRIERS OF AID AFFECTED

Under the new program, the immediate impact will be upon allied and neutral ships that carry U.S. Government cargoes to Europe and return to the Western Hemisphere with merchandise for Cuba. The value of the shipments involved in this trade was not immediately known.

In this instance, the administration aimed its threat against individual shipowners rather than against all the ships of a nation.

In the case of ships bringing Soviet cargo to Cuba and then picking up goods in U.S. ports for a return voyage to Europe, only the individual vessels would be penalized.

The object here is to face the shipowners

with the prospect of going back to Europe

empty.

The provision banning from U.S. ports all that has allowed one the ships of a national that has allowed one of its vessels to carry military equipment to Cuba may, however, be academic. The administration's intelligence reports

indicate that only Soviet ships have been carrying military equipment to Cuba. For years no Soviet vessel has visited the United States.

The only Soviet-bloc country to maintain maritime trade with the United States is Poland and there are no indications that Polish ships have been used to carry military goods to Cuba.

Among the many details to be worked out is the definition of military equipment. day, officials could not say whether ships carrying tents, army boots, or uniforms would be included in the definition.

In another action related to Cuba, President Kennedy signed the congressional resolution today that authorizes him to use troops if necessary to counter any acts of aggression emanating from Cuba. He also signed the resolution authorizing him to call up 150,000 reservists if needed.

Mr. PROXMIRE. Mr. President, the proposed action is in order also because it has just been revealed that the British plan no law to bar trade with Cuba. According to the New York Times, there is no possibility that legislation will be adopted or will be passed by Parliament prohibiting British trade with Cuba.

I ask unanimous consent that an article entitled "British Plan No Law Barring Trade With Cuba but Will Help United States Otherwise," published in the New York Times of October 5, 1962.

There being no objection, the article was ordered to be printed in the RECORD, as follows:

BRITISH PLAN NO LAW BARRING TRADE WITH CUBA BUT WILL HELP UNITED STATES OTHERWISE

(By Seth S. King)

LONDON, October 4.—An authoritative source said today that Britain would continue to cooperate with the United States in a search for a formula to reduce the volume of strategic cargoes reaching Cuba in British ships.

There is no possibility, however, the source added, that the British Government will introduce legislation forbidding British

ships to call at Cuban ports.

The British have apparently not ruled out the possibility of placing Cuba on the Co-ordinating Committee's boycott list. It consists of countries to which specified strategic materials may not be shipped by members of the committee.

The Coordinating Committee consists of all the North Atlantic Treaty Organization countries except Iceland—the United States, Belgium, Britain, Canada, Denmark, France, West Germany, Greece, Italy, Luxembourg, the Netherlands, Norway, Portugal, and Turkey. Japan is also a member.

WOULD REPRESENT SHIFT

Although the Committee's boycott list consists of Soviet-bloc countries and Communist China, Cuba is not on the list.

The placement of Cuba on the list would indicate an abrupt change in British policy. In the past Britain has often been a pro-ponent of reducing the numbers of goods barred from sale to the Soviet bloc.

The U.S. plan to keep ships carrying arms to Cuba from calling at U.S. ports would not affect British-owned shipping, a Foreign Of-

fice source said.
For 2 years, Britain has refused export licenses to British arms manufacturers who intended to sell their products to Cuba.

"So far as we know, no British ships are knowingly carrying arms from any other sources to Cuba," a Foreign Office official said.

If the United States should bar its ports ships carrying cargoes other than arms to Cuba, British shipping would definitely be hurt. British shippers ar among the chief carriers of oil to Cuba and sugar from there.

British officials do not agree with the contention that by refusing to carry nonstrategic cargoes to Cuba, the West would force the Soviet Union to divert its ships to do this.

Neither does Britain believe that an embargo on all goods and shipping from the West would harm the regime of Premier Fidel Castro.

"We think it might actually stabilize his position," a source said, "giving him a source of sympathy from his own people and a reason to stir them up further against the

AGREES ON PRINCIPLE

The official said Britain agreed with the idea of preventing communism's spread from Cuba into Latin America.

"We share your alarm over this possibility," he said. "But we do not agree on the means of combating it.

"Britain is a maritime country. We believe in freedom of the seas, and the U.S. proposals cut directly across some of our oldest traditions.

The British Government does not have the authority to stop the transportation of nonbeiligerent cargoes to Cuba by her ships, a

Foreign Office source said.

Legislation would have to be adopted by Parliament. "There is neither any possibility that the Government will introduce such legislation nor that Parliament would pass it," the source said.

Shipping is one of this country's largest earners of foreign currency and one of its greatest industries. Nearly 3 percent of Britain's large merchant fleet is now idle, however.

CURBS URGED IN NORWAY

Oslo, October 4.-The Norwegian Shipowners Association has requested its members not to engage in shipments to Cuba. In a statement Monday, the association said that Norwegian ships had carried only civilian cargoes to Cuba.

CANADA PLANS NO BAN

OTTAWA, October 4.—The Government does not plan to forbid Canadian-owned ships to carry cargoes between the Soviet Union and Cuba, the External Affairs Minister, Howard C. Green, said today in the House of Com-

Mr. PROXMIRE. Mr. President, the New York Times has published today an editorial entitled "The Embargo On Castro," which reads, in part, as follows:

The Kennedy administration, refusing to be stampeded by advocates of direct action against Cuba, has now produced a program that might materially reduce the Soviet bloc's military and economic support without risking an armed collision or violation of international law.

But the United States long ago adopted the embargo policy; and as long as we maintain it in respect to our own trade with the sland, there is certainly every reason to try D make it as effective as possible by methes. The present program is in fact an inenious way of extending this embargo hrough the control that we exercise over the use of our own ports and over the shipment of goods exported at the cost of the American taxpayer.

I think this action is exceptionally praiseworthy. Because trade with America is of far more importance to shiptowners of those countries than is trade with Cuba it will be mighty effective in choking Castro. The coup by the Secretary of State deserves our congratulations. I am mightily heartened by it.

Mr. President, I ask unanimous consent to have the entire editorial printed at this point in the Record.

There being no objection, the editorial was ordered to be printed in the Record, as follows:

THE EMBARGO ON CASTRO

The Kennedy administration, refusing to be stampeded by advocates of direct action against Cuba, has now produced a program that might materially reduce the Soviet bloc's military and economic support without risking an armed collision or violation of international law. This policy was discussed by Secretary Rusk with the foreign ministers of the Organization of American States at a 2-day meeting in Washington this week. It is fundamentally designed to compel foreign shipping companies to choose between the permanently lucrative American trade and the quick short-term profits they are earning by carrying Soviet bloc cargoes to Castro.

When operative, the program would bar from American ports all the ships of any country any one of whose ships was found transporting weapons and munitions to Cuba. So far as is known, the arms already imported into Cuba have in no case been brought there under the flag of a non-Communist country. But there are many vessels of non-Communist lands that have been carrying other types of supplies to Cuba. When the program goes into effect they will be prohibited from loading American cargoes in American ports for their return voyage. This means that in many cases they would be forced to recroes the Atlantic in ballast without any payload. Furthermore, the owners of any foreign ships engaged in the profitable trade of carrying American surplus commodities to countries receiving grantsin-aid or loans will stand to lose their contracts if they also trade with Cuba. All U.S.-owned ships, whether flying the American flag or sailing under foreign registries, will be prohibited from engaging in the Cuban trade.

This program was born of the reluctance of many foreign maritime countries, allies of the United States, to abandon their trade with Cuba. On the ground that neither we nor they are at war with Cuba, they claim their undoubtedly legal right to carry peacetime goods to Cuba as usual. Some make the argument that an embargo is not the way to destroy Castro, and that in fact it can becomerang and even strengthen his grip on the Cuban people. This may be true; there is no guarantee that a cessation of trade with Cuba will have the desired effect on Castro.

But the United States long ago adopted the embargo policy; and as long as we maintain it in respect to our own trade with the island, there is certainly every reason to try to make it as effective as possible by peaceable methods. The present program is in fact an ingenious way of extending this embargo through the control that we exercise over the use of our own ports and over the shipment of goods exported at the cost of the

American taxpayer. It is another question whether the hoped-for result will be achieved, not to mention the cost in good-will of our maritime allies.

There can be no doubt that the trans-

There can be no doubt that the transformation of Cuba into a Soviet-supported enterprise is a danger to this hemisphere, and the Latin American foreign ministers at the Washington meeting clearly acknowledged this fact. Although their assessment of the methods to be employed to combat this danger varied, they agreed on this important conclusion: "that now more than ever it is necessary to strengthen the system of representative democracy and to redouble the efforts being made to bring harmonious progress to the peoples, and the earliest and most effective improvement in their standard of living, within the framework of the Alliance for Progress, and with the most complete respect for human rights." This statement recognized the essential prerequisite in warding off the political dangers emanating from Castro's Cuba. This is really the crux of the problem so far as Latin America is concerned.

Mr. SMATHERS. Mr. President, I join with the able Senator from Wisconsin in commendation of the Secretary of State and the administration upon the particular move which they have just made.

There are two other subjects as to which action should be taken promptly. I shall refer to them in a speech which I shall deliver at 2:30 this afternoon. I hope that the Senator from Wisconsin will be here so that we may exchange views.

Mr. PROXMIRE. I thank the Senator from Florida.

THE U.S.-U.S.S.R. ENERGY RACE: A SOBER WARNING

Mrs. NEUBERGER. Mr. President, on September 28, 1962, I placed in the RECORD portions of an article written by Howard Morgan, Commissioner of the Federal Power Commission, in which he discussed his recent trip to Russia.

Today I present for the consideration of the Senate a more detailed report on that trip, in which Mr. Morgan comments especially on the technique of the Russians in long-distance power transmission.

As I read the excellent speech by Mr. Morgan, I could not help recalling that one of our colleagues, the distinguished senior Senator from Louisiana [Mr. Ellender], had made successive trips to the Soviet Union, where he visited powerplants. Upon his return, he warned the Senate—and I considered his remarks as a warning—that the Russians were fast creeping up upon us in their production of hydroelectricity and their development of long-distance transmission. I think we owe a special tribute to the Senator from Louisiana for calling this subject to our attention; and these remarks by Commissioner Morgan again remind us of it.

Commissioner Morgan mentions names with which Americans are unfamiliar, names of places which Americans do not know how to pronounce: rivers such as the Yenisei, Angara, and Sungari; Lake Baikal; and cities such as Bratsk, Kuybyshev, Novosibirsk, and Krasnoyarsk. It is in these cities that the Russians have built huge powerplants and on these

rivers that they have constructed the biggest power dams in the world. They are places which most Americans probably have never heard of.

I ask unanimous consent to have printed at this point in the Record the outstanding address delivered by Commissioner Howard Morgan before the Western States Water and Power Consumers Conference at Portland, Oreg., October 2, 1962.

There being no objection, the address was ordered to be printed in the RECORD, as follows:

THE U.S.-U.S.S.R. ENERGY RACE: A SOBER WARNING

(Extracts from address by Howard Morgan, Commissioner, Federal Power Commission, before the Western States Water and Power Consumers Conference, Portland, Oreg., October 2, 1962)

About 3 weeks ago I returned from a 2-week inspection trip through Russia, Siberia, and Sweden, in company with Secretary of the Interior Udall, Chairman Swidler, of the Federal Power Commission, Bonneville Power Administrator Charles F. Luce, Gen. R. G. MacDonnel, of the Corps of Engineers, and a group of highly qualified engineering experts in hydroelectric generation and high voltage transmission. The purpose of the trip was to study those two subjects and, in addition, the operation of large integrated power pools.

During the course of the trip, Mr.

Khrushchev, in a conversation with Secretary Udall, issued a challenge to the United States to engage in a peaceful energy race with the Soviet Union. The challenge was of course accepted by Mr. Udall, and both the challenge and its acceptance was reported by the press. During the intervening period there has been surprisingly little editorial comment in the United States about this energy race to which we are now committed. Most of the comment I have seen reflects little understanding of the seriousness of such a contest and expresses a comfortable and complacent point of view concerning our prospects.

After a careful examination of the comparative electric power statistics of the two countries I am convinced: that we have already been in an electric energy race with the U.S.S.R. for 15 years, that while we are ahead in that race by a very wide margin, the Russians are gaining on us at an alarming rate, and that the seriousness of the race, together with the possibility that we can eventually lose it, are matters which urgently need informed public discussion in this country. I shall try to make a small contribution toward such a discussion in this talk.

At the time of the revolution Russia was the most backward European nation in the development of electric power, but the total electrification of Russia was at once made the goal, the center and the heart of the industrialization plans laid down then, over 40 years ago. * * * During the twenties and thirties American engineers and contracting firms, together with American generator and turbine manufacturers, worked with the Russians to develop both hydro and steam generation, as well as high-voltage transmission. Lend-lease assistance helped rebuild war-damaged plants and lines, and even built a few new ones for war production during the forties. Since shortly after World War II the Russians have been self-sufficient, and have carried on an increasingly large and rapid construction program unasided; even developing enough capacity to send skilled englineers, technicians and first-rate electric equipment abroad to newly-developing areas. Today, in the generation of elec-

tric power, Russia has outstripped not only every nation in Europe by very wide margins, but every other nation in the world as well, except for the United States.

In 1927, the earliest year for which the FPC has statistics, Russia had 1,905,000 kilowatts of installed generating capacity. The United States had passed that figure in 1900. By 1946 Russia had 12,238,000 kilowatts. The United States had passed that figure exactly 80 years before in 1916. But by 1961 Russia had 74 million kilowatts, a figure equalled in the United States only 12 years earlier, in 1940.

The United States is still ahead of Russia by a wide margin, wide enough to give rise to a good deal of self-congratulation in our electric industry. In 1961 we had nearly 200 million kilowatts of capacity; the Russians only 74 million kilowatts. But a closer look at the figures is disturbing. * * In 1932 we had almost 10 times as much capacity as they; about 43 million compared to 4,675,000. By 1961 this margin had ahrunk to less than three times. There are two ways to look at this. Notice that the absolute margin had widened, while the percentage of margin had ahrunk. * *

By 1961 the United States had reached the level of about 333 percent of its 1946 capacity, or an increase of 233 percent. In the same period the U.S.R. had reached the level of exactly 800 percent of its 1946 capacity or an increase of 500 percent. Both these rates of growth are impressive and represent great achievements, but the latter figure represents a rate of growth about the latter figure represents a rate of growth absolutely unparalleled in any 15-year period in the history of the United States or, for that matter, in the history of any other important nation in the world.

The absolute amounts of our yearly additions, while reassuring, are not as important as the percentage of existing capacity which we and they—add each year. These percentages are ominous.

Mr. Khrushchev knew perfectly well, before he challenged the United States to a race in the field of electric energy, that our capacity is nearly three times that of Russia, and that the annual additions to U.S. generating capacity are currently greater than those being made in Russia. Does this mean, as the complacent executives in our electric industry would have you believe, that Mr. K is out of his mind and has advertised to the world that the Soviet Union has entered a race it cannot win?

I hope I may be pardoned if I remind you that the world has by now formed an entirely different view of that willy old gentleman. He is, as we all have reason to know, an exceedingly well informed man; he knows the stakes that are involved in an energy race between the United States and the U.S.S.R.; and as a master politician he knows very well the risks of outlining policies and goals which are beyond the possibility of execution. It will pay us, if for no other reason than to avoid panic later on, to take a careful look at the same figures he has been looking at and try to understand real-stically what he and his system are driving

What gives rise to the greatest concern among Americans who have studied these figures carefully, and who have gone to Russia for a look around, is the accelerating pace of the construction the Russians have recently built and the even faster acceleration of their plans for future construction. Both countries are planning and building on curves which rise more steeply each year, but the Russians' curve of actual construction is rising faster now than ours was 12 years ago, when we had the same capacity they presently have. What is more important, they plan to steepen their construc-

tion curve more drastically in the years ahead than some people think would be justified in the United States by the demands of our own economy. If this happens, the curves will inevitably converge, intersect, and cross.

Whether this will happen, of course, depends on a complex of economic and perhaps political factors probably beyond the ability of anyone to predict with certainty. But in 1960 a U.S. Senate committee, which toured Russia with engineering staff and studied power matters carefully, reported that "The U.S.S.R. is catching up with the United States in electric power production, the basic field in which supremacy counts heavily in peaceful economic competition or in event of war. * * * The Russians could overtake us in 1975—in 15 years—unless we speed up or they slow down."

Whatever we—or they—actually do in the

Whatever we—or they—actually do in the years to come, I can report that they have not the slightest intention of slowing down.

Take comfort in the fact that so far we seem to be ahead of the Russians in design, size and efficiency of steam generating units, which comprise the bulk of both their own and our power systems. One of our manu-facturing concerns is now building a 1,000,000 kilowatt single-unit steam generator, and several 800,000 kilowatt units are in operation, while the Russians are only now building their largest at 300,000 kilowatts. This doesn't seem to bother them, though it actually may; it is hard to tell. They claim they would rather standardize at a moderate size and build more of them, which may or many not be the case. This would not make economic sense in our system but it is sometimes hard to be sure whether the economic factors in their system would produce the same decisions as in ours, even granting that they have the technical capacity necessary for free choice. In any case Mr. Khrushchev, in a recent policy speech, directed his engineers to step up their mastery of larger steam units, and on the basis of past experience we can realistically expect

that they will proceed to do so.
But it is in the hydropower (about 20 to 25 percent of their capacity) and in extra-high-voltage and integrated transmission systems that they have made important advances, and this is what we went to see and learn

Russia has several very large rivers that dwarf the Columbia in size and power. On the Volga we saw the dams at Stavropol; 2.3 million kilowatts (compared to 1.9 million kilowatts at Grand Coulee) and Volgograd; 2.5 million kilowatts.

At Bratak, 200 miles north on the Angara from its origin at Lake Balkai, we saw what will presently become the world's largest dam at 4.5 to 5 million kilowatts. It is now about two-thirds complete, already has 200 feet of water behind the dam (eventually it will have 350 feet or so) and is generating power with 6 of what will eventually be 20 generators.

These generators, and the turbines which drive them, are the largest in the world and were especially designed for this dam by L. A. Artemov, an English-speaking engineer now in his sixtles who spent several years in America working on lend-lease during the war, has many friends here, and is widely respected in the electrical world. He is in charge of all hydroturbine and generator designs in Russia. Incidentally, as a very young man he built the first hydroplant in Russia becoming in 1922.

Russia, beginning in 1922.

We were able to see some of these turbines and generators being installed. The largest in the United States are at Niagara and have a capacity of 180,000 kilowatts. Those at Bratek are of 250,000-kilowatt capacity. That means more than 300,000

horsepower is developed by a single turbine on a single, slow-speed shaft. At Krasnoyarsk, 200 miles west from Bratsk on the Yenisei, is a dam we did not visit because construction is just now getting well underway. This dam, when completed, will take the title of "biggest" away from Bratsk. It will generate 6 million-plus kilowatts. Its equipment, also designed by Mr. Artemov but not yet built, will produce 500,000 kilowatts per generator, or more than 600,000 horsepower per turbine. The shafts necessary to take such power are too big to forge in a single plece, so they are made of slabs of foot-thick steel, which are rolled into partial cylinders, welded lengthwise into tubes, heated in soaking pits to relieve welding stresses, and then machined to size—something over 8 feet in outside diameter and about 6 feet inside diameter. The design and construction of these shafts is a real engineering achievement by itself.

and and construction of these snarts is a real engineering achievement by itself.

It is planned that both the Angara and the Yenisel, as well as a number of other Siberian rivers, will be fully developed from headwaters to their mouths on the Arctic in the next several years, some of the dams being larger than those I have mentioned, and some smaller. But the real glant, one planned for construction beginning 10 or 12 years from now, is on the Lena quite near its delta on the Arctic. Preliminary engineering studies, we were told, yield the astounding prediction of from 20 to 22 million kilowatts to be generated by this single dam. It is expected to electrify the entire Pacific coast of Siberia.

The secret of getting power from such remote regions to the centers of industrial production involves the thorny problem of very long-distance transmission without uneconomic line loss. So far as I can determine the longest lines in the United States are no more than 225 miles from point of generation to load centers. The distances involved in moving Siberian power to load centers are in excess of 1,500 miles. This accounts for the strenuous research and construction the Russians have been doing in the extra-high-voltage field, for in that very difficult technological field lies the answer to the problem.

The heaviest lines actually constructed in this country are at 345,000 volts (345 kilovolts) and there are not many of them. The Russians have for some years been operating 500-kilovolt lines as long as 600 miles, from Kulbyshev to Moscow and from Volgograd to Moscow. In addition, a 500-kilovolt line is in operation from Irkutsk to Bratsk, is being extended from Bratsk to Krasnoyarsk, and before that dam is complete will be extended clear across central Asia to the Ural Mountain area. Work is now going on which will eventually boost some or all of these lines to 750 kilovolts and ultimately to 1,000 kilovolts—I million volts. All this is alternating current.

is alternating current.

Even more challenging, and holding out the promise of even more economies, is direct current, and here too the Russians have heavy lines—eventually planned for 800 kilovoits—in operation from Volgograd to the Don River basin industrial area. We saw all this extra-high-voltage research and construction, including the world's largest direct current laboratory at Moscow, and found it all very impressive.

Finally, we were shown the control center

Finally, we were shown the control center in Moscow where, in a single room, all of the power generated and consumed in European Russia, except for two minor districts which are now being hooked up, is dispatched under computerized control on a single interconnected grid. We have two such interconnected grids in the United States, the Northwest power pool (mainly Bonneville) and the TVA, each controlling about 12 million kilowatts. In the Russian pool is almost 55 percent of the power generated in the entire nation—about 39 million kilowatts.