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MEMORANDUM

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May 2, 1961

Schelling Panel Report

TO : Mr. McCloy

FROM : Consultative Group on War by Accident, Miscalculation, or Surprise Attack

SUBJECT: Summary and Recommendations

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1. Surprise attack, accidental war, and war by miscalculation are closely related concepts; for the most part, we have treated them together. Together they comprise the problem of general war. They arise in the premium that presently attaches to haste, initiative, quick response, and preemption, at the outset of general war. There is a powerful common interest between the USA and the USSR in measures to eliminate or reduce this premium.

2. We are impressed with steps in that direction the United States is now taking unilaterally, as described in the President's recent defense-budget message. Some of these measures are the very substance of arms control; it is most important to integrate our military and our arms control policies. This integration requires recognizing that budget messages, press releases, testimony, and Presidential speeches, are all parts of the arms control negotiating process.

3. We use a broad definition of "disarmament negotiations." Many measures in our report do not lend themselves to formal negotiations, and perhaps should not even be called "disarmament." Private consultations, through diplomatic and other channels, are as much a part of our arms-control negotiations as the more formal negotiations; for the measures that relate to our Panel, they may be more important.

4. We are reporting on fifteen specific measures or areas of consultation on which we have affirmative recommendations - subject in some cases to urgent further study of points that the Panel could not settle.

1. Joint read-out of Midas.

2. European air-warning system.

3. European ground-force inspection.

Pages 64-161

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4. Prior notification of launch activity.
5. Prior notification of aircraft movement.
6. Exchange of information on communications.
7. Consultation on strategic indicators.
8. Limits on submarine deployment.
9. European MUHM's.
10. Nuclear weapons for European ground forces.
11. Purple telephone.
12. Emergency observation teams.
13. Military attachés.
14. Information-exchange center.

Most of these measures are aimed at damping military crises and the need for hasty military response. Some of them, like the launch-notification procedures, lend themselves to formal negotiations, and have been worked into the draft negotiating document. Others, like the phone link, should probably be kept out of disarmament negotiations. Some, like the restraint on deployment of submarines, cannot yet be made as a firm recommendation because particular questions could not be resolved by the Panel with the information and evaluations available. We have identified the particular questions that need to be resolved before a decision can be reached.

5. We should like to have done a more thorough analysis of comprehensive arms control in relation to the danger of general war. Such an analysis is feasible; it could provide essential guidelines for the development of such plans. We recommend an analysis - perhaps with a target date of 1970 - of what military postures would be most consistent with world security assuming successful negotiation and a favorable political climate, allowing drastic changes to be considered. As background there needs to be also an analysis of the strategic environment in the late 1960's if no formal, negotiated disarmament is forthcoming, to assess how stable it will be and how far unilateral measures on both sides may have reduced the danger of general war.

6. Many measures in our report relate to military crises. The capabilities of U.S. strategic forces for meeting such crises, especially prolonged crises, need to be examined with respect to the flexibility and freedom they would allow the President in time of crisis, and with respect to their adaptability to unforeseen contingencies. We understand such examination is under way in the Defense Department. We recommend, in this connection, that disarmament planning explicitely recognize that serious disarmament negotiations may well arise during a military crisis or its aftermath, at a time when both motives and dangers are drastically changed and time is not available for the leisurely development of negotiating positions.

7. Most of the actions recommended in our report require persistent follow-up of the kind that they would not automatically receive in the course of preparing for formal disarmament negotiations. As mentioned above, many of them cannot appropriately be included in the draft negotiating document. We recommend therefore that:

a - In the process of developing United States disarmament policy in anticipation of disarmament negotiations, there be added to the negotiating document an annex containing those recommended actions that cannot effectively be included in the negotiating document. It is as important to get policy decisions on these actions, we think, as it is to get decisions on those measures that we have been able to fit into the negotiating document.

b - Something like the present Panel be retained, or other immediate staffing arrangements be made, to pursue in close collaboration with the Department of Defense and the intelligence community the general ideas and the specific measures presented in our report. Specifically, we believe the annex to the negotiating document (mentioned in the preceding paragraph) needs to be prepared; particular studies that we have identified need to be set going urgently; and detailed work needs to be done on the contents and procedures for the more private consultations and negotiations that we have recommended be kept outside formal disarmament negotiations.

8. The Panel is ready to continue its participation if that would be helpful.

Report of the Consultative Group on War by Accident, Miscalculation, or Surprise Attack.

May 2, 1961

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CONTENTS

PART I INTRODUCTION

The problems of surprise attack, war by miscalculation, and accidental war, virtually comprise the problem of general war. With modern weapons, great advantages accrue to speed, initiative, and surprise in the launching of general war. This is not an inherent characteristic of warfare, but of today's military technology and postures. (Hopefully, it will be less true later in the 60's.) It is this that makes irrational, inadvertent, mistaken, or unauthorized initiation of a war a serious possibility.

If there were no premium on haste, initiative, surprise, and quick response, there would be comparatively little danger of war by accident, miscalculation, false alarm, or misinterpretation. There would be time to recalculate, investigate, and await confirmatory evidence.

If there were little chance of blunting retaliation by taking the initiative, premeditated general war would seem almost out of the question except as a truly insane act.

The danger of general war--premeditated war or pre-emptive war in a crisis--inheres largely in the character of modern weapons that puts a premium on speed, initiative, and surprise.

This is why the problem of surprise attack and of war by miscalculation, accident, or mischief, are closely related. It is the importance of striking first, or of being a close second if not first, that creates the incentive. The fact that each side is aware that the other side is equally aware of the value of quick response, only compounds the danger in a crisis when both expect that general war may be imminent.

It is for this reason that it could be in the joint interest of the USA and the USSR to deflate the advantage of speed, initiative, and surprise. It is of particular interest to the US that the advantage of surprise and pre-emption be reduced, even if similarly reduced on both sides, since it is mainly the danger of Soviet decision to attack that would induce us to launch an attack, and only a belief in Soviet attack that would induce us to respond mistakenly to any evidence of imminent war. Some reduction of our pre-emptive capability could be a reasonable price to pay for measures that would similarly degrade Soviet capabilities for surprise and Soviet incentives toward hasty response.

But it is easier to state the principle than to find concrete measures to give it effect. Nevertheless, this is a crucial area for arms control, probably the crucial area.

Stable

Stable deterrence is a most important objective not only of specific limited measures but also of any comprehensive program of disarmament. A main criterion for any comprehensive disarmament scheme should be reduction of the danger of general war through the creation of military postures less susceptible to surprise attack, less dependent on speed of response, and more subject to reliable, centralized, deliberate control.

In principle there may be some limit to how far the danger of general war could be reduced without a disproportionate invitation to limited aggression. We see little chance of such rapid progress as to pass this limit in the next several years. In fact, to reduce the danger of general war may well release us from inhibitions on our response to more limited threats.

The most important steps to be taken are probably steps that must be taken by unilateral decision and in accordance with unilateral plans on both sides, with--at most--some tacit understanding on the need for reciprocity. The President's recent defense budget message is a clear statement of steps we are already taking--steps that, for the most part, we wish the Soviets would reciprocate, steps that the Soviets should appreciate if they wish to see the danger of general war reduced. These steps, such as increasing the security of our

 strategic

strategic forces, improving and centralizing command and control, developing better military communications and coordination, deliberately reducing the need to respond quickly, reducing our reliance on the use of nuclear weapons in all contingencies, inhibiting the decentralization of nuclear weapons to other countries (including allies),and developing a doctrine of warfare that would not automatically convert a potentially limitable war into a contest of extermination, can correctly be viewed as unilateral steps in precisely the direction that arms control should take.

We think it important to make clear to the public, and to make it as clear as we can to the Soviets, that this is what we are doing. We think it should be emphasized that, in a real and practical sense, this <u>is</u> arms control. At least, these are unilateral steps which, if reciprocated, would constitute a program of arms control. We do not mean that this is the whole of arms control, but that reciprocated unilateral actions can be as important as anything overtly negotiated. We also emphasize that the aims of arms control need to be publicly clarified, and better communicated to the Soviets; and it seems to us that identifying the objectives of arms control with the objectives that the President indicated were guiding his military budget, should be an important part of our arms-control diplomacy and information program.

The prevention of surprise attack has often been confined to measures of observation and inspection. Such measures have been thought of as providing better warning and, by promising better warning, reducing the likelihood of successful surprise, thus deterring attack itself. But the same could be achieved by restrictions on military forces that limit their ability for achieving surprise. The same could be true of measures to reduce the vulnerability of strategic forces, and their command and control, to sudden attack. We see no difference in principle between measures to improve warning, measures to reduce capabilities for achieving surprise, measures to reduce vulnerability to surprise, measures for clearing up misunderstandings, and measures to improve deliberate control over strategic forces. There may be important political and diplomatic reasons for distinguishing these measures, as during the surprise-attack conference of 1958; but for our own clarity we should recognize that all of these measures selectively improve capabilities that we prefer to see on both sides, and selectively degrade those that we prefer to see absent on both sides. At least, that is what they do if they succeed--whether they are taken unilaterally by mutual consent, or by explicit agreement.

The contingencies in which successful arms control along these lines might make a difference will be political and military crises, and should be judged in that context. The usefulness of the measures should be judged in terms of the events, provocations, motives, status of military forces, and negotiating situations during a limited war, during a Berlin crisis, during an invasion threat, or during the crescendo of a political crisis. They should be designed to work, not to go into abeyance, in extreme circumstances. Their usefulness should be judged by what they contribute to tranquilizing crises. The significance of false alarms, misinterpretations, sudden actions, or even mischief and accidents, should be judged in the context of crises and emergencies, not simply in the cooler atmosphere of peacetime.

The Accidental-War Problem

Accidents and false alarms can happen, sudden actions can be misinterpreted, mischief can be done. The important thing is to keep them from leading to war. This is a matter of the response to accidents, mischiefs, and false alarm.

War by mistake--whatever the nature of the mistake--a mechanical accident, false radar alarm, communication failure, misinterpretation of enemy action, misunderstanding by someone in the chain of command, or the mischief of some third party--is war initiated in haste on ambiguous evidence.

If there

If there were no danger in waiting, and no advantage in speed, the accident could be investigated, the false alarm cleared up, the mischief identified, communications re-established; and even deliberate unauthorized actions would be unlikely to start a chain reaction culminating in war. Better warning, better command and control, more secure forces that can survive if necessary the first moments of attack, and a better basis for belief that the enemy is in fact deterred, are the principal means of reducing the danger. So are procedures and facilities for clearing up misunderstanding and ambiguous occurrences before they set off a chain of provocative responses. Measures that tranquilize either side's response can, if known and appreciated, reduce the urgency with which the other has to respond.

The need for haste affects the military response in two ways. It increases the urgency of central decisions; and it requires decentralization of control over weapons in the interest of capability for quick response. Reducing the urgency of response can help both ways. It can permit more deliberate response by central authorities; it can permit the design of weapons and communications with more inhibitors to local action.

A primary function of arms control is thus to alter the military environment in such a way that hasty response does not convert an accident--which may be deplorable, but is still a local event--into "accidental war." In this sense the "accidental war" problem is not different from that of surprise attack, pre-emptive or premeditated. The measures described in the defense-budget message reduce the danger of war by mistake, our mistake or the Soviet's. Secure, well-controlled retaliatory forces, and a dulling of the pre-emptive capability on both sides, is as much a deterrent of accidental war as it is of general war by any other motivation.

We say this to contradict the wide-spread notion that accidental war is solely a matter of accidents, and that anything that reduces accidents reduces the likelihood of war. Arms limitations that, in the ostensible interest of minimizing accidents, degrade the security of our forces or require them, for their own safety, to act more quickly in an emergency, cannot be credited with reducing the danger of war, accidental or otherwise.

An example may be proposed limitations on military use of communication satellites. The possibility of war resulting from misinformation of any sort can be reduced by improved military

military communications. If communication satellites promise to improve military communications, and can help to prevent wrong conclusions being drawn from communication failures, they serve a positive function in the avoidance of war.

One final point with respect to the accidental war problem. This problem has usually been thought of in relation to strategic forces in the US and USSR. In fact, the problem may be at least as acute in Western Europe. The deployment of substantial numbers of nuclear weapons in this area under conditions which are probably less secure than those in the United States, the absence of fully secure command and communications facilities in this area, the vulnerability of nuclear-capable forces in this area to surprise attack , and the fact that forces of several nations have more or less ready access to nuclear weapons in the area--all these factors make for some risk that misinterpretation or miscalculation could lead to a mutually unintended use of nuclear weapons. Measures to deal with this risk will be considered later in the paper.

The Nth Country Problem

The Panel has not given direct attention to whether and how the test ban, production cut-off, ban on nuclear transfer, or other measures contained in the draft document, inhibit the capabilities of Nth countries for mischief, accident, or provocation. But a large part of the Nth country problem arises from the strategic instability between the USA and the USSR. The problem is not solely one of keeping other countries from getting these weapons. It is equally a problem of stabilizing the strategic environment so that accident, mischief, local wars, etc. involving nuclear and other weapons obtained by additional countries, cannot ignite general war.

The Nth country problem has been likened to a situation in which there is a powder keg in our midst and more and more countries are getting matches. Our opinion is that it is important not only to stop the distribution of matches but to remove, defuse, shield or otherwise protect the powder keg against ignition.

Unilateral Measures.

We mentioned that the United States is already taking steps that are consistent with--in fact are--arms control. This is insufficiently appreciated in the world at large, among the American public, and within our government. The fact that these military measures are so much in our own

own interest that we adopt them unilaterally does not detract from their being the very substance of arms control.

We say this to make two points. First, we think the United States is already adopting a good deal of arms control and not getting credit for it. Second, we think that these actions, if properly explained and emphasized in speeches, testimony, press releases, and so forth, not only can get us credit for arms control but can enormously help to define the content of arms control and the directions in which arms control should lead us.

These unilateral measures also help to put "arms negotiations" in perspective. To the extent that we can induce the Soviets to reciprocate measures of this sort we have arms control, whether or not it is embodied in a written agreement, whether or not we negotiate it in a disarmament conference. Formal disarmament negotiations are part of the process--but only part of the process--of inducing the Soviets to join us in mutual restraint or in policies and practices that are in the mutual interest.

PART II NEGOTIATING PHILOSOPHY

This matter of how to negotiate arms control has been continually on our minds in our discussion of particular measures. The reason is that many of the measures of interest to this particular panel do not lend themselves to formal negotiation, or might be spoiled by inclusion in a negotiating document presented to other nations.

This is particularly true of steps we take, or procedures we may set up with the Russians, to reduce the danger of mis-interpretation. In fact, it may jeopardize some of these measures even to call them "disarmament" or "arms-control" and to insist that they be treated as such. Many of them, furthermore, are fairly modest, at least in their initial stages, and hardly seem appropriate to being made as formal proposals. Some of them seem promising only if handled in an informal way, without too much commitment or too much effort to negotiate details, and without a formal effort to accommodate them to highly charged political relationships.

We have no great optimism about the Soviets' willingness to engage in discussions in a low key, seriously, cooperatively, and in relative privacy. Whatever chance there is, however, can be exploited only if the United States is willing to take these proposals seriously, and not make them part of a debating contest.

For a variety of reasons, therefore, we suggest that most of these measures

measures be discussed with the Soviets outside the context of "disarmament" negotiations. A number of these measures—such as the "purple telephone", the exchange of emergency observation teams, and the expansion of military attaches—might be proposed to the Soviets through normal diplomatic channels. Others—such as consultation on strategic indicators—might be raised through military channels. A few—such as the European air-warning system—might be part of our formal disarmament negotiating position.

The need to begin a serious private dialogue with the Soviets on these measures is urgent. The danger to which they are addressed will be at its greatest during the next few years, when both sides' strategic forces will be more vulnerable to attack than later.

We strongly urge that a private diplomatic approach be made soon to the Soviets, in a way which makes clear the importance we attach to the subject (e.g., a Presidential message to Khrushchev delivered by Ambassador Thompson), and suggesting quiet and continuing talks on means of reducing the risk of war by miscalculation. These talks might take place in Moscow, a few appropriate U.S. civilian and military experts being attached to the Embassy for this purrpose. Or conceivably some neutral "cover" could be found, e.g., our missions to the IAEA in Vienna or to the UN Military Committee in New York.

The

The important thing is quickly to make clear to the Soviets our conception of the problem and our seriousness, and our willingness to treat it outside the propaganda glare of "disarmament" negotiations—thus, incidentally, making it easier for the Soviets to agree to needed measures without compromising their basic posture that they cannot agree to any "disarmament" steps that do not involve reductions of forces.

We have not, therefore, thought it appropriate to incorporate some of our proposals in the draft negotiating document. If the intended document is to be shown to allied nations first and Russians next, and to be a formal proposal in disarmament negotiations, it would misrepresent our intentions to formulate negotiating language on some of these proposals. We have, however, attempted to insert language that might provide the auspices under which rather more private consultations might take place.

Even assuming that negotiations with the Soviets might take an unprecedentedly successful and serious course, and be kept out of the main stream of formal disarmament negotiations, some of the things that we shall propose represent activities that will have to be started modestly, played by ear, and allowed to evolve with experience. For that reason we have mainly tired to identify useful initial activiiies to get started, rather than full-blown institutional arrangements.

PART III SPECIFIC MEASURES

This section discusses specific measures. On some we make affirmative recommendations; these ideas look good to us, subject in several cases to some further examination. On some we make negative recommendations; these look as though they can be dropped unless there are political or public-relations reasons for them. On some others we have been able to reach no decision, but urge immediate examination. Fourth are those measures to which we have just not been able to give enough attention to provide any advice.

A. Affirmative Recommendations

1. Joint read-out of Midas.
2. European air-warning system.
3. European inspection against ground attack.
4. Prior notification of launch activity.
5. Prior notification of aircraft movement.
6. Exchange of information on communications.
7. Consultation on strategic indicators.
8. Limits on submarine deployment.
9. European MRBM's.
10. Nuclear weapons for European ground forces.
11. Purple telephone.
12. Emergency observation teams.
13. Military attachés.
14. Information-exchange center.
15. Satellite non-aggression pact.

1. Joint Read-out of Midas

We have considered a variety of ways in which the USA and the USSR might exchange facilities for warning of missile or bomber attack—the placement of ground observers at or near each other's air bases and missiles sites; exchange of territory for the placement of early-warning radar; making available to each other the data obtained from existing early-warning radar net-works; ground stations in the northerly reaches of the North American Continent and the Soviet Union with infra-red or accoustical censors.

For various reasons we have rejected most of these. With regard to ballistic-missile warning, the Midas system of satellite-borne infra-red detectors is likely to be superior to any system of ground stations, and probably adequate.. For radar, the delay in installing any substantial network would bring us into the period when bomber attack is of less importance; the expense of new early-warning radar systems would be disproportionate to the results, considering the acute difficulty of building a system that did not have holes well known to the attacker on whose soil it was placed. It is doubtful whether existing radar systems could be converted to joint use in a way that guaranteed the inability of the host country to deceive the other side in the event of attack.

We do

We do, however, consider it feasible to make the Midas system available to both sides. We prefer to consider this a "joint read-out system" for Midas, rather than a "joint Midas system." We want to avoid making Midas itself subject to negotiation. We also want to avoid a position with respect to Midas that may set a precedent for other satellite reconnaisance systems' requiring Soviet agreement. What we have in mind is to proceed with our own Midas system and to propose making the information obtained from the system available to the Soviets or to other nations, or even to some international organization, keeping in mind the necessity for quick reliable receipt of such information by the nations most concerned.

This might mean offering to construct Midas in such a way that Soviet read-out stations could obtain precisely the same information as we obtain. For this purpose it would probably be necessary to expose the design and manufacture of the Midas system to Soviet scrutiny, to provide assurance that the device was in fact operating as it was declared to operate. This would mean two things. First, that the Midas system not have been so programmed, or tampered with, that it will fail to record our attack. Second, that no other controversial reconnaisance system have been incorporated in Midas itself.

This

This would apparently mean that Midas satellites would be subject to physical inspection in great detail. Conceivably it might mean that the actual hardware should be manufactured by some third party, or with some kind of Soviet participation.

To the panel this seems feasible, but we have not been able to examine in detail the operation of the Midas system, the design of the hardward, and any intelligence programs that might be built around Midas other than the quick recording of a ballistic missile plumes. The Russians would, by this arrangement, acquire a good idea of the capabilities and deficiencies of our Midas system--and we of theirs if they do the same. We anticipate that a joint read-out of Midas will be feasible, but further examination is necessary.

We have particularly in mind the importance of handling the subject in such a way as not to subject the Midas system, or any other satellite-reconnaisance system, to an implicit requirement for negotiated international approval.

2. European

2. European Early-Warning Systems

We considered the possibility of "overlapping radar" or other exchange of aircraft-warning facilities in central Europe. We noted that there are plans—notably the "Norstad Plan"—for exchanging rights to install radar a few hundred miles across the iron curtain.

Without examining in detail how much warning this might provide, it appeared that it might make the difference between, say 10 or 15 minutes warning and 45 or 60 minutes warning, for sorties against each other's European air and missile bases. Such additional warning could make a real difference to the ability to respond to imminent attack, and thus increase the deterrance to attack. It might make a real difference in our ability to adopt safeguards against the mistaken or unauthorized initiation of nuclear-weapon activity. In other words, that additional warning could be of real value.

The main limitation is that, by the time any substantial radar coverage could be negotiated and constructed, the Soviets might long since have targeted NATO air and missile bases with short and medium range missiles, so that warning against aircraft would be of only marginal significance. We did note, however, that there is presently a possibility of non-nuclear attack on these NATO air and missile bases, and that non-nuclear attack on them would have to be with aircraft rather than missiles. Denying a no-warning air strike at the NATO bases would deny the Soviets the possibility of conducting such attack beneath the

nuclear threshold. It may, therefore, be valuable in spite of the fact that he retains the option to fire missiles.

Another drawback is that thorough low-level coverage would be extremely difficult to obtain, particularly since radar in enemy territory could not conceal its capabilities and deficiencies from the enemy. But a system of ground observers, using visual and accoustical techniques, might be an economical way of supplementing the radar coverage.

On balance, and without having looked into the matter in technical detail, we can only conclude that there is a possibility here.

A main consideration is whether we attach value, for its own sake, to an arms-control arrangement in central Europe, and welcome the opportunity to negotiate and spend money on such a system, or consider it a nuisance and a diversion of economic and diplomatic resources. If we are looking for a tangible scheme, here is one that may have merit; if we are not interested in such a scheme for its own sake, or if we attach negative value to the attempts to negotiate it, this scheme is of marginal significance. (In a limited way such overlapping radar coverage presently exists in the neighborhood of Berlin; examination of that system might shed additional light on the value and feasibility of a scheme of this sort.)

3. ~~Prior~~

3. European Inspection Against Ground Attack.

Inspection against surprise ground attack in Europe would be helpful. The fact that the Soviets may now be able to launch quickly their readily available forces in Eastern Germany, possibly with reinforcements, against selected points in the allied line in Western Germany is to our disadvantage. Like the possibility of surprise air attack already referred to, this makes it more difficult for the NATO forces to institute and maintain safeguards against mistaken or unauthorized use of nuclear weapons.

General Norstad has proposed specific measures. We have not examined these in detail but believe that the purpose is sound and that specific proposals should be made to the Soviets, as soon as they can be worked out--if they can be sold to our allies.

Given the political difficulties involved in discussion of the Norstad proposals with the Germans, we have no recommendation to advance except that efforts should continue to convince our allies that local safeguards against surprise ground attack would serve their interests. Possibly if the safeguards were instituted at the same time as other measures, they would be less likely to give offense to our allies than otherwise.

4. Prior

4. Prior Notification of Missile and Satellite Launches

We have considered a procedure for advance notice of missile and satellite launching. Twenty-four hours or more in advance, notice would be filed of the time (to within, say, two hours) of a launching, with location and projected track. No verification would be required, as far as we can see.

By 1965 and 1970, the average number of launches might reach several per day, with ten or twenty occuring some days. It could help some, in the avoidance of false alarm, to have advance notice of such firings (in connection with Midas or other ballistic-missile warning systems.) There are other advantages in regularizing the exchange of information of this sort; and advance notice would facilitate keeping inventory of objects in space.

The scheme may give away information we prefer to keep secret—reconnaissance satellite launchings in particular. The only launches we could keep secret in any event would be from mobile platforms or aircraft—in the immediate future, from submarines. In the longer run, a Soviet Midas or equivalent will probably deny us munk possibility of keeping any launch activity secret; but for the time being there could be some loss of secrecy.

This question whether loss of privacy on firings at sea would be a critical disadvantage should be examined in detail at once. If it is not, the notification scheme is a good one. (We might consider unilaterally initiating such a scheme, inviting the Soviets to reciprocate. We are less obliged to argue about the details if we initiate it voluntarily.)

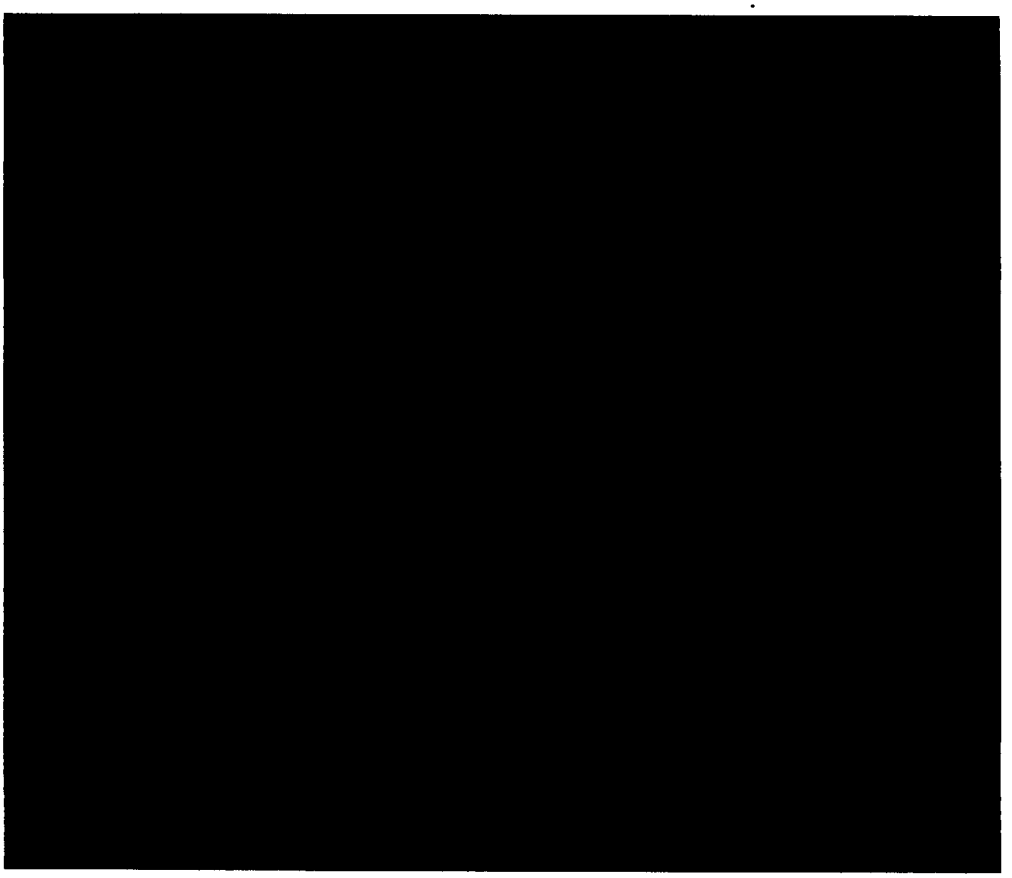
5. Prior Notification of Aircraft Movements

As a modest step to minimize misinterpretations, and to improve the reliability of warning against bomber attack, we have considered a procedure under which we and the Soviets (and other important participating nations) might file advance notice for certain kinds of air traffic. (This is already done under ICAO for certain traffic.) The idea is that for certain flights--perhaps flights above 60 or 65 degrees north latitude--advance notice of flight patterns would be provided. In these regions neither side would have anything like assured radar or other coverage to check whether flight plans were being uniformly adhered to. On the other hand, each side has sufficiently good intelligence to determine whether, by and large if not uniformly, the other side is giving notice and adhering to it.

The advantages of the procedure are these. First, they may reduce the danger that unexpected, unusual air traffic will be misinterpreted or otherwise provoke an exaggerated response. (In other words, it may help to tranquilize some strategic indicators by providing advance warning of what might otherwise be unexpected behavior.) Second, it should improve each side's early warning by reducing the traffic

traffic not accounted for. Third, it may help to establish precedent and routine for the interchange of strategic information, symbolizing the joint interest in reducing misinterpretation, and providing regular procedures through which consultation can occur.

While we should not exaggerate the strategic importance of such system; it has value and is feasible.



There is

There is also the question of what happens when, in the face of some emergency, SAC goes on alert and aircraft are flushed. This is a question that at some stage has to be considered, at least internally, but we do not see that a specified answer to this question is required prior to going ahead with the procedure.

[redacted]

6. Exchange

6. Exchange of Communications Information

Among the occurences that can cause mischief, but could be cleared up with improved exchange of information between us and the Soviets, communications disturbances are an example. This is a matter on which better facilities and procedures for continual consultation might help. We have no specific proposal to make, but signal this topic as one that adds to our interest in the development of better facilities for Soviet-American military consultation. We shall refer to such procedures for consultation, and are simply noting here one matter that might be dealt with.

7. Consultation

7. Consultation on Strategic Indicators

In determining from moment to moment what Soviet Military intentions are, whether war is imminent, and what our state of alert should be, a number of strategic indicators are kept under observation. [redacted]

[redacted] These vary in importance, and they vary in the urgency with which we must interpret and respond.

It is evidently in the Soviet interest to keep us guessing and to thwart our intelligence, on some matters. It is also evidently in the Soviet interest to avoid any mistaken response on our part that might, by itself or through a chain of events, raise the danger of war by misunderstanding. The Soviets presumably watch activities on this side for tactical and strategic warning; it is the Panel's understanding that our military services recognize the value of avoiding, particularly in time of crisis, military movements and other activities that might provoke an exaggerated Soviet response.

This is a complex and sensitive area, but one in which a certain amount of Soviet-American collaboration or consultation could help. In fact, it already exists, in an implicit and informal way, in that we already try to yield them advance notice of some of our activities that might alarm them.

It is our opinion that this sensitive and complex area of strategic and tactical intelligence is closely related to the danger of war by accident or miscalculation, and one in which better consultation and exchange of information between ourselves and the Soviets might be valuable.

How to go about it is not easy to say. It would not be appropriate to negotiate openly and formally for any exchange of information in this area, except for particular parts of the subject (like the advance notice of launches and aircraft movements) that lend themselves to formal procedures.

One way of exchanging stabilizing information in this area is simply through voluntary unilateral leaks and announcements. As mentioned, this already occurs on both sides. We propose that efforts be made to establish better contacts, or consulting arrangements, for the more deliberate exchange of information, and for the better identification by each side of the kinds of activities that are most susceptible of misinterpretation.

It may be possible to discover, on both sides, modes of behavior that are susceptible of exaggerated information, and that might be voluntarily avoided. It may be possible to discover areas in which a more conscious policy of advance notice or some means of telegraphing intentions would facilitate keeping particular movements and activities

activities in perspective. It is conceivable that explanations of particular movements and activities might help to allay suspicions. In some instances, regular procedures for advance notice might be worked out either formally or informally, bilaterally or multilaterally. Some of these areas of consultation and advance notice might thus gradually evolve into recognized fields of arms control, others might remain at the level of informal military consultation.

We doubt whether it is appropriate to identify this general area of consultation in a negotiated document. But we think this potential interchange needs to be kept in mind as a possible purpose behind any consultative procedures or exchange of personnel that may work out with the Soviets in other connections; and this is an area in which to search for particular ad hoc schemes for reciprocal information and notice.

8. Limitations

8. Limitations on Submarine Deployment

We recommend an immediate review of the Soviet submarine threat against vulnerable SAC bases and other urgent surprise attack targets in this country, focussed on the present and the few years immediately ahead. The Panel has been unable to resolve conflicting evidence; a review of intelligence estimates and vulnerabilities is required. If such a review confirms the belief that Soviet subs are an appreciable supplement to the Soviet capability for sudden pre-emptive or surprise attack, this will be strong reason for efforts to induce Soviet reciprocation of voluntary restraints on U.S. Submarine deployment, pursuant to the following discussion.

We have looked at several possible limitations on weapons or their deployment, and one that we find promising is voluntary restrictions of a reciprocal nature on the cruising of submarines. We have in mind an understanding by which we keep our Polaris submarines outside of firing range as long as Soviet submarines stay away from our coasts. Where the lines should be drawn, and how tight the restrictions on crossing the line should be, are details that we have not had time to go into. Nor have we investigated in detail how much interference with naval operations would be entailed by this kind of limitation, other than the interference that is intended, namely the delay in retaliation.

The argument

The argument in favor of such a scheme is that it might, if it were reasonably adhered to, remove a significant risk to SAC by keeping submarines out of the zones in which they could participate (in a supplementary way) in a Soviet attack on U.S. bases. We have also noted that the deterrent mission of the Polaris submarine would not be too seriously degraded by its being out of striking range, since it is a weapon system whose capacity for eventual retaliation would not be much degraded by the interposition of a delay of several hours or a day or more.

In fact, it appears to us likely that in the event of general war the United States might well wish to preserve some strategic weapons, rather than expend them instantly; if so, the Polaris submarine appears to be the weapon system most suitable for that kind of "strategic reserve." This is probably the strategic weapon that can best tolerate delay.

We think, too, that such a restraint helps to identify the Polaris submarine in a dramatic way as a second-strike weapon, as a weapon that can react slowly without danger of its own early destruction, and may have positive value in persuading the world at large, and the Soviets in particular, of our seriousness in maintaining a deterrent posture rather than a menacing one, and in safeguarding against hasty action of any kind. The Polaris submarine exemplifies some of the qualities

qualities that we should wish both sides to seek in their development of strategic forces. To identify these submarines as weapons that need not strike quickly may therefore serve a positive purpose, to help compensate somewhat for the restriction on its deployment.

But the main question is whether Soviet submarines are in fact a significant part of the threat to our SAC bases. If they are, we should be gaining something in the exchange. Certainly the Soviet submarines are, if anything, "first strike" forces; and we could take the position that for the Soviets to withdraw them well out of range would help to convert them into second strike weapons which, in our judgment, would enhance stability. We can also argue—correctly—that Soviet subs close up in any number create precisely the kind of false-alarm potential that it is in our joint interest to reduce.

We are impressed with the importance of keeping any such limitations in the nature of an informal voluntary reciprocal restraint, rather than a negotiated agreement, or formal commitment, or rigid rule. We think it would be much better, if limitations of this sort were adopted, to indicate that we would voluntarily keep Polaris submarines by and large in a kind of retaliatory standby status, rather than within early firing range, and would be the more inclined

inclined to do so if the Russians would adopt similar restraints. (We should contemplate not a tight rule but one that will be violated on a small scale.)

This should, in other words, be an understanding and not an agreement; it should be terminable at will without any commitments' being broken. And we should avoid negotiating or arguing in detail over precisely what the restrictions should be.

There would be no explicit procedure for verifying compliance with the understanding, and no certainty that compliance could be monitored. But, by and large, both sides could probably tell whether restrictions were generally being adhered to. And the Panel understands that if six or eight Soviet submarines entered the zone that begins, say, six hundred miles off our coasts, enough of them would have been detected to provide some tactical warning before they reached firing range. In other words, this is essentially a warning arrangement; submarines stay sufficiently out of range so that their approach to target would be detected in time to provide some kind of warning.

It is not absolutely necessary to make the criterion one of being "outside firing range." A limitation on proximity that kept each side's submarines similar distances away might be arrived at, notwithstanding the superior range of the Polaris missile. And as the longer-range Polaris came into operation we should not necessarily change the deployment zones correspondingly.

We recommend, therefore, that the seriousness of the Soviet submarine threat to SAC bases be examined in detail, at once, to see whether there is a genuine gain to the United States from a restraint of this sort. (The role of Polaris in our present strategic targeting must also be considered.) If it then appears that the Soviets do achieve a significant marginal capability from their submarines in the event of Soviet attack on SAC, a strong motive should exist for trying to induce Soviet reciprocation of a restraint on submarine deployments along these lines.

9. MRBM

9. MRBM Limitation in Europe

The President has approved an NSC directive regarding U.S. policy toward NATO that contemplates meeting MRBM requirements in Europe by a sea-borne rather than land-based missiles. In that event, it may be worth while to translate it into a tacit or explicit understanding regarding forces in central Europe. It would give the Soviets assurance against German possession of missiles capable of striking the USSR, and might be worth appreciable Soviet concessions in return. (It might possibly be related to any new agreed arrangements regarding Berlin access.) The political implications of an MRBM agreement could be a serious obstacle to Western agreement; to minimize this problem it may be desirable to have the agreement a tacit and temporary one.

The important thing is to convey to the Soviets that it might be appreciably to their interests to have no MRBMs on the ground inside national boundaries in Europe. We might wish to convey to them that we were in no position to negotiate formal agreements on the subject. But we might try to make it clear to them that the political obstacles to keeping such weapons off European soil could be reduced by certain Soviet restraints. These could include non-deployment of Soviet missiles in Eastern Europe, and possibly some quiescence of the Berlin situation, and the avoidance of troop concentrations in Eastern Europe. Informal consultation with the Soviets should be considered.

10. Nuclear

10. Nuclear Weapons for European Ground Forces

Physical distribution of nuclear weapons to NATO ground forces, and the custodial procedures for such weapons, could be a cause of Soviet concern over the possibility of unauthorized use. Particularly in a crisis, there would apparently be no guarantee that the national forces of some European country could not obtain physical possession of nuclear weapons and use them. And even without efforts to appropriate weapons by the national forces of other countries, it could well appear to the Soviets that in the urgency of military crisis, and especially in the event of communication failure, nuclear weapons might be utilized through misunderstanding or as a result of some failure of the procedures for authorizing their use.

This is simply an inference based on the apparent facts, as the Soviets would see them, regarding the disposition and control of nuclear weapons in Western Europe.

If this Soviet concern exists, it may be possible to translate steps the West now intends to take to improve the security and control of nuclear weapons in Europe into reciprocal arrangements that would give us certain Soviet concessions in return.

We could indicate to the Soviets the kinds of steps that we are proposing to take, e.g., more centralized and positive control over the possession and use of nuclear weapons in Europe and possibly avoiding deploying these weapons in the front line. At the same time, we could also indicate that how far we were able to carry these measures forward would depend, in some degree, on how far the Soviets went in removing the possible inhibitions on these measures.

One such inhibition is the possibility of quick use of nuclears by Soviet troops in the event of military engagement. The other inhibition is the possibility of a Soviet attack with conventional forces which rapidly overwhelms the NATO forces, if only locally, therefore requiring the quick use of nuclears to stop the advance. It is doubtful that the latter case need any longer be as seriously considered as in the past.

It appears to the Panel that there may be a genuine basis for some mutual accommodation between the Eastern and Western European forces. The Soviets may be more disposed to keep nuclear weapons out of Eastern Europe, as they have seemed

seemed to do thus far,* and to abstain from building up a preponderance of conventional forces in East Germany, if they understand that actions of this kind might make the West less willing to subject nuclear weapons to a variety of controls (including their redeployment rearward and measures to increase positive control over their use) which would make them less immediately available to ground troops. A more positive control over the use of nuclear weapons is probably best achieved by the device of installing a combination lock device on such weapons. The order from higher headquarters authorizing their use would then include the combination which makes it physically possible to use the weapon. In this way unauthorized use might be made more difficult.

We realize that there are potent political implications to any understanding about denial of nuclear weapons to NATO ground forces, and especially to the demarcation of the zones within which nuclear weapons will not be kept. We do not have in mind

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* Whether the basing of some Soviet missile systems in the Satellites, e.g., 700 N.M. MRBM's, will change their pattern of behavior we do not know. It may be that a few of nuclear weapons have been introduced with these systems.

have in mind the overt "denuclearization" of Western Germany or of any overt political delineation of nuclear-free zones. We rather have in mind an attempt to convey to the Soviet Union an appreciation of what we take to be a fact. This is that there are strong pressures for keeping nuclear weapons distributed well forward in NATO; that there are prudent reasons to prefer to keep them centralized rearward; that the pressures to keep them forward will be aggravated by any apparent preponderance of Soviet forces confronting NATO forces and/or the distribution of nuclear weapons to Soviet forces in Eastern Europe. Similarly, the urgency of having nuclear weapons forward would be reduced by a tranquilization of Berlin.

11. The Purple Telephone

We have looked at several ideas for establishing direct instant communication between heads of government of the USA and the USSR, and we have looked at the available arguments pro and con, and strongly recommend that an effort be made to put the idea into effect. We appreciate the possibilities of abuse, and we appreciate the possibilities of misunderstanding or resentment by certain other countries. The advantages outweigh the disadvantages.

The contingencies in which some direct communication between heads of Government could be valuable have been described and discussed before; we shall not repeat them. We do offer a few thoughts about how the arrangements may be made.

We think it advantageious to route the direct communication line through the command posts in both countries. This helps to establish that the direct communication line is mainly for military emergencies, not for political conversations. The effectiveness of the system in a military crisis will require coordination with the kinds of data that are available at the command posts. And, there needs to be sufficient formality to the system to preclude any possibility of efforts to bypass responsible governmental channels or to use the facility in an excessively informal way. Putting the channel through command posts in both countries helps to play down the"Kennedy-Khrushchev" personal aspect and to allay fears that some kind of intimate conversation will politically dispose of the world.

We cannot rule out Soviet efforts to abuse the system. But there are natural safeguards in the ordinary facts of bureaucratic life, aside from the safeguards in routing it through command posts. Except in acute emergency when time is terribly short, any communication received by the head of government,

government, or by his authorized representative, from the Soviet Union would tend to be responded to not by direct vocal reply but by consultation, perhaps with a written message read back over the system. Especially since communication will have to go through translation, the normal response will be to get the message in writing, consider it and draft a reply, and transmit it in writing back to the Soviets. It is hard to imagine that the temptation to go through formal procedures would be resisted except in a genuine crisis when time required quicker and more informal interchange.

The idea is a good one, and it should be urgently put into effect. We cannot, of course, control the procedures at the other end of the line. We can describe to the Soviets the arrangements we are prepared to make, propose the establishment of the direct link, and suggest that they take steps to assure appropriate contact at their end of the line. We could suggest the command-post idea, on grounds that this is for use in emergencies when appropriate military personnel may have to be connected into the conversation, and when mobility and adaptability will be a premium.

In the event the Soviets are uninterested, we might wish to fall back to a plan of establishing such a direct link between the President and the U.S. Ambassador in Moscow, suggesting that the Soviets keep in mind that this link exists

exists and make their own arrangements for quick contact with the Ambassador. This would be more of a unilateral arrangement, at least in appearance. We prefer not doing it between the President and the Ambassador, because we think the military command-post idea serves both needs and appearances better; but in the event the Soviets demur, an arrangement for continuous reliable communication between Washington and our Ambassador in Moscow might be a substitute.

We recommend that the matter be handled in as private and undramatic a fashion as possible, recognizing that it will draw attention and may have to be explained to our allies. Even though some embarrassments can be foreseen, we strongly recommend proceeding with it. Certainly if there is anything to the notion that the Soviets may be seriously interested in arms control of any sort, this is a concept that they should appreciate, arrange with us, and keep intact by abstaining from abuse. If some kind of abuse occurs, we can take steps to disengage the connection or interpose enough intermediate connections to damp down its sensitivity.

12. Special Observer Teams

We favor the idea of inviting the Soviets to keep on hand in Washington specialized personnel that could at our invitation, in an emergency, see with their own eyes what we wish them to see and communicate their observations to the Soviet

Soviet Government. We have in mind a variety of contingencies, which cannot be specified in advance, when it may be in our interest in a hurry to submit to Soviet observation in order to make possible certain agreements that might otherwise not be capable of being monitored, or in order to reassure the Soviets in a grave crisis or other circumstances when lack of authentic information could be disquiting and potentially induce pre-emptive decisions. We should like to see similar arrangements established in the Soviet Union. This idea has been described before and does not need to be discussed in detail here. We do wish to support the idea strongly, and to offer a few observations on how the notion might be advanced.

First, we suggest that perhaps half a dozen technically qualified Soviet officials be made available at the Soviet Embassy in Washington, and that we and they concert in arranging mobility through readily available transportaion equipment, and quick communication from these officials to the Soviet Government from wherever these officials may be. They should be exercising their functions by frequent trips to American installations insofar as this can be done without compromising security. Efforts should be made to maintain their interest in their potential functions, and to emphasize the need for their

their being on hand, mobile, reasonably expert at recognizing what they see, and capable of communicating home. Comparable arrangements with American personnel should be made in Moscow.

It may be wise to identify the personnel with some continuing official responsibilities; conceivably these people could be participants in some of the various information exchanges, consultation procedures, or other arrangements that we are recommending in this report. If there is developed an information exchange center, as described below, some of the Soviet officials attached to that organization might possibly serve the purpose. If there are Soviet officials here or American officials in Moscow engaged in military consultations of various sorts, they might additionally serve this purpose.

In any event, there is a function here that it is in the U.S. interest to see capable of being discharged. The U.S. should discuss this function directly with the Soviets; but it may be useful to utilize for this purpose personnel who are available in Moscow and Washington in connection with other assignments.

The precise arrangements cannot be specified in advance; it will have to evolve out of conversations with the Russians. But the U.S. should consider it satisfactory if half a dozen capable Soviet officials could be available in this country, and half

and half a dozen capable American officials could be available in the Soviet Union, with arrangements for mobility, communication, and technical competence, to permit them to fulfill the function of observing what the host government wishes them to observe in case of emergency or crisis.

13. Military Attaches

We have identified several functions that may require responsible, sensitive, militarily competent personnel available to consult on sensitive matters here in Washington, and Moscow, or both. One useful way to develop such consultative procedures, or to develop personnel able to serve some of these purposes, would be to augment the Military Attache Offices in Washington and Moscow. Some of the consultations we have discussed above should be done in the least conspicious manner possible; utilizing the existing military-attache functions may provide a method. Perhaps some of those consultative functions could be handled directly by persons assigned to the attache offices. The personnel attached to these offices could develop into official representatives in more formal procedures, such as the discussion of strategic indicators, the special observation teams, or even standby staff for consultation in the event the purple telephone is used.

In other

In other words, we see a number of useful purposes that may be advanced by the development of enlarged military staffs in the Soviet and American Embassies in Washington and Moscow. Whether or not there can be agreement on any of the more concrete tasks for which they might be needed, such additions to the military attache staffs should be negotiated. The negotiation of enhanced military attache offices is a useful method of conveying to the Soviets our serious interest in developing continuing, consultative relationships of an expanded sort. (A variant worth considering, is the inclusion among the officers assigned by both sides to the UN Military Committee of persons with the competence require for such consultations.)

14. Information-Exchange Center

Several items already discussed suggest the advantage of establishing with the Soviets, probably with the participation of other countries and perhaps with the UN, of an information-exchange center, manned by personnel of the several participating countries. (This could be two or more centers.) We have discussed prior notification of aircraft movements and space launches, exchange of information about meteorological and other interferences with communications. We have discussed exchange of information about

about troop movements and other noteworthy strategic activities for which there may be an incentive to provide prior notice or explanation. And we have adverted to the possibility of other such exchanges of information.

If these exchanges are to be regularized, and especially if they are to be handled on an international basis, it is probably worthwhile to set up an appropriate agency or institution for the purpose. A single center may serve a number of these purposes. We note that there currently exists a Berlin air safety center; whether or not the latter derserves to be used as an explicit model, some of its experience may be pertinent.

Such a center might serve purposes beyond the specific functions we have discussed. If we have a general interest in developing regular procedures for business-like military consultations with the Soviets, and if we wish to establish the general usefulness and legitimacy of certain exchanges of information about military activities, the deliberate development of a center as a stimulus and encouragement to such consultation may be useful. The more this sort of thing can be made routine, the more we may establish the principle of mutual interest in exchange of information.

Our thought

Our thought is that initially such a center should have specified functions that are clearly valuable, and not be designed for some vague growth potential. But we also think this growth potential should be kept in mind, in the event that the thing has a successful experience. History gives no grounds for confidence that the Soviets will play the game straight and help to develop such a center into a useful institution. But if we can attach to it some reporting procedures that are genuinely beneficial to both sides, the thing may possess an initial value that causes the Soviets to cooperate in preserving it. We notice that there have been several suggestions in recent months for establishing institutes, study groups, and consultation centers for the conduct of serious technical discussions with the Soviets on arms control, military policy, etc. Possibly such a center could become, either on the side or explicitly, a host organization for such activities. While we are not sanguine about the success of the project, we consider it worth trying, particularly since we have identified a few specific functions that would give the organization a purpose.

15. "Non-Aggression Pact" in Space

Much attention is given to the banning of certain activities in space (orbiting of weapons). Our Panel is strongly of the opinion that arms control should be construed to include the protection of legitimate activities in space. We have already remarked on the virtues of communication satellites. We believe every effort should be made to legitimize--but without implying the need for legitimizing action--ballistic-missile warning satellites. We anticipate that photo-reconnaissance satellites will be launched by us, and very likely by the Soviets. We think an effort should be made to construe the avoidance of hostile activity vis-a-vis these satellites as an objective of arms control.

In addition to emphasizing the positive value of communication satellites with respect to the accidental-war danger, we think efforts should be made to persuade the Soviets that reconnaissance satellites are in their and our joint interest. There are many reasons for supposing that we and the Soviets will wish to monitor military activities and weapons programs around the world. The Soviets appear to be preoccupied with the American acquisition of a reconnaissance capability; they may not be giving sufficient attention to the value to them of good photographic satellites for the reconnaissance of China and other areas of the world.

In any event, our communications with the Russians and particularly our public relations with the whole world, should try to get across the notion that arms control is not simply a matter of banning objects and activities in space, but also of avoiding hostilities in space. A tacit mutual "non-aggression pact"--so to speak--with respect to satellites could be a useful thing. Wherever a line may be drawn between permitted and prohibited space activities, it should be a line that not only bans the one category but protects the other category. Perhaps a specific proposal to ban interferences and hostile acts with respect to legitimate space activities could usefully be made.

B. NEGATIVE RECOMMENDATIONS

1. Ground Inspection at Air and Missile Bases

As indicated in the earlier discussion of the "joint read-out of Midas" we looked at several other suggested ways of improving early warning agains missile or air attack. In particular we considered the proposal for placing ground observers at air and missile bases. The purpose would be to provide earlier warning than is otherwise available of evident preparations for attack. The observers would have to be in continual contact with their home warning systems so that any sudden disruption of their communications, if occurring at several sites simultaneously, could be interpretated as possible attack.

The idea has been criticized on ground that a few minutes' extra warning would be of little help if we are unwilling to launch our own attack on the basis of such ambiguous evidence as the sudden disruption of contact with ground observers. Our view is that such additional warning would be of value, since there are many alerting actions in this country (short of launching an attack ourselves) for which an extra ten or fifteen minutes warning would be extremely useful. We are, however, impressed with the extreme difficulty

difficulty of arranging an observer system which would not appear to yield excessive target information, which would not interfere excessively with operations, which would not create irritations and nuisances, but which would nevertheless provide reliable enough warning to be of genuine value.

While we have not examined the proposal in sufficient detail to render a conclusive negative judgement, we do report our skepticism and suggest that no such proposal be made unless it has been carefully examined and found to be quite practicable. Some limited usefulness of observers at air bases may be the final judgement. But our present judgement is that a direct-observation scheme at the bases themselves, as a continuous-warning system, is unlikely to work.

We are not, it should be noted, opposing the idea that observers might be very useful in some emergency, particularly if their effectiveness could be suddenly increased at the invitation of the host country. The "emergency observation team" discussed earlier might, if it were sufficiently mobile and appropriately equipped, provide a

provide a sample of observations in circumstances where sudden reassurance were required and the host country were motivated to provide it. What we find doubtful is the proposal for continuous early warning through ground observers at strategic bases.

2. Limitations on SAC Aircraft

We have looked at the possibility that SAC flights and deployments might be limited in a manner analogous to the submarine limitations discussed earlier. We have so far found no significant limitations that, imposed on the Soviets, would greatly help us, or significant limitations that, imposed on us, would help the Soviets. Present airborne alert procedures, for example, do not appear to us to be especially provocative. Movement of Soviet bombers to advance staging bases does cause apprehension; but the operating difficulties of retaining a large part of their bomber forces at advance staging bases imposes a sufficient limitation not to require any negotiated agreement. We have not found a reasonable Soviet counterpart to the withdrawal of SAC aircraft from overseas bases. While we think this area is one in which we should be alert for useful limitations, we have none to propose; and we doubt whether it would be wise to open this subject for negotiation.

If the "prior notification" of aircraft movements should go into effect, some of the argument in favor of flight limitations would already be taken care of. It should be noted that the system of prior notification, if it should come into effect, might entail some voluntary reconsideration of SAC operating procedures; if flights in particular areas require notification and others do not, or if the notification scheme tends to make flights in particular areas more noticable and conspicious, SAC itself may find it convenient to adopt certain modifications in its present procedures.

3. Limits on Aircraft in Air or Launches Per Day

There have been suggestions that, as safeguards against surprise attack or false alarm, there should be a limit on launches per day of missiles and satellites, or some agreed spacing between them. A limitation on the number of aircraft in the air has also been suggested, to increase the difficulty of being in position for sudden attack and thus to provide greater reassurance against attack.

We are dubious about both of these ideas. It is doubtful whether a limitation on the frequency or bunching of launches would matter. The prior notification of launches is a less restrictive condition, and should remove the false-alarm problem in the bunching of launches. If the problem does become serious, when launch activity increases, we can consider it then. It would not have to be considered as a formal proposal; consultation might take care of it once launch-notification is in effect, and especially if there is a "Center", as discussed earlier, for exchange of this information.

The limit on aircraft in the air does not appeal to us as a continuing limitation. The warning or reassurance value seems small compared with the nuisance, particularly since any limitations would have to be frequently renegotiated with changing practices. We do think it should be kept in mind that, in a crisis, voluntary restraints may be extremely useful in providing reassurance; ad hoc negotiated limitations may help to tranquilize the crisis. It will be critically important to anticipate these in our own preparations, but we do not think it would be wise to propose such limitations now.

C. MEASURES FOR URGENT EXAMINATION

1. Bomb Signature

It would be helpful, in the event of a nuclear explosion somewhere, to know whose it was; and helpful, if it were ours, to know where it originated. It would also be helpful if the Soviets were in a position to know, in the event of a nuclear explosion, whether or not it was theirs, and if so where it originated.

We have briefly considered two possibilities for bomb signatures useful for discriminating between their bombs and ours, between various of the bomb designs on each side. One of these signature ideas would try to make use of the electromagnetic signal generated when a nuclear bomb explodes. This does not seem to be a feasible way to do the job. The other idea is to put tracer materials in the bombs, perhaps a small metal plate attached to the case of the bomb. Using mixtures of trace elements it would be possible to encode, and keep secret if this seemed wise, a good deal of information into the signature as to the source of our bombs (e.g., the military unit that had custody of a particular bomb, the base it came from, etc.).

If a quick method of determining the source, should a nuclear bomb detonation occur, is required it will be necessary to have aircraft available on short notice stationed relatively near the areas to be monitored (e.g. within say 1000-1500 miles of all points in the area). These aircraft would also need the right to fly anywhere within the region. With these arrangements it would probably be possible to obtain material from the bomb cloud and analyze

and analyze it for the trace elements in less than a day.

A program of research, and possibly development, in the area of bomb signatures and the establishment of a monitoring system, are mainly things that it could be in our interest unilaterally to do. They have, however, an important arms-control significance, since it is in our interest for the Soviets to do this also, as it is in their interest for us to do it. Identifying accidents as accidents, perhaps even identifying how they may have occurred, is a capability that each of us should wish the other to possess.

It does not seem to us as though a specific agreement along these lines is desirable, or that it could necessarily be enforced. In the event of bomb explosion, either of us could deny ownership or other responsibility; the idea is not to be able to detect evidence of the other sides responsibility. This is rather a matter in which unilateral actions on both sides may be in the common interest. But if something of this sort is done by our Government, it may be worth while to communicate it to the Soviets. We may wish to find a subtle way of suggestion that they might well do likewise. (In view of the possibility of nuclear detonations originating in third countries, there is no necessary implication that to be concerned about this question is to be concerned about ones own security procedures.

But we have not examined the technical possibilities here at all; and we have given only brief thought to how any such program might be concerted with the Soviets. It does, however, seem to us a concrete measure of potential genuine value, and we urge immediate examination of the subject with a view to early action. The action, we suppose, other than unilateral procedures, would be very informal consultation with, or conveyance to, the Soviet Government.

2. Soviet-American

2. Soviet-American Civil Air Relations

We understand that negotiations may establish American commercial flights to the Soviet Union. It appears to us that some of the purposes for which special observation teams, consultation procedures, etc., have been recommended, may possibly be served by civil aircraft procedures that may be established. We have nothing concrete to offer, but suggest that this be investigated in relation to arms consultation and arms observation.

3. Nuclear

3. Nuclear Weapons in Orbit

The banning of weapons of mass destruction in orbit has been a U.S. proposal; it appears in the draft negotiating document. The effect of bombs in orbit, or of banning them, on vulnerability to surprise attack, on the possibilities of accidental war, etc., have not to our knowledge been extensively examined. We have not been able to perform an analysis of whether bombs in orbit would be stabilizing, or their prohibition would be stabilizing. We have not looked at electronic and other procedures for controlling such weapons to see whether they are especially accident prone or especially accident proof. We have not looked at the relation of bombs in orbit to other weapons systems, to see whether the mix of weapons would be a more stable one with or without orbiting nuclear bombs.

We urge that the relevance of these questions be recognized, and that examination take place. Although a prohibition of weapons of mass destruction in orbit has been approved as a U.S. proposal, we suppose that various options remain to reiterate the proposal, to drop it, or to modify it. The surprise-attack, accidental-war implications of this particular weapon are genuinely in need of strategic and technical evaluation. We recommend it be initiated at once.

4. A ICBM

4. A ICBM

There are reasons to suppose that ballistic-missile defenses could be stabilizing; there are reasons to suppose that they could be destabilizing. They may prove to be helpful in launching preëmptive attack, or at inhibiting such attack. Until the particular AICBM system is specified, one can only observe that the argument may differ for terminal defenses and defenses that operate during launch period. It may depend on whether AICBM protects retaliatory forces, protects cities, or works indescriminately. It will depend on whether AICBM is effective mainly when alerted ahead of time, by an attacker who has decided to attack, or works equally well for the defender. It depends on whether the system is one that can be augmented in a crisis; whether in that event it is subject fatigue and degradation; whether if activated in advance it gives notice to the other side; and how it fits into nuclear-blackmail situations.

We doubt whether an arms agreements would be formulated in terms of active defenses, or ballistic-missile defenses. They are more likely to affect such defenses indirectly. Banning particular weapons in space may, though not oriented toward the purpose, inhibit or facilitate ballistic-missile defense. Orbiting ballistic-missile defenses are among those considered; they may not use nuclear weapons; if they do, they may not be identified "weapons of mass destruction." Ballistic-missile defenses may require test launches, whether they are orbiting systems or terminal defenses. So we anticipate that measures aimed

measures aimed at satellites, missile launches, and other activities relevant to arms control, will affect AICBM.

The surprise-attack and accidental-war or crisis-war implication of AICBM have not examined, even to the point of establishing whether AICBM would be stabilizing, de-stabilizing, neutral, or any of these depending on the particular system. We do believe that arms control may impinge on AICBM, whether intended to or not.

We recommend an analysis. Sooner or later these questions are bound to arise explicitely; they are implicitely involved in proposals already current.

D. MEASURES OMITTED FROM CONSIDERATION

There are several measures in the draft document or other sources that we have not been able to study. We have not examined the implications of the nuclear-test ban for surprise attack, accidental war, etc. A measure of this sort, affecting the development of nuclear weapons, and our knowledge of the effects of such weapons, is integrally related to surprise-attack capabilities. (Even measures to improve weapon safety may be affected, as suggested in the discussion of bomb signature). But this matter has so much momentum of its own that we considered it outside the jurisdiction of our panel. In any event, the required would have been beyond the time available.

The same is true of nuclear-materials production cut-off. Thus the wisdom of a production cut-off, aside from political demands for it, ought to have been the concern of our panel, since another one is concerned with this topic, and since the analysis required would have been beyond the competence of this panel within the time available, we simply note that the matter is important and that we have reached no recommendation. The same is true of a ban on transfer of nuclear weapons. This has implications for mischief and accidents, but have not been able to give it attention.

We have also considered the possibility of limiting the development of aircraft carriers. We did look into this kind of limitation for Polaris submarines and for SAC aircraft; we were unable to extend our investigation to aircraft carriers.

There are

There are provisions in the draft negotiating document that have implications for the stability of strategic forces but are not specifically oriented toward surprise attack or accidental war. An example is the manpower ceiling. It has implications for the size and shape of strategic forces, and for the relative emphasis given to conventional forces. We do not know whether the particular figure of 2.5 million men has been geared to any particular military force structure; we suppose that it to reflect approximately present U.S. manpower figures. We have no basis for questioning it, but point out that, when efforts are being made to reduce the dangers of surprise attack and accidental war by measures that may cost more money, or require more manpower, any ceiling should be examined for its strategic implications. Especially if the figure is likely to be negotiated upward or downward, there should be a plan for accommodating our military forces to it, in a way that demonstrates that the danger of war is reduced rather than increased by such a ceiling.

PART IV. SPECIFIC COMMENTS ON NEGOTIATING DOCUMENT

A. Suggested Amendments

We submit, below, language concerning such of our proposals as would be appropriate to a formal negotiating document.

Other Panel proposals--e.g., for some reciprocal action regarding European MRBM's and/or nuclear weapons in Europe, for a beefing up of military attaches, and for a tacit non-aggression pact regarding inspection satellites--would not seem to be suitable to a formal negotiating document. We suggest, therefore, that Governmental approval be sought of not only the proposed negotiating paper but also of an Annex to that paper, spelling out arms control proposals that we will wish to raise with the Soviets through other channels. This Panel is willing to help prepare language for inclusion in that Annex, covering such of its recommendations as are not addressed below.

Specific comments on sections C and E of the paper "Proposals for Study by Consultants' Groups" follow; Part IV-B is the consolidated revision in accordance with these changes.

Page 10, C, paragraph 1: In accordance with our discussion of "joint read-out for Midas" and our preference not to make ballistic-missile warning systems in orbit depend on international agreement, we propose replacing this paragraph with the following:

> The United States is developing a ballistic-missile warning and surveillance system utilizing

infra-red sensors in satellites. Such a system could be of advantage to all the major strategic powers. The United States is ready to join discussions on the establishment of read-out facilities available to the USSR, and the inspection of the system to assure that its operation will be reliable and indiscriminate as between the major powers. In the event that comparable Soviet systems are launched, the United States is ready to discuss reciprocal facilities to make the most effective joint use of systems in operation. Arrangements for such systems must provide confidence to the nations that rely on them. Such systems can provide assurance against surprise attack, and can facilitate the surveillance of missile and satellite launching activity.

Page 11, C, paragraph 2: In accordance with our negative conclusion regarding inspection at strategic bases, this paragraph should be deleted.

Page 11, C, paragraph 3: In view of our conclusion that further study will be required before limitations on deployment of submarines can be agreed to, we suggest deleting this paragraph. We suggest replacing it with the following, which accords with one of our related affirmative recommendations:

States agree to make advance notification, through channels to be arranged, of launchings of satellites and of missiles above some agreed altitude, together with notification of location and track.

Page 11, C: Suggest adding the following:

States agree to set up procedures for consulting with each other and giving advance notification on such major military maneuvers and other actions as may otherwise be susceptible to misinterpretations, or may otherwise cause alarm or disturbance, or induce counter measures.

Page 11, C: We suggest adding a paragraph along the following lines:

States will consult regarding the establishment of procedures for advance notice of aircraft movements in particular regions where such advance notice may help to preclude misunderstanding or misinterpretation.

Page 11, C: We suggest a paragraph along the following lines:

Consideration shall be given to the establishment of a joint information-exchange center where, on a regular basis, advance notice of activities such as those indicated above may be filed, queries raised,

and unaccustomed activities (possibly including communications disturbances) explained.

Page 11, C, paragraph 4: This should be treated as a regional matter. We are not competent to pass on the question of how its language should be adopted to any regional sensitivities, e.g., in Europe.

Page 11, C, paragraph 5: The same comment applies here. In view of the discussion in our report of the possibility both of overlapping radar systems as a safeguard against surprise air attack in Europe and of the ground/air arrangements proposed by General Norstad as safeguards against surprise ground attack in Europe, we suggest that this language be revised as follows:

> Zones of inspection will be established in agreed areas. The means of inspection may include ground inspection, aerial inspection, and/or overlapping radar systems, depending on the circumstances and depending on whether the object is to report upon concentrations of military forces and/or to guard against surprise air attack.

Page 12, E, paragraph 3: In view of the language suggested above concerning advance notification of military maneuvers for insertion under C, this paragraph should be deleted.

Page 12, E, paragraph 4: We suggest this paragraph be stopped at the comma, so that it will be consistent with--and provide a general peg on which to hang discussion of the "purple telephone" proposal in our report.

Page 12, E, paragraph 5: Suggest this paragraph be deleted in view of the language concerning establishment of an information-exchange center as a repository for advance notices suggested under C above.

Page 13, E, paragraph 6: We suggest that this proposal be re-written as follows:

> One or more international institutes or other forums for the continuing discussion and study of arms control and other measures to reduce the danger of war will be established.

This would provide a general position, from which we could move in whatever direction might seem useful in the light of the Soviet reaction.

Page 13, E, paragraph 7: We propose the following language:

> States shall consult with each other regarding the establishment in each other's territory of observer teams, to be on call at the discretion of the host state in the event the host state wishes to give reassurance regarding its military activities and posture.

Note: We recommend consolidating sections V-C (pages 10 and 11) and V-E (pages 11-13) in view of the close relation both of the problems and of the measures to deal with them discussed in these sections. A text showing the proposed consolidation follows:

B. Proposed Revision of Sections C and E of Working Draft of April 14, 1961

"C. Measures to Minimize the Dangers of Surprise Attack and War by Accident or Miscalculation

1. The United States is developing a ballistic-missile warning and surveillance system utilizing infra-red sensors in satellites. Such a system could be of advantage to all the major strategic powers. The United States is ready to join discussions on the establishment of read-out facilities available to the USSR, and the inspection of the system to assure that its operation will be reliable and indiscriminate as between the major powers. In the event that comparable Soviet systems are launched, the United States is ready to discuss reciprocal facilities to make the most effective joint use of systems in operation. Arrangements for such systems must provide confidence to the nations that rely on them. Such systems can provide assurance against surprise attack, and can facilitate the surveillance of missile and satellite launching activity.

2. States agree to make advance notification, through channels to be arranged, of launchings of satellites and of missiles above an

agreed altitude, together with the location of the launching and the track of the vehicle.

3. States agree to set up procedures for consulting with each other and for giving advance notification on such major military maneuvers and other actions as may otherwise be susceptible to misinterpretation, or cause alarm or disturbance or induce countermeasures.

4. States will consult regarding the establishment of procedures for advance notification of aircraft movements in particular regions where such advance notification may help to preclude misunderstanding or misinterpretation.

5. To facilitate implementation of the measures proposed in paragraphs 2, 3, and 4, states may establish a joint information-exchange center where on a regular basis advance notification of activities such as those cited in paragraphs 2, 3, and 4 may be filed, queries raised and unaccustomed activities (possibly including communications disturbances) explained.

(6. Zones of inspection will be established in agreed areas. The means of inspection may include ground and aerial inspection and/or overlapping radar systems, depending on the circumstances and depending on whether the object is to report upon concentrations of military forces and/or to guard against surprise air attack.)

(7. As a means of minimizing the danger of a surprise attack in particular regions, control posts will be established in such locations as large ports, railway centers, main motor highways and airports to report on concentrations of military forces.)

8. Arrangements will be made for rapid communications between and among heads of government.

9. One or more international institutes or other facilities for continuing discussion and study of arms control and other measures to reduce the danger of war will be established.

10. States shall consult with each other regarding the establishment in each other's territory of observer teams, to be on call at the discretion of the host state in the event the host state wishes to give reassurance regarding its military activities and posture.

Notes:

1. Sections C and E of the Working Draft have been consolidated.

2. Those paragraphs of the original Sections C and E not included among the foregoing ten paragraphs are recommended for deletion unless otherwise incorporated.

3. Each of the foregoing ten proposed measures is capable of independent implementation with the possible exception of paragraph 5 (information-exchange center) which loses much of its purpose without implementation of at least one of the measures cited in paragraphs 2, 3, or 4.

4. Paragraphs 6 and 7 are essentially regional measures and are included here only for the purpose of indicating the type of measure that might be implemented to achieve regional stabilization.

PART V PHASED COMPREHENSIVE PROGRAM

The three-stage program for general disarmament is probably not thought of as being particularly related to surprise attack and war by miscalculation. But if such a program serves a purpose, part of the purpose is to reduce the danger of war. Whatever the level of armament, war is always possible. Even if it has to be fought with weapons produced and manpower conscripted after war is declared (as has been the case of U.S. participation in world wars), general war is possible from any level of armament. What disarmament may do, in so far as military dangers are concerned, is to increase the stability of mutual deterrence - by enhancing the security of military postures, improving intelligence and warning, slowing the tempo of war - or perhaps reducing the violence of war if it occurs.

This is what shorter-run stabilization measures are supposed to accomplish. A longer-term program for general disarmament should serve the same purpose, and should be guided by the same criteria.

It requires careful analysis to determine what kind of "disarmament" is achieved by a specified elimination of weapons. At present there exists some reasonable notion of what "weapons" are, what the significant means of delivery are, what constitutes "war industry". But as we eliminate weapons, warning systems, vehicles, and bases, we change the criteria of military effectiveness. We change

We change the list of items that are militarily significant. Airplanes increase in importance if missiles are banned, slower planes if fast planes are banned; complex airplanes are of less importance if complex defenses are banned; and internal defense forces become more important if the first priority for offensive action is to guard home base while nuclear mobilization is rushed.

Since weapons themselves are the main targets in war, to eliminate a weapon is to eliminate a target, and thus to change the requirements for attack. Surprise attack takes on a different character when the technology of response to attack is on a time scale of hours instead of minutes, or days instead of hours. Civil defenses, evacuation procedures, and active defenses need to be evaluated differently when offensive weapons are curtailed or slowed down; this affects both defense against aggression and defense against retaliation.

We find it helpful, in approaching the analysis of disarmament, to imagine - for any specified degree of disarmament - what happens in the event that war is declared. If any immediate offensive capability can be mobilized, presumably the initiation of war takes the form of destroying the other sides immediate retaliatory potential, if any, or retarding the other side's development of weapons of mass destruction and their means of efficient delivery. Preëmptive war and preventive war are just as pertinent concepts for the evaluation of a "disarmed" world as for an armed world.

Limited war,

Limited war, too, can be conducted in a substantially disarmed world. In some ways it may be more difficult to conduct limited war if weapons have been limited (though one can always acquire weapons by placing orders for them). But a good part of the material required is trucks, ships, radios, clothing and canned food. Considering that the Korean War, and the American Civil War, were conducted with an acute shortage of weapons on both sides, it is evident that a protracted limited war will become a rearmed war in the process.

This suggests that the process of disarmament, if it occurs, will run the danger of occasional spurts of rearmament; it will be important to design the mode of disarmament so that rearmament, if it occurs, can take a stabilized rather than explosive course, and remain limited.

We do not believe these problems can be avoided by reference to some international security force that will police the world against war and rearmament. Even assuming such a force could be established with appropriate political safeguards, it still has its own military problems and strategic dilemmas of its own. One cannot simply turn 100 Polaris submarines over to an international security force, giving them exclusive rights to the oceans, and suppose that they can be assured success in policing the world against limited aggression, limited rearmament, or nuclear blackmail. The threat to fire nuclear weapons into the USA or the USSR, Japan or Germany, at the first sign of

orderly

orderly rearmament, may not be credible. It may be particularly incredible because of the need to establish the force in a manner that makes it a civilized, politically responsible one.

If it is to contain aggression by local resistance, or preëmptively invade countries that embark upon rearmament, it will have to face military problems (including military-budget requirements) of a kind that have not proved easy for the United States to meet.

Nor can we be confident that an international security force can exercise a "balance of power," relying on coalitions of states to help it coerce miscreants. (The NATO coalition has not been wholly successful in subduing the Soviet urge to arm itself.)

Any international security force has military and strategic problems not totally different from these the United States has now. Serious military analysis is required even to visualize the nature of the force. And one must consider whether an adequate international security force would make the world less militarized than moderate national forces for mutual deterrence and self defense.

The draft document is vague on what happnes in stage III, as the force whose original purpose was to "verify" the agreement becomes one of "enforcing" it, in circumstances in which "no nation had a military capability which could challenge the international securing forces established to preserve the peace." If this is intended to imply that dominant military power will irreversibly be given to a decisive organization that can police the United

the United States, the USSR, China, Japan, Germany, or any combination of them, against rearming themselves; against going to war against each other; and against challenging the international security force itself; then we submit that what is being outlined is government.

This means giving it the essential features of "sovereignty", - the power to coerce population and local (formerly national) governments, and to extract its continued financing even from unwilling populations and constituencies. This is an enterprise as serious and complicated as the one that exercised Madison, Hamilton, and all those who participated in the comparable (perhaps easier) organization of the American colonies. A force that can maintain internal order, that for all time prevents military defection of any sort, that can levy the taxes required for its own perpetuation, that can intervene in disputes that are "international" but decide which disputes are "international", seems to us the essence of Government. To say this is not to take a position one way or the other, but only to propose that we are dealing with something more here than a "security force" with which there is a "control problem", or a veto problem, or a collective decision problem, on the analogy of NATO or the Un.

In any event, somewhere between Stage II and Stage III, or within Stage III, the political organization of the world implicitely undergoes a profound and heroic transformation. This is not just "disarmament", it is "government".

We say

We say this is to indicate that the military and strategic problems raised by drastic national disarmament cannot rea ily be disposed of by reference to "international security forces." That may be the answer; but it is a drastic answer, and one that is not achieved by a process of "phasing."

But assuming that the immediate problem is disarmament in the absence of world government, within a time period in which nations will still remember war and fear war; and considering that if nations now are willing to risk war itself in defense of their interests, they may be willing to risk disarmament or war in defense of their interests during the process of disarmament; we think a comprehensive disarmament plan has to be carefully designed to promote genuine military security. We are doubtful whether the present document reflects any such design. We are not sure that the present document has identified the relevant criteria, or defined the framework within which disarmament must be judged.

"Delivery vehicles" are to be reduced; the particular ones to be reduced are yet to be agreed. But the question of which delivery vehicles ought to be reduced, in the interest of peace and stability, is more than a technical question that remains to negoiated. We simply do not know. And if we find it difficult to get the Soviets to understand, or to get the rest of the world to understand, what we mean by stabilizing deterrence even at the present time, it is going to be extraordinarily difficult to find agreed criteria for determining which delivery

which delivery vehicles are comparatively stabilizing, peaceable, and non menacing, and which aggravate the danger of war. The Panel is doubtful whether, within our own Government, this question has been adequately (or even seriously) addressed.

More basically, we question whether "delivery vehicles" uniquely are the critical thing. Active defenses and civil defenses may be as critical in making preventive war unattractive, quick response less necessary, nuclear threats less promising.

Nor is it only the question of stability against instant war that must be guarded against. The main deterrent to re-armament under disarmament will be an appreciation on all sides that no quick, decisive advantage can be gained by the nation that begins to rearm first. This may mean that mobilization potentials are as important as weapon inventories. But they are important not simply in the sense that mobilization potentials must be reduced; it may be that some stable situationsof mobilization parity must be designed, so that no side is tempted to think it can engage in, or successfully threaten, rearmament to achieve decisive military superiority, and so that no nation need fear that, if it fails to rearm quickly, it may be too late.

The vulnerability of mobilization potential to small enemy forces has to be considered. If a few regiments of commandoes can sufficiently impede a potential enemy's rearmament capability, while the attacker rebuilds limited supply of nuclear weapons and crude means of delivery, the latter may have an easy win.

A serious

A serious comprehensive disarmament scheme must consider these matters. We doubt whether even the political and psychological advantages of disarmament will be present unless disarmament genuinely enhances the sense of military security. If instead it just eliminates weapons and targets simultaneously, leaving the world equally unstable or more unstable, it may at best reduce the danger of war by promising quick and bloodless victory to the side that starts the war, or to the side that mobilizes first and delivers an ultimatum. Serious disarmament must stabilize the military environment - must stabilize the deterrence of both war and rearmament - and provide cushions against occasional spurts of war and rearmament, just as limited arms control at present must aim at the same thing. The objective of stabilizing mutual deterrence, and of minimizing the sensitivity of the arms race to sudden politi al or technological changes or sudden new intelligence, is pertinant to any level of armament including the very lowest.

We note for example that in the draft document vehicles are prominent but bases are not. Considering that a few aircraft on a few bases may make the world nearly as unstable as many aircraft on many bases, it seems to us as important to stress the maintenance of a large number of bases, for the purpose of dispersal, as it is to stress the reduction in the number of vehicles. (One might propose increasing the number of bases; the retaliatory force can afford fewer vehicles, the better dispersed they are.)

Nothing is said about warning systems, military communications, active or

active or civil defenses, or the important role of a gendarmerie in preventing invasion by enemy gendarmerie during a war in which the decisive activity is the furious reestablishment of nuclear capabilities.

The broader principle exemplified by the question of aircraft and bases is that of second-strike vs. first strike forces. Evidently what is urgent is to shift away from those vehicles and weapons systems that are vulnerable, excessively quick-reacting, or peculiarly good at preëmptive attack, shifting to other weapons that have more tranquil defensive and retaliatory capabilities. It may be as important to agree on what vehicles should be preserved, improved, and increased, as to agree on the vehicles that ought, in the interest of stability, to be dismantled or modified.

We make these critical remarks about the draft proposals for comprehensive disarmament because the particular problem of our Panel, that of avoiding general war, which we take to be the main problem that any comprehensive scheme must come to grips with, does not receive explicit attention. The important thing is not to prescribe an arithmetical process of phased, proportionate reduction of offensive vehicles. It is to determine what kinds of military forces, what military postures on both sides or in all countries, are most conducive to stability, most proof against deliberate or inadvertant war, and most reassuring in the confidence in deterrence against war, rearmament, or threats of war and rearmament, that they provide.

We agree -

We agree - though not without reservations - that the general direction in which comprehensive arms control should go is downward. The important thing is to determine a way to go downward that increases stability and security. This is what the present draft - or any of the proposals we have seen - does not really cope with. We doubt whether the United States Government has determined through careful strategic analyses, what sort of military posture here and in the Soviet Union might be a goal to aim for by 1965 or 1970, under optimistic assumptions about negotiating progress and political quiescence. As long as our immediate measures for military tranquilization are ignored by, or contradicted by, our comprehensive-disarmament proposals, it is going to be difficult either to support the former persuasively, or to convey what our genuine interests are in connection with comprehensive disarmament.

These being our reactions to the draft document, the question is what to recommend. Our recommendation is two-fold. First, that it be recognized that neither this government nor any other government has really developed a plan for comprehensive disarmament, or has even identified the guide lines for construction such a plan. Whether this means we should or should not go ahead on the basis of the draft document, whether we should or should not act as though we take our proposals seriously, whether we should or should not engage in discussions of the subject, is not for this Panel to say.

Second,

Second, we think there are compelling reasons for trying, internally, to determine what comprehensive disarmament or arms control should mean. If only for the intellectual clarity of our own Government, we should take the military implications of disarmament seriously enough to see what disarmament means, whether we are genuinely in favor of comprehensive disarmament, whether the kind of comprehensive disarmament we would favor is different in spirit from the limited proposals we favor, and whether such comprehensive disarmament will make an enormous difference to our security and work enormous changes in the political environment.

We think too, but this is not our business, that the United States will have a much more persuasive negotiating position if it finds principles, criteria, and guidelines for comprehensive disarmament that are genuinely consistent with our national security, with our approach toward more limited arms control, and with the military posture that we are trying to adopt.

We suspect that the Soviets have not thought long and deep about genuine disarmament as a means of co-existence in a world in which the danger of war has been reduced. Just to communicate our ideas and intentions to the Soviets, or to persuade them eventually of what they should favor in the disarmament field, we ought to do some of the world's thinking for it on this subject. At some stage comprehensive disarmament negotiations may become serious; at that time we should be

intellectually

intellectually prepared to know what we favor, and intellectually prepared to persuade others.

Without prejudice, then, to our immediate negotiating strategy; without prejudice to whether in the end we shall favor or disfavor comprehensive disarmament; we strongly recommend that efforts be made to examine the various concepts of comprehensive arms control or disarmament - as seriously as our strategic posture, our NATO strategy, our limited war capability, etc., have from time to time been analyzed. We think that in every way this would be salutary. To repeat: we recommend this because, as a Panel, we take seriously the danger of general war and believe that good disarmament may possibly help us, bad disarmament may possibly hurt us, and we don't know what a comprehensive program of "good" disarmament would look like.

We doubt whether the detsils of any such scheme are likely to be developed in the near future, whatever the effort put into it. We do think that the general criteria, guidelines, and appropriate categories, should be urgently identified; they probably could be identified within a matter of months.

If a study of this sort could be produced for internal use, we might even consider making it available to the rest of the world, including the Soviets, in a quiet and serious way, just to communicate what we have in mind and to see whether we can improve the undertone of disarmament negotiations during the next few years.

PART VI: "CRASH" ARMS CONTROL

Much of the concern of our Panel has been with crises and emergencies - brink-of-war situations in which general war seems imminent, the urge to preempt is heightened, extraordinary events and military movements have to be interpreted, and alarms are more likely to be acted on. In addition to peace-time measures that blunt the edge of preemptive capabilities, increase confidence in deterrence, reduce the incidence of false alarm, improve command and control, and reduce the need for hasty action, we have outlined a number of procedures and understandings that might be arrived at with the Soviets to facilitate the tranquilization of military crises should they occur. The thought behind the "Purple Telephone," the special observer teams, and the enlargement of military-attache offices, and some of the motive behind inspection schemes ostensibly oriented toward other purposes, is to have a capability for sudden negotiation in crisis, for the conveyance of reassurance if the facts are reassuring, for the joint investigation of untoward events, and for the negotiation of mutual restraints that may facilitate withdrawing from the brink of war.

But these arrangements can at best eliminate <u>one</u> of the obstacles to last-minute understandings by making communication possible, and some exchange of authenticated information. If these facilities are ever called on for anything but routine consultation and reassurance, there has to be some kind of "arms-control" plan to go with them. That is, if these arrangements are intended to facilitate negotiation in an emergency, we have to know in advance what we shall want to negotiate about.

We need to think in advance about sudden, emergency arms-control measures that we might in a crisis wish to negotiate. We need this not only to know what it is we wish to propose and what Soviet proposals we could take seriously and how to respond to them; we also need advance planning to assure that we have the physical capability of adopting such postures as we may wish to propose. If we want to negotiate some phased withdrawal from alert status, particularly under the pressure of knowing that such an alert status could not be maintained indefinitely, more is required than just a plan for how it might be done. What is required also is that the strategic forces themselves be physically capable of carrying out the proposals, have plans and procedures for the contingency, and have the command and control to bring it about. There would also be required some ability to submit to Soviet observation, in a manner that did not aggravate vulnerabilities at precisely the time when we could not afford to aggravate them.

We would need facilities for authenticating Soviet compliance with any such temporary restraining agreement. This means not only having something like the emergency observation teams but having them so located, so equipped, and so trained, that they can perform whatever critical functions prove necessary.

Anticipating emergencies and how they could arise, and predicting the status of forces on both sides, is beset by uncertainty. Nevertheless, we consider it possible to create some adaptable, flexible facilities and personnel to monitor short-term arms limitations and to facilitate negotiations to that purpose. Improvising emergency limitations on the status and deployment of forces, in a manner that genuinely enhances security, could otherwise prove impossible just because of the time required to think, communicate, and move personnel and equipment.

The measures we have proposed in this report represent modest steps - but steps with appreciable growth potential - toward facilitating negotiation in these cases, and creating a possible basis for inspection. What we have not considered in any detail is the kind of brink-of-war plans that our Government should develop in order to increase the options available at a time when war may seem imminent.

Imaginative but realistic exploration of this subject - examination of the kinds of contingencies that may arise - is a prerequisite to knowing in advance what negotiation may be possible in such an emergency. It is prerequisite even to knowing what kinds of data should be accessible to the Purple-Telephone command post, and what data should be eschewed in the interest of streamlining the procedure.

Most important of all is to examine the capabilities and procedures that govern our strategic forces in an emergency. It is almost certain that in any emergency in which war has become likely but not inevitable, or in which the danger has become sufficient to require extraordinary alert measures, plans will suddenly be modified, new plans improvised, options discovered and courses of action identified, that had been ignored all along; hopefully, capabilities will be discovered that had never been adequately appreciated.

What will be needed is strategic forces with the greatest possible flexibility of performance and of command and control. This means two things. First, it means that the alternative states of our strategic forces, and their alternative modes of deployment, should be increased in number and variety. Second, it means that the maximum capability for last-minute adaptation and improvisation should be built in. We should not be restricted to a war plan that can tolerate NO

no adjustments; we should not be restricted to alert procedures that have only two states, on and off.

The matter is of course extraordinarily complicated, involving some of the most sensitive areas of military planning. The Panel can only report an impression; even with the fullest knowledge of present procedures and plans, it would not be possible to render a judgement on how well they would fit the kinds of crises and emergencies that we could have examined only if much more time, and a wider variety of talent, had been available to the Panel.

We do however record an impression that in many respects our strategic forces have an "on-off" quality. Perhaps for budgetary reasons, our forces have been designed too much as though there were only two states of the world, war and peace, or as though there were only two kinds of alarms, those that genuinely mean war and those that are cleared up quickly. Strategic planning has not reflected sufficient attention to the many gradations in the state of the world between peace and war, and particularly to the kinds of crises that may endure over a period of time, in which neither war nor disalert can be declared.

In discussing warning and alert procedures with a view to examining the danger of war by miscalculation, it has come to our attention several times that our strategic forces may be obliged to behave with excessive conservatism because of alert plans that are excessively bold. To react to an alarm that may be a false one entails severe costs and risks. Not only is public opinion aroused, with possible political embarrassment, but the Soviets themselves may be exceedingly jumpy and react disproportionately to some sorts of measures we might take for the security of our own forces. Most important of all, certain measures, like the sending of bombers aloft for their safety, are subject to fatigue and

degradation after a period that may be no longer than half a day. Thus to maximize readiness on the instant is to risk lesser readiness twelve hours, twenty-four hours, and forty-eight hours hence.*

As a result of this overly dramatic off-on character of alert plans it is possible that commanders feel obliged to react less vigorously to available warnings and indicators than we might wish them to react. They can react less conservatively only if the actions they take are less drastic. This requires designing procedures (and spending money) to have a more graduated, flexible capability than we presently have. We also believe that discussions with the Soviets concerning the nature of crisis behavior, the mutual interest in both sides' improving the security of their forces in these situations, would help to make it easier to implement a wider variety of alert measures with less risk. These sorts of discussions might appropriately take place at the "Center" we suggest elsewhere in the document.

This problem of the design of alert procedures is pertinent to the topic of our Panel. Not only are these procedures relevant to the problems of misinterpretation, false alarm, etc. But they acutely point up that if forces are designed for a limited set of alternative contingencies, their capabilities and their plans may lack the flexibility needed for negotiating controls and restraints in a time of crisis.

*However even today the situation is not wholly bad. After reaching peak ground alert, where almost all aircraft would be ready, SAC could fall back to a steady state level of readiness with about two thirds of the force ready to launch at all times. This is very good. Our point is that forces may have to stay on alert for extended periods. Therefore this requirement needs to be emphasized in alert planning and provisions.

This contingency of a brink-of-war situation that lasts for some time, in which negotiation of some sort proceeds, in which the negotiations may include arms restraints, is a realistic possibility, as realistic as general war itself. It is not a remote and hypothetical possibility to be put far down the list of contingencies to plan for.

We urge that in both U.S. arms-control planning and U.S. strategic planning these contingencies receive explicit and serious attention; that plans be drawn in a flexible and adaptable way for the kinds of circumstances that can be foreseen; and that emphasis be put on the development of war plans and alert procedures that are commensurate with the variety of contingencies that may confront us.

Additionally, we offer the observation that neither the United States nor the Soviet Union has in the past acted as though disarmament is an urgent matter, a promising alternative to a war that appears likely. The world situation could change in a way that caused rapid re-evaluation both by our Government and by the Soviet Government. In the aftermath of a truly serious military crisis, or during the crisis itself, the motives for some kind of safeguarded disarmament may be drastically changed on both sides. The willingness of the Soviet Union to make, and submit to, reasonable proposals in the interest of avoiding a war may increase sharply.

In such circumstances, knowing what kind of arms control or comprehensive disarmament would in fact be consistent with our security may make the difference between disarmament and war, or may make the difference between successful disarmament and one that proves inconsistent with our continued security. We recommend that the U.S. Government's analysis of disarmament, and planning for disarmament, take seriously the liklihood that disarmament may at some time

become suddenly more urgent, more businesslike, more necessary, as well as perhaps more dangerous. Again, we emphasize that this is not a remote contingency; we think it as likely as not that comprehensive disarmament, if it ever comes, may come out of an emergency or crisis in which it is negotiated without the leisure and procrastination that usually typifies disarmament negotiations. To avoid the disaster of misconceived disarmament, or the disaster of a war that might have been averted, imaginative and realistic disarmament planning would have to be done in advance. We can think of no better reason for proceeding at once to the examination of the military implications of comprehensive disarmament than the fact that the subject may unexpectedly become important at a moment when time is not available for a more leisurely study.

Finally, while these are sensitive matters, and the revelation of U.S. Government plans and expectations could be subject to grave misinterpretation, it may be important to stimulate Soviet awareness of the considerations that have been discussed in this section. We anticipate that the success of any of these measures that may have to be mounted in a hurry will depend not only on our having thought about them in advance, but perhaps on the Soviets' having thought about them in advance, having made some plans, or at least having caught on to the possibility. Soviet unpreparedness for serious negotiations could conceivably mean a negotiating advantage for the United States; more likely it would mean our joint inability to quell the military emergency. That could mean war, or a dangerously unstable disarmament scheme badly negotiated, or, with luck, emergence from the crisis with a determination on both sides not to be caught unprepared again.