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SOME IMPLICATIONS OF A SYSTEM OF INTERNATIONAL ARMAMENTS INSPECTION

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Submitted by the

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SOME IMPLICATIONS OF A SYSTEM OF INTERNATIONAL ARMAMENTS INSPECTION

THE PROBLEM

To estimate: (a) whether the Soviet rulers could maintain their present degree of control over their people if they should permit international inspectors of armament facilities and installations to have free access and movement within the USSR, and whether they would believe that they could maintain such control; (b) if international inspectors are granted free access and movement within the USSR, and communication among themselves and to the exterior without any interference, to what degree such inspection would give assurance against the launching of a surprise nuclear attack by the USSR against the US; and (c) in general terms, the ability of the USSR to evade arms limitations.

SCOPE

In the absence of details regarding the terms of the assumed disarmament agreement and the nature of the inspection system, this estimate can be no more than a preliminary survey of the questions posed. It does not attempt to deal with actual Soviet intentions in the sphere of disarmament, or the probable Soviet attitude toward any particular proposals for inspection or disarmament. This estimate is limited to an examination of only a few implications of an assumed Soviet acceptance of international arms inspection.

CONCLUSIONS

1. We believe that an international armaments inspection system would present no dangers to the Soviet system which could not be overcome by techniques of control. We believe that the Soviet leaders would probably reach the same conclusion, but that their decision to accept or reject an international inspection agreement would be based for the most part on other grounds. *(Para. 9)*

2. The USSR could have concealed, or might accumulate by clandestine methods, the numbers and types of nuclear weapons required for a feasible attack on the US. Therefore, international inspection of nuclear weapons and fissionable materials alone could not provide assurance against the possibility of surprise attack. If extensive preparations of the means of delivery were necessary before

launching a large-scale surprise nuclear attack on the US, they would almost certainly be recognized by the inspectors. However, the ability of inspectors to give warning would be reduced not only by a high degree of Soviet readiness at the time inspection was initiated, but also by a reduction in the preparations required for an attack resulting from developments in weapons technology, delivery means, training, or logistic procedures. *(Paras. 15, 17–19)*

3. The Soviet leaders might evade a disarmament or inspection agreement through resort to legal subterfuge, administrative obstructionism, use of facilities in countries not subject to inspection, and other forms of deception. In the absence of detailed information about the proposed arms limitations and inspection provisions it is impossible to foresee all the stratagems the Soviet leaders might be able to employ. Past experience indicates, however, that they are capable of great ingenuity in escaping the spirit and letter of agreements they have ostensibly accepted. *(Paras. 22, 25)*

DISCUSSION

I. EFFECTS OF INTERNATIONAL INSPECTION UPON THE INTERNAL POLITICAL AUTHORITY OF THE SOVIET REGIME

4. Any international armaments inspection system acceptable to the US would require the USSR to make major changes in its internal security practices, and would constitute a marked modification of the fundamental Soviet policy of secrecy. There would have to be substantial numbers of inspectors, free to travel about the country as necessary within the agreed scope of their duties, to conduct physical inspections of plants and military installations, to communicate abroad without interference, and probably to audit certain records of government ministries and production enterprises. They would presumably not have the right to information other than that related to armaments, but in view of the high degree of integration and great complexity of modern industry their operations would almost certainly impinge upon a large part of industrial activity. They would inevitably gain much information beyond the strict scope of their mission. In short, the inspectors would constitute a considerable body of foreign personnel, exempt in many important respects from the control of the Soviet state. Their freedom would be much greater than that presently accorded the diplomatic corps in the USSR and would be without precedent in any sovereign country.

5. The impact of such a system upon the population and official personnel of the USSR would probably not be as direct and constant as these broad rights of movement and inspection suggest. It can be assumed that Soviet authorities would provide some sort of escort and surveillance on almost all occasions when actual physical inspection was undertaken, and citizens could probably be insulated from direct contact with the inspection agents to the extent that the Soviet government deemed necessary. While the presence of inspection teams within the country would be evident to the population, inspectors would probably not have occasion or opportunity to establish personal relationships with ordinary citizens, and might not even be able to converse with officials except in the presence of "liaison" officers.

6. The knowledge that an international inspection system was in operation, and the evidences of its functioning would, of course, have an impact upon the population. In the case of the USSR, this would have psychological implications bearing directly upon interpretations of the outside world which the So-

viet government has heretofore presented to its people. It would be somewhat more difficult to maintain the proposition that the USSR was confronted by a hostile capitalist encirclement if the capitalist representatives were, by Soviet government consent, admitted to the secrets of the Soviet military establishment. The admission of large numbers of Soviet inspectors to the US, and the reports and gossip which they would spread on their return, would probably add to this difficulty. Propaganda based on the purported dangers of hostile foreign penetration would almost certainly be less effective.

7. However, the internal political authority of the Soviet regime does not depend upon the willingness of the people to accept the propaganda with which the regime justifies its policies. Acceptance by the Soviet people of their government rests on many factors, including social inertia, national loyalty, fear, ignorance of the outside world, and the self-interest of many groups. Maintenance of the authority of the regime rests on its ability to manipulate these factors and to bring police power to bear where and when needed. We think that none of these factors would be seriously affected by Soviet acceptance of international inspection. The regime's police power would not be reduced by the physical presence of foreign inspectors in the USSR.

8. Attitudes among the general population, however, are not as important for stability in the USSR as attitudes among the elite groups of the armed forces, and of the party and government bureaucracies. The degree of ideological enthusiasm among members of these groups probably varies widely, from cynicism to fanaticism. Nevertheless, most of these people desire social and political stability. The fact that they have been individually successful means that they have acquired a vested interest in the preservation of the system within which their success was achieved. Hence, although the members of these groups would probably be exposed to considerable contact with foreign inspectors, we believe that they would prove relatively impervious to disturbing influences which might be exerted through such contacts.

9. On the basis of the foregoing, we believe that international inspection in itself would present considerable but not insurmountable political control problems to the Soviet leaders. There appear to be no dangers to the stability of the Soviet regime arising out of such inspection which could not be overcome by techniques of control. We believe that the Soviet leaders would probably reach the same conclusion, but that their decision to accept or reject an international inspection agreement would be based for the most part on other grounds than that of internal political control.

II. ADEQUACY OF AN INTERNATIONAL ARMAMENTS INSPECTION SYSTEM TO PREVENT SOVIET SURPRISE NUCLEAR ATTACK

10. To provide assurance against surprise nuclear attack by the USSR, international inspection would have to achieve, at a minimum, one of the following objectives:

a. To account for Soviet nuclear weapons and current production, and to maintain such surveillance over them that a surprise attack on the US would be infeasible.

b. To account for Soviet weapons delivery vehicles and current production, and to maintain such surveillance over the means of delivery that a surprise attack on the US would be infeasible.

In the following paragraphs we examine in a general way whether these tasks could be accomplished by international inspection, assuming that inspection agents would employ presently known techniques of investigation.

Nuclear Weapons Control

11. To establish surveillance over Soviet nuclear weapons, all stockpiles of fissionable materials existing at the inception of the inspection system would have to be identified, beginning presumably with an exchange of inventory lists. A confident determination of the accuracy of the Soviet inventory could not be made, however, because of the uncertainty in US estimates of Soviet production and allocation of nuclear materials. Physical inspection of the production of fissionable mate-

rials, together with an audit of the records of such production, would permit a refinement of these estimates but still would not afford an incontrovertible determination of cumulative Soviet production. Consequently, it must be assumed that the USSR could have, at the outset of international inspection, an undetermined number of concealed nuclear weapons or nuclear components. Weapons assemblies without nuclear components and weapons-grade fissionable materials could also be concealed.

12. In addition, in the period after inspection had begun, some fissionable materials could secretly be diverted from permitted nonmilitary production. Preparation of fissionable components for weapons from these materials, under dispersed clandestine conditions, would be difficult to accomplish without leaving traces. Nevertheless, over an extended period, and carried out on a moderate scale with due precautions, undetected production would be possible. This production, apart from any weapons or components not included in the original declaration, might eventually provide a considerable stockpile of weapons not effectively subject to international inspection.

13. While the clandestine accumulation of nuclear weapons is thus feasible under an inspection system, it is highly unlikely that the USSR would develop and produce radically improved nuclear weapons, or weapons of a yield greatly in excess of those previously tested, without a testing program.[1] Since the occurrence of a nuclear detonation can easily be detected at great distances, it is almost certain that the USSR could not conduct such a program without detection.

14. The chances are slight that concealed stockpiles of nuclear weapons would be detected by subsequent inspection. Presently known techniques do not permit the detection of fissionable materials at any great distance. Moreover, nuclear weapons can be stored for long periods, the only components requiring replacement being units not specifically identifiable as weapons components. Security and maintenance activities associated with storage sites might alert inspection agents, but the vast area of the USSR would almost certainly provide adequate cover against detection except by accident.

15. Thus, the USSR could have concealed, or might accumulate by clandestine methods, the numbers and types of nuclear weapons required for a feasible surprise attack on the US. We cannot foresee just how many weapons the Soviet leaders would consider necessary for this purpose. Their estimate of requirements would depend on many factors, chief among which would probably be their assessment of the magnitude of the US military and other strengths which would have to be neutralized in order to accomplish their objectives. However, it would be impossible for the US to be certain that the USSR did not possess the required stock of nuclear weapons. Even a small secret Soviet stockpile would give the USSR military advantage if the US nuclear stockpile and delivery means were effectively subject to international inspection. We must conclude, therefore, that international inspection of nuclear weapons and fissionable materials production alone could not provide assurance against the possibility of surprise attack.

Control of Weapons Delivery Vehicles

16. *Aircraft.* Uncertainty as to the completeness of data, which makes absolute control of nuclear production virtually impossible, would not necessarily apply in the case of weapons delivery vehicles. The number of aircraft, for example, required at the present time to deal a crippling blow to the US would be difficult to conceal from inspection agents. The task for inspection would be to exercise such surveillance as to preclude the preparation and mounting of a surprise attack. Whether this task could be performed would depend, in the first place, upon the levels and dispositions of Soviet forces existing when the inspection system went into operation.

17. The USSR might conceivably complete preparations for attack before the inspection system had been installed. Thus, the inspec-

[1] The USSR might forego such a test if through successful espionage it should acquire adequate data on a possibly more advanced weapon developed by another nation.

tion agents would be confronted at the outset with a military establishment fully capable of initiating large-scale attack without further noticeable preparation. Under these conditions, international inspection might provide warning of attack, though the warning might be little earlier than the actual launching of the attack itself. Under such conditions, training activities would tend to be largely indistinguishable from preparations for attack. Logistic movements and aircraft deployment which might otherwise alert inspection agents of impending attack would thus be deprived of their significance as specific indicators of hostile intent.

18. If, however, the USSR had not prepared its forces for attack prior to the initiation of inspection, early warning of Soviet preparation for a major attack could probably be provided by an inspection system. Under present conditions, the USSR would almost certainly have to undertake certain detectable preparatory activities in order to launch a surprise nuclear attack on the US in a magnitude sufficient to deal a crippling blow. Preparations for handling aircraft at staging areas and forward bases, and the logistic, deployment, and communications activities which would be entailed in such an attack would almost certainly attract the attention of inspection agents before the attack could be launched.

19. The ability of international inspection to provide warning of preparations for attack would thus depend upon the length of time between the moment at which preparations for attack became recognizable as such, and the moment at which the attack was launched. This length of time might be reduced, in future, by a series of gradual and almost imperceptible changes in training and logistic procedures which could bring the Soviet air establishment to a ready status without such hasty or massive movements as would be likely to alarm inspection agents. Moreover, it would be possible to employ ostensibly nonmilitary aircraft as delivery vehicles. Thus, the capability of the USSR to launch a sudden attack might be steadily improved, and the ability of inspectors to detect an impending attack correspondingly diminished. The length of time between detectable preparation and launching might also be reduced by developments in weapons technology and aircraft design. Such developments might substantially reduce the numbers of aircraft required for a feasible surprise attack on the US, and thus increase the difficulty of identifying preparations for such an attack. Moreover, such improvements might permit the circumvention of logistic and advance base limitations, and enable the USSR to launch sudden attacks from interior bases. We must emphasize, therefore, that our estimate in paragraph 18 might be invalidated by major improvements in the character, quality, or training of the Soviet air establishment as we presently estimate it.

20. *Guided Missiles.* The limited experience available on the technology of storage and prefiring preparation of long-range guided missiles permits only a very tentative estimate of the ability of an inspection system to deal with these weapons. We believe that long-range guided missiles produced prior to inspection probably could be concealed, but that the activities necessary to prepare them for use probably could be detected by a comprehensive and well-directed inspection system. The undetected production of long-range guided missiles, particularly the ICBM, after the institution of inspection, would probably be impossible because of the extreme complexity and huge size of the undertakings required for such projects. On the other hand, development problems inherent in the ICBM could probably be solved under the guise of experimentation in outer space exploration. It is conceivable that a few such missiles could also be produced and made ready for use under this cover. Shorter-range guided missiles, suitable for launching from aircraft, surface ships, or submarines might be available for use against the US. Preparations for attack by such missiles would probably be no more and no less detectable than preparations for attack by the vehicle carrying the missile.

21. *Ships and Submarines.* Surface ships and submarines could be employed to deliver

nuclear attacks by mine or torpedo; merchant vessels could carry concealed nuclear weapons for detonation in US ports. It would not be necessary to modify the design of ships for these purposes, and inspecting agents could therefore learn of preparations for such forms of attack only by detecting the loading of nuclear weapons aboard ship. We believe that such loading could be accomplished without detection. While the production of submarines designed to carry guided missiles internally would almost certainly be detected by inspectors, it is probable that a small number of submarines could be clandestinely adapted for the firing of guided missiles carried externally.

III. OTHER POSSIBILITIES FOR SOVIET EVASION

22. In the foregoing section we have discussed Soviet opportunities for evasion arising mainly from the technical characteristics of nuclear production and weapons delivery methods. In addition, the Soviet leaders could seek to evade the limitations of an inspection system through resort to legal subterfuge, administrative obstructionism, and other forms of deception. In the absence of detailed information about the proposed arms limitations and inspection provisions it is impossible to foresee all the stratagems the Soviet leaders might be able to employ. Past experience indicates, however, that they are capable of great ingenuity in escaping the spirit and letter of agreements they have ostensibly accepted.

23. In Korea and Indochina, while accepting the principle of international inspection, the Communists have in practice frustrated its effective application, at times by openly flouting agreed obligations, at other times by rigidly insisting upon minutiae of legality. Administrative obstructionism has often been employed by the Communists as a convenient device for nullifying rights and privileges which could not otherwise gracefully be withdrawn. The myriad petty annoyances which the Soviet leaders have in the past employed to obstruct travel in the USSR suggest some of the difficulties that could be thrown in the way of inspection agents.

24. There are many ways in which the USSR might evade arms limitations. For example, the USSR might, while ostensibly reducing its military personnel strength, modify training procedures and logistic administration in such a way as to nullify in large measure the effect of such a reduction. The reduction of units to cadre strength and the civilianizing of support functions could be a major means of achieving this deception. Included in the activities that could readily be accomplished by civilian personnel would be the operation of depots, hospitals, motor and rail transport, the maintenance of equipment, and engineer, signal, airfield and naval construction. In addition, training activities could be transferred in part to semimilitary organizations such as DOSAAF.

25. Another possible avenue of evasion for the USSR might be the utilization of the facilities of countries not subject to inspection. It might be possible for the USSR to conduct research secretly on a weapons system up to the point of prototype construction, and then utilize foreign facilities and personnel for later stages of testing and development. The extensive facilities and abundance of highly skilled scientific and technical manpower required for such an undertaking would make the problem of secrecy difficult in any of the European satellites. The USSR might, however, move undetected the necessary facilities and personnel into the interior of Communist China or covertly transfer there a small-scale nuclear capability, comprising stockpile, delivery means, and personnel. The former would be costly and time-consuming, the latter could be accomplished with much less difficulty.