ARMS CONTROL AND INADVERTENT GENERAL WAR

Morton H. Halperin

Special Studies Group

Study Memorandum 6

Institute for Defense Analyses

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Morton H. Halperin

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The judgments expressed in this Study Memorandum are those of the author and do not necessarily reflect the views of the Institute for Defense Analyses or of any agency of the United States Government

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FOREWORD

This paper was prepared for Project VULCAN, a study of Arms Control and a Stable Military Environment, which was made by the Special Studies Group of IDA for the Department of State under contract No. SCC 28270, dated 24 February 1961. Dr. J. I. Coffey was the Project Leader.

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## CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>SUMMARY</td>
<td>iv</td>
</tr>
<tr>
<td>I. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>II. POTENTIAL TRIGGERS OF INADVERTENT GENERAL WAR</td>
<td>3</td>
</tr>
<tr>
<td>- Political Crisis</td>
<td></td>
</tr>
<tr>
<td>- Local War</td>
<td></td>
</tr>
<tr>
<td>- Deliberate Catalytic Action</td>
<td></td>
</tr>
<tr>
<td>- Nth Country</td>
<td></td>
</tr>
<tr>
<td>- Subordinate Military Commander</td>
<td></td>
</tr>
<tr>
<td>- Sabotage, Mischief, and Espionage</td>
<td></td>
</tr>
<tr>
<td>- Accidents</td>
<td></td>
</tr>
<tr>
<td>III. THE ROLE OF ARMS CONTROL IN REDUCING THE LIKELIHOOD AND DANGER OF &quot;TRIGGERING&quot; EVENTS</td>
<td>10</td>
</tr>
<tr>
<td>- Local War Measures</td>
<td></td>
</tr>
<tr>
<td>- Atom-Free Zones</td>
<td></td>
</tr>
<tr>
<td>- Accident Prevention</td>
<td></td>
</tr>
<tr>
<td>IV. REDUCING THE PRESSURE TO PRE-EMPT</td>
<td>20</td>
</tr>
<tr>
<td>- Direct Soviet-American Communication Systems</td>
<td></td>
</tr>
<tr>
<td>- Crisis Agreements</td>
<td></td>
</tr>
<tr>
<td>- Slow-Reacting Strategic Systems</td>
<td></td>
</tr>
</tbody>
</table>
SUMMARY

Even if both prospective belligerents expect to suffer major damage in general war, decision-makers in each country are likely to feel that there is a premium in striking first if they believe war has become inevitable. In this situation the danger of inadvertent general war—a war which occurs even though both sides prefer peace—will be significant. Various events extraneous to the strategic balance may precipitate general war. These triggers include political crises, local wars, deliberate catalytic action by Nth countries or by individuals, sabotage, mischief and espionage, and literal accidents. These events could compel a general war by making one or both sides believe that such a war had become inevitable and that the only prudent choice was to launch a first strike.

Arms control can reduce the danger of inadvertent general war in two ways. The likelihood of triggering events can be diminished. Should they nevertheless occur, measures can be taken to avoid automatic precipitation of all-out war. A number of steps might be taken to prevent the explosion of local wars into general wars. Atom-free zone agreements and arrangements to deal with mischief and accidents might also be of value.

A direct Soviet-American communication system as well as other procedures which would go into effect during a crisis might contribute to stabilizing the strategic balance. The development of slow-reacting strategic systems—forces which do not depend on warning for their survival and which do not
appear provocative when going on an alert--would substantially reduce the danger of inadvertent general war.

Such agreements would have to be negotiated on a very informal basis. Much could be accomplished through unilateral action by the United States. Negotiations with the Soviets on these arrangements should be separated from traditional propaganda-oriented formal negotiations.
A major objective of American military policy is to prevent a situation in which we or the Russians are forced to launch a general war by events extraneous to the strategic balance. We are interested in the development of a "stable" balance which can withstand pressures generated by the cold war.

We are likely soon—if we have not already—to move into a situation in which the probable outcome of a strategic interchange is such that neither side, at least in normal circumstances, could consider general war a rational instrument of policy. The development by both sides of relatively invulnerable strategic forces would reduce the incentive to strike first and increase the level of destruction which the side receiving the attack could inflict in the second strike. However, even given this development, decision-makers might believe that several different outcomes would result from a strategic interchange: (1) the side launching the first strike would expect to suffer major damage, but it might nevertheless also expect to "prevail" in the sense that it could dictate the terms for ending hostilities; (2) both sides would believe there would be equal and major damage no matter who strikes first; (3) the side striking first would expect to suffer greater damage and lose the war.

Given situation (2) or situation (3) the danger of general war would be substantially reduced. However, for subjective as well as objective reasons we are not likely to move beyond situation (1) in the foreseeable future. As long as both sides
rely on extremely vulnerable aircraft, a first strike with missiles will substantially reduce the size of the opponent's strike. Command and control systems are likely to remain vulnerable; since control may break down or the will to retaliate may be lost, the second strike may not be launched or may be very desultory. Decision-makers, even in the face of a complicated analysis leading to the contrary conclusion, are likely to believe that the execution of a well-planned first strike will produce an advantage over a confused and demoralized second strike. In addition psychological pressures to act or to seize control of the situation may in a crisis lead to the decision to launch an attack.

The remainder of this paper is concerned with the world situation (1); i.e., the side launching the first strike would expect to emerge with major losses (say, two to twenty million casualties), but it might nevertheless also expect to "prevail" in the sense that it could perhaps dictate the terms for ending hostilities. In such a situation, the strategic balance, while relatively stable, could be upset. Administration spokesmen have recently argued that the United States would now win a strategic war no matter who went first. The Soviet leaders, however, may not have the same image of the current situation. In any case, as the Soviet missile force increases in size and invulnerability, we are likely to enter situation (1) if we are not there already. This paper will discuss events which might upset the balance and arms control measures to deal with these events and reduce the danger of pre-emption by moving towards situation (2), in which decision-makers would not perceive any advantage in striking first.
CHAPTER II

POTENTIAL TRIGGERS OF INADVERTENT GENERAL WAR

There are several ways in which events and pressures extraneous to the strategic balance might lead to general war. One side (or both) might decide that strategic war was preferable to the likely outcome of the current situation (i.e., the level of "acceptable" damage could be lowered) or one side (or both) might be convinced that general war was inevitable and that the only decision left was who was going to strike first (i.e., pre-emptive urges might be induced).¹

The process by which extraneous events lead to general war results either from changing estimates of the future without general war or from changing estimates of the likelihood of general war. The former case suggests the need for restraint on both sides in exploiting a political advantage. The feeling of pessimism about a future without war may compound the danger of inadvertent war.

Wars of this kind are often identified by several different names--"accidental," "catalytic," "unpremeditated," "war by miscalculation," etc. In essence these are actually all the same. They all identify an "inadvertent" general war--a war that occurs even though both sides prefer peace. Such a war can occur only if one side becomes convinced that it does not have

¹. There might be changes in the strategic balance itself which would bring on war. Technological advances might make a first strike seem attractive.
this choice and would prefer to strike first if general war is certain, or that the likelihood of general war is so great that the only prudent view is to assume that it is certain.

Thus the danger of inadvertent war rests\(^2\)

on the same premise that underlies pre-emptive war—that there is an enormous advantage, in the event war occurs, in starting it (or enormous advantage, in the event it seems to have started, in responding instantly) and that each side will be not only conscious of this but conscious of the other's preoccupation with it. It seems quite unlikely that war would be brought about by an...accident...if there were not some urgency of responding before the evidence is in. The essence of a false alarm is that, if one fails to act upon it, it is seen to have been a false alarm. An accident is almost certain to be recognized as an accident, if war has not intervened meanwhile. And among all those who may have it in their power to bring about a provocative event that might precipitate the decisions that bring about war, very few, if any, would have the power to wage a persuasive imitation of war if the consequences of their actions could be assessed and analyzed for even a brief period of time. Thus "accidental" war is war that may be initiated on misinformation, incomplete evidence or misunderstanding, of a kind that could likely be cleared up were it not that the time to clear it up might seem a disastrous delay to a government confronted with the possibility that war has already started. "Accidental war" is, for the most part, pre-emptive war sparked by some occurrence that was unpredictable, outside the control of the main participants and unintended by them.

It would, therefore, not be the events themselves that would directly bring about war. These occurrences provoke decisions that bring about war. The problem is not solely one of preventing the events; it is equally, or even more, one of forestalling the kinds of decisions that might lead to war as a result of these events.

Political crises, local wars, sabotage, mischief and espionage, "catalytic" actions and "accidents" might be the trigger which touches off a general war. The ways in which each of these events increases the likelihood of inadvertent general war are discussed below.

**POLITICAL CRISIS**

Political crises may trigger inadvertent war because neither side finds it possible to back down, because control over events is lost, or because one side finds itself losing and revises its estimates of the damage it will accept in a general war. These pressures and the tensions and fatigue which develop in a crisis reinforce the same kinds of pre-emptive urges which arise as a result of the other events to be discussed below.

During a major political crisis each side is constantly aware of the danger of general war. On each day it must decide whether to strike and whether or not it expects the other side to strike. If the crisis lasts long enough or gets confused enough it may on its own touch off a pre-emptive strike. Local military action, accidents, catalytic action, and sabotage are more likely to occur during a crisis and more likely during a political crisis to lead to war.

If a nuclear explosion could, due to pre-emptive urges, lead to war in a relatively calm situation, this is even more likely to happen during a crisis. Not only would decision-makers on both sides be tired and tense, but they would be pre-occupied with the danger of general war. Thus a political crisis by itself or in combination with another event might trigger an inadvertent general war.3

**LOCAL WAR**

A local war (i.e., a war not involving Soviet or American territory but in which the two powers are supporting opposing local forces) might produce an inadvertent general war either by

3. During a crisis both sides might go on alert, reducing the advantage of striking first. However, if the crisis is prolonged the alert status may degrade with a corresponding advantage in going first.
inducing a pre-emptive strike or by gradually expanding so that it slowly and almost imperceptibly becomes a general war.

Even at low levels local war will increase tensions. Both sides will become increasingly aware of the hostility between them, more aware of the possibility that all their disputes will be settled by force, and perhaps more prone to decide that general war has become so likely that it is time to strike. Finally, literal accidents of various kinds (explosion of nuclear weapons, for example) are much more likely during a period of local war, and such accidents are more likely to trigger general war during a period of tension.

Further, one or both sides may deliberately risk the danger of inadvertent war. One side may feel that the situation on the local battlefield is going so badly, and defeat is so intolerable, that the only alternative is to take measures (e.g., explode a nuclear weapon or alert its strategic forces) which increase the possibility that general war will occur even though neither side wants it. The country doing this would presumably do so not to induce pre-emption, but to force the other side to back down. If this fails, the desperate side might come to believe that the political cost of not pre-empting had become so great that it had no choice but to do so.

**DELIBERATE CATALYTIC ACTION**

**Nth Country**

General war may be triggered by an action of a third country deliberately designed to lead one or both sides to believe that a general war had begun. It is difficult to conceive of the circumstances in which a minor power would decide to try to enhance its security by precipitating general war with all the risks involved. Even with a nuclear arsenal it would be difficult for an Nth power to simulate an attack. If the effort were made and failed, the smaller power would probably suffer drastic consequences. Faking a single nuclear accident, while easy, is much less likely to succeed. But perhaps more important, the

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4. Both sides are even less likely to take a single nuclear explosion as a symbol that general war has started if it is known that third countries have nuclear capabilities.
consequences of general war are likely to look so unpredictable that it will be difficult, if not impossible, for any small power to conclude that it is likely to gain from it.

Subordinate Military Commander

Not only might an Nth power seek to serve as a catalyst for general war, but so might a subordinate commander within the armed forces of a major power. This danger has been so graphically depicted in a short novel, Red Alert, that it seems unnecessary to elaborate on how it might be done. Suffice it to say that the local commander must command enough forces to lead one side to believe that war had become very likely. He might do this by disguising his action as a full-scale authorized attack, or, like the "hero" of Red Alert, by committing enough of the force so that his own government decides that it must unleash the rest of its forces or face disastrous political or military consequences.

SABOTAGE, MISCHIEF, AND ESPIONAGE

Acts of sabotage or mischief may precipitate general war even though this may not have been the intention of the perpetrator. War might result because the act fails or because it succeeds, but with unintended consequences. Actions of this kind might include: spoofing radar screens, blowing up an enemy nuclear stockpile, interfering with communications systems, and provocative overflights.

Such actions might have a variety of motives. Gaining intelligence is one. Sabotage is another. Exploding a nuclear weapon and attempting to make it appear to be an accident in the other side's operations might be aimed at strengthening the general pressures for unilateral disarmament or more particularly, for example, at forcing the cancellation of airborne alert.6


With a few major exceptions both sides have been remarkably restrained in carrying out such activities, perhaps because of the danger of triggering general war and because they recognize that what one side does the other probably can do and that they are both better off if both abstain.  

ACCIDENTS

The term "accidental war" is frequently used to refer to all "inadvertent wars;" it seems more convenient however to limit the use of the term to literal accidents, i.e., events which occur without anyone wanting them to. There are a number of such events that might lead to decisions to initiate a general war. Among the possibilities which have been discussed are: a nuclear explosion; and geese, the moon, or meteorites on a radar screen. The kinds of accidents that may cause general war have one thing in common--they present ambiguous evidence to one or both sides which suggests that general war may have started or is about to start (or they may convince one side that the other will conclude that general war is about to begin). It is difficult to see how an accident of this kind could lead to war unless one side were depending on tactical warning to fire its missiles or to move its planes into a much less vulnerable but more provocative posture. One of the best descriptions of this danger was provided by the Soviet Representative to the United Nations in a Security Council debate of 21 April 1958:

American generals refer to the fact that up to the present time the American planes have taken off on their flights and returned to their bases as soon as it became clear that it was a case of false alarm. But what would happen if American military personnel observing their radar screens are not able in time to determine that a flying meteor is not a guided missile and that a flight of geese is not a flight of bombers? Then the American planes will continue their flight and will approach the borders of the Soviet Union.

But in such a case the need to insure the security of the Soviet people would require the USSR to make immediate retaliatory measures to eliminate the oncoming

7. This reciprocal abstention from various forms of sabotage, mischief, and intelligence is one of the most important existing arms control arrangements.
threat. The Soviet Government would like to hope that matters will not go so far.

In order to get a clearer idea of the extremely dangerous character of acts of the United States that are dangerous to peace, it is enough to ask the question what would happen if the military Air Force of the Soviet Union began to act in the same way as the American Air Force is now acting? After all, Soviet radar screens also show from time to time blips which are caused by the flight of meteors or electronic interference. If in such cases Soviet aircraft also flew out carrying atom and hydrogen bombs in the direction of the United States and its bases in other states, what situation would arise?

The air fleets of both sides, having observed each other, having discerned each other somewhere over the Arctic wastes or in some other place, apparently would draw the conclusion natural under those circumstances, that a real enemy attack was taking place. Then the world would inevitably be plunged into the hurricane of atomic war. (New York Times, April 22, 1958)

If both sides depended on the capacity of their forces to survive attack, accidents would be much less likely to trigger general war.
CHAPTER III

THE ROLE OF ARMS CONTROL IN REDUCING THE LIKELIHOOD AND DANGER OF "TRIGGERING" EVENTS

The danger of inadvertent general war precipitated by one or a combination of the actions just reviewed, though exaggerated in some discussions, is likely to be a serious one over the coming decade. Both unilateral military policy and arms control agreements (formal or informal) can reduce this danger.

There are two approaches by which this aim can be attained. The first involves measures—taken unilaterally or by agreement—which reduce the likelihood of the occurrence of the events discussed above.8 The second involves measures to reduce the likelihood that such events, if they do occur, will actually lead to general war. In this section, various arms control measures will be discussed which decrease the likelihood of a particular triggering event occurring or the danger if it does occur. The following chapter will discuss more general measures to reduce the danger of pre-emption.

Measures to reduce the likelihood of political crises are beyond the scope of this paper. However, as was noted above, crises are dangerous precisely because the other "triggering"

8. For an extensive discussion of the factors that need to be considered in the evaluation of any arms control proposal, see Schelling and Halperin, Strategy and Arms Control, pp. 43-74.
events discussed above are more likely to lead to inadvertent general war if they occur during a crisis. Hence actions which reduce the likelihood of these events also reduce the seriousness of the crisis. Three types of arms control measures will be discussed below: local war measures, atom-free zones, and accident and mischief prevention. Atom-free zones are aimed at reducing the danger of local war and Nth country catalytic action. No specific measures are discussed which deal with the subordinate commander problem. In the section on accident and mischief prevention, agreements which deal with literal accidents as well as sabotage, mischief, and espionage are discussed.

LOCAL WAR MEASURES

Arms control agreements aimed at preventing local wars from leading to inadvertent general war may seek to prevent the outbreak of any local violence or aim at restricting the level of local violence in ways that make it less likely that the violence will trigger a pre-emptive general war. It would probably be impossible to put into operation an arms control measure aimed at preventing local violence, because it is by no means clear that both sides have a common or an equal interest in its prevention. As Chairman Khrushchev has recently made clear, the Soviet Union is determined to prevent local wars which are Western-inspired. But the Communists also assert the inevitable necessity of Communist-sponsored local warfare, particularly internal revolutions. Likewise, the United States seems determined to try to prevent the Communist use of force in local areas, but, to understate the case somewhat, was not prepared to stop the invasion of Cuba by Cuban rebels.

Thus, although at certain times one or more major powers may have a positive incentive to initiate or to encourage local aggression or internal revolution, there may be other times and places when there is a joint interest in reducing the likelihood of local war. This may be particularly true of those local wars which might start even though neither major power intends them to.

9. See, for example, Khrushchev's speech on the November 1960 Communist Party Conference. The speech has been reprinted widely, e.g., The Current Digest of the Soviet Press, XIII (February 15 and 22, 1961). The most convenient reprinting is in a pamphlet edited by Burton Marshall and published by the Washington Center of Foreign Policy Research. The text of the Conference statement is also included.
If an undesired local war might be started by an "incident," measures to avoid "incidents" might be jointly pursued. If particular minor power members of the major power blocs might initiate war that would drag the major powers in, measures to restrain allies might be jointly undertaken; if the mere existence of military forces in particular areas increases the likelihood of both sides being drawn into military action that they may both deplore, measures to synchronize withdrawal may be possible. In particular, the major powers are likely to have a joint interest in preventing wars among minor, uncommitted nations.

Measures to prevent local wars might be informal or formal. A joint arms embargo to a particular region might result from a policy announced by one side, to refrain from shipping arms if the other also refrains, or from an international treaty. Arms embargoes may relate to particular countries (e.g., Laos) or continents (e.g., Africa). They may deal with all weapons or just certain ones.

Many potential arms control measures to reduce the likelihood of local war would require deliberate and recognizable major political settlements. Such proposals as disengagement in Europe, joint neutralization of particular countries, and boundary settlements clearly involve an element of arms control designed to reduce the dangers of local war, but they are essentially political settlements with a small arms control component. Some arms control measures designed to prevent local war without requiring political settlements might prove to be more easily carried out than arrangements dealing directly with the strategic balance itself. Cooperation in this area might be informal and produce less difficult inspection and regulation problems. Further, the joint interest might be easier to embody in a concrete agreement.

Agreements to limit local war may be more likely than agreements to reduce the possibility of local war. Arms control agreements or informal understandings designed to establish limits during a local war could take a number of forms. The process of limiting war very likely will require some explicit or tacit bargaining, and arms understandings reached before the war may facilitate the process. Prewar arrangements may simply consist of United States-Soviet discussions (formal or more likely very informal) of limited war. Such communication of views would make

10. The Russians may some day be interested in such agreements to prevent the Chinese from inspiring or undertaking local wars.
it clear to each side that the other accepted the notion of the limited use of force in the nuclear-missile age. It could mean that, if a limited war did break out, neither would regard it necessarily as a strategic attack that meant the initiation of general war. Such prewar discussion might also facilitate the explicit or implicit negotiations which might take place after the war broke out. Unilateral discussion of limited war such as has been going on in the United States can also serve this function by making American attitudes towards limited war clear to the Soviet Union.

The danger of measures designed to keep local wars limited must be recognized. Just as agreements to stabilize the strategic balance may make local wars more likely, so agreements which serve to facilitate keeping local wars limited may make the outbreak of such wars more likely. If one of the factors that prevent local wars is the fear of both sides that general war will be precipitated thereby, agreements which make such an explosion less likely may make local wars more likely. But this could well be a reasonable price to pay for reducing the probability that local wars will not trigger general war.

Arms control agreements and understandings might be designed to establish specific rules under which a local war would be fought. The United States might seek to use arms control negotiations and agreements to help establish the kinds of rules under which it wishes to fight a local war. This involves two kinds of problems. First, what rules are most likely to contribute to reducing the danger of triggering a general war? Second, what rules are likely to be to the military advantage of the US in pursuing its objectives in a local war? Although a number of pressures are likely to affect the decision of either side to expand or limit a local war or to initiate a pre-emptive strike, certain broad, dramatic kinds of limits are likely to be most possible to agree on; and these limits are probably the most important in reducing the danger that a local war will trigger a pre-emptive strike.11 There have been at least four major limits

11. For a discussion of the kinds of limits which are most likely to form the basis of tacit bargaining during a limited war, see Thomas C. Schelling, "Bargaining, Communication, and Limited War," The Journal of Conflict Resolution, March 1957, pp. 19-36.
which have been observed in all local wars fought since the Second World War:

1. The non-use of nuclear weapons.
2. The abstention from confrontation in battle of Soviet and American troops.\(^{12}\)
3. The recognition as a sanctuary of supply lines outside the immediate battlefield area.
4. The recognition as a sanctuary of the homelands of the major powers.

It would seem that the observance of these four limits, plus the confinement of the war to a relatively small geographic area, significantly reduces the danger of local war triggering a strategic war. Perhaps the best way of establishing these kinds of rules is to observe them. In a sense, the United States and the Soviet Union are current participants in powerful arms control agreements which limit the use of force in these four ways, as well as in others. The continued observance of the rules by both sides while they support the use of force reinforces the expectation of both that these limits will continue to be preserved. Insofar as each side is interested in establishing limits and observing them, it can have a reasonable expectation that the other side will reciprocate. There is another reason why the observance of these limits is likely to be important and compelling. Both sides have learned through experience that if these rules are observed a local war can remain limited. The breaking of one of these limits would be a dramatic point in any limited war. Both sides would ask themselves whether the breaking of the limit meant that general war had become inevitable and that the only prudent course would be to strike first.

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\(^{12}\) Both the United States and the Soviet Union have been very circumspect in committing their troops to a local war; thus a number of these wars have been fought without either American or Soviet troops participating. An agreement might be sought to reinforce this rule as well as the more limited rule that major power troops do not confront each other in battle. The latter rule would give a great premium to the side first committing its forces.
Having established these limits by observing them, both sides may be in somewhat of a strait jacket. They may be unable to break the limits without creating such a danger of inadvertent general war that it is not worth the risk. Given these conditions, it may be desirable for both sides to reinforce further these four limits on local war in an attempt to make it even less likely that they will be broken. But there is a substantial cost involved. Either by deliberate decision of one or both sides, or inadvertently, one of these limits may be crossed in a local war and a grave danger of general war created. To reinforce these limits, therefore, may increase the risk of general war, if the limits are broken.

The question of the desirability or undesirability of strengthening the nuclear--non-nuclear line illustrates the problems involved in evaluating arms control proposals in local war. The United States must first determine if the non-use of nuclear weapons is in its interest13 and secondly, if it does so determine, it must decide which arms control proposals, singly or in a group, will contribute to non-use without jeopardizing other security objectives.14


ATOM-FREE ZONES

Atom-free zones have been proposed for both Europe\textsuperscript{15} and the Far East.\textsuperscript{16} Such proposals would have little effect on military capability; they presumably would ban the stationing of atomic weapons—and perhaps of launching vehicles which could only be used with atomic weapons—in particular areas or zones. Since the United States and presumably the Soviets are developing dual-purpose launching equipment, this withdrawal would probably not be a serious check. And since nuclear weapons presumably could be fired into the area of combat by ballistic missiles or by tactical planes from outside the area of combat, agreements on atom-free zones would not in themselves, from a military standpoint, reduce the likelihood that nuclear weapons would be used in a local war or, in fact, reduce the effectiveness with which they could be used, even very quickly. However, the conclusion of such an agreement might have some implications which reduce the likelihood that nuclear weapons would be used in a limited war and hence would reduce the likelihood that the war would expand beyond the point that brought on pre-emption.

An agreement on an atom-free zone might halt the spread of nuclear weapons. It would also keep such weapons out of the hands of troops on the front lines. It is vitally important not to have nuclear weapons with troops which can be overrun in the early days of battle. Even if such troops have strict orders not to use atomic weapons without authorization, it is very likely that they would use them rather than allow themselves to be overrun and destroyed. Since there may be very strong political pressure from the Germans in NATO to station atomic weapons right in the front lines, an atom-free zone agreement may be the only satisfactory way of altering this situation.\textsuperscript{17}

\textsuperscript{15}At least some versions of the Rapacki plan are proposals for atom-free zones rather than the withdrawal of troops.


\textsuperscript{17}Implied here and at several other points in the discussion is the notion that internationally negotiated arms control agreements may serve as a lever to force the United States and
Perhaps the major value of atom-free zone agreements, however, is that they would further highlight and sharpen the expectation that neither side would use nuclear weapons in a limited war. By signing such agreements, both sides might be in fact signaling to the other that, while they in fact anticipate the possible outbreak of violence in the area, they would not introduce the use of nuclear weapons in that area; they would not use nuclear weapons as a matter of course; and they would refrain from using them until the other side used them. Atom-free zone agreements would probably be an important and useful complement to other agreements aimed at neutralizing the use of nuclear weapons; and, even in the absence of such a complex of agreements, might be valuable in increasing the shared expectation that at least in certain areas, and, by inference, in other areas, nuclear weapons were not to be used.

ACCIDENT PREVENTION

Some measures for accident prevention may in fact increase the likelihood of an inadvertent general war by increasing the chances that an accident would lead to war. This may be because the agreement itself stigmatizes the occurrence of the accident (so that if it does occur, it appears not to be an accident), or it may be that the agreement in a general way causes the strategic forces of both sides to be more vulnerable and hence increases the likelihood of inadvertent general war. An example of both cases might be an agreement to take precautions to prevent accidental nuclear explosions. The hoped-for result of such an

its allies to take steps which are of value independent of the formal arms control agreement and even if taken unilaterally without reciprocation. This is not meant to imply that it is impossible to develop unilateral military policy along the necessary lines without an agreement; but two things are implied. One is simply that it may be more likely that these things will be accomplished if they are discussed and implemented in terms of arms control rather than unilateral military policy. The reasons for doing them may be clearer if one focuses on the dimension of military policy which involves cooperation with potential enemies. Secondly, the signing of an agreement may create excuses—and even a rationale—for the United States or the Soviet Union for resisting pressures from its allies. It sets up additional costs to them for not doing it, because they would be breaking an arms control agreement.
agreement would be to reduce the likelihood that an accident would occur, and reduce general nervousness on both sides about what might result from such an accident by lowering for both the expectation that the other will permit an accident to take place. But another unavoidable result would be that, in the event that a nuclear weapon did go off, both sides would be much more prone to believe that it was not an accident. Such agreements, by putting checks on the location and control of nuclear weapons, might also increase the vulnerability of both sides to attack. These risks, however, seem worth taking. It would probably be desirable for the United States to discuss with the Soviet Union in an informal way the whole range of possible literal accidents and to discuss an exchange of information about ways to reduce this likelihood. This kind of negotiating, as many of the others to be discussed below, would have to be extremely informal, perhaps even unofficial.

An agreement to ban airborne alerts might provide another example of the second problem, an arms control agreement which reduced the likelihood of an accident while increasing the danger of general war. An airborne alert increases the likelihood of accidents, and perhaps the likelihood of nuclear accidents, simply by increasing the number of flying hours and the number of times that nuclear weapons are carried aloft. However, it may be that some forms of airborne alert--those which involve sending planes away from the enemy territory and not towards it--are a very important part of an invulnerable strategic posture, a strategic posture which involves taking no menacing steps in the event that one suspects an attack. A proper kind of airborne alert might be reassuring rather than provocative during a crisis and might make a substantial contribution to reducing the likelihood of pre-emptive war. Here a proper balancing between the two goals, reducing the likelihood of accidents and reducing the likelihood that accidents would lead to inadvertent general war, is more difficult. It would depend in part upon how likely accidents are during an airborne alert; whether other measures can be taken to reduce the seriousness of the accidents; and finally, whether an airborne alert needs to be an important component of an invulnerable strategic system.

Exchanges of warning facilities between the two sides; the construction of radar on the other side's territory, or close to the other side's territory; or other facilities for last-minute tactical intelligence might reduce the incidence of false-alarm type accidents by increasing the reliability of warning systems and improving the flow of evidence to each side. If both sides
came to depend less on their own radar screens, which are subject to accidents, and more on less accident-prone strategic or tactical warning systems set up by agreement, the danger of war because of an accidental reading may be substantially reduced. Some increased warning facilities, however, might also increase the false alarm rate and some superficially attractive schemes of mutual warning probably could not communicate rapidly enough to be of use within the very short span of time. It may be that the thirty-minute delivery period of intercontinental ballistic missiles has eliminated the possibility of using alternative agreed warning systems to supplement warning systems which are prone to accidents.

There is also a possibility of agreements by which both sides refrain from kinds of activities which would spoof or interfere with radar systems. We now seem to have a very important informal arms control agreement in effect between the Soviet Union and the United States by which each refrains from spoofing radar screens, from testing them by flying planes over them, and from seeking in other ways to discover how well they work. As other measures are taken which either unilaterally or by agreement stabilize the strategic balance and make it less likely that missiles will be fired on ambiguous evidence, it may be that, without a formal agreement, both sides may try to spoof radar systems by flying into them or to interfere with communication systems. It therefore may be desirable to try to solidify the present status quo while it still looks very dangerous for both sides to carry on such activities. Such a formal agreement in effect might serve to reduce the likelihood that the informal agreement would be broken once the strategic system is stabilized.
CHAPTER IV

REDDUCING THE PRESSURE TO PRE-EMPT

The situations discussed above are likely to lead to general war only if there is an advantage in striking first. Only if this advantage is believed to exist, or if strategic doctrine reflects the belief that it exists, is it likely that inadvertent general war could take place. Strategic stability of the kind assumed in this paper would still imply a great premium on launching a first strike if war became inevitable. Thus unilateral or arms control measures which would reduce the advantage of launching a first strike would do much to reduce the danger of inadvertent (as well as premeditated) general war.

If neither side perceives an advantage in striking first, its forces need not be set on a hairline trigger. Thus cooperative or unilateral measures to improve the ability of each side's strategic forces to survive an attack, and to remain under good command and control under attack, might slow down the tempo of decisions. Slowing down decisions on the brink of war not only means that either side can, if it so wishes, take more time to ascertain whether or not the war has already started; it also means that each can impute less impetuous action to the other and reduce thereby the need for its own quick reaction. Slowing down the tempo of decisions thus becomes possible. However, such actions would reduce the credibility of American threats to strike first.

If the United States wants to use the threat of general war as an explicit deterrent in dealing with local war situations and political crises, it probably cannot subscribe to the kinds of
arms control proposals to be discussed below. However, should
the United States decide that it is prepared to deal with these
other situations without increasing the threat of general war
(recognizing that this threat will always exist to some degree
no matter what arms control measures are agreed upon), the way
may be open for measures which reduce the likelihood that any
external events will lead to general war. Three possible measures
will be discussed: direct Soviet-American communication systems,
crisis agreements, and slow-reacting strategic systems.

DIRECT SOVIET-AMERICAN COMMUNICATION SYSTEMS

It appears, from unclassified sources, that there is not at
present any official means of direct communication between the
Kremlin and the White House in the event of a major crisis. Such
a direct communication system might be of great value in reducing
the likelihood that various events could trigger inadvertent war.
It would symbolize for both sides their desire to be restrained
in a crisis, their desire not to allow events to drag them into
war, and it would provide an important means for each side to
reassure the other that war was not about to start. It would
enable them to explain a false alarm or to agree to wait and to
discover the cause of a particular event. Clearly such a system
might be abused to communicate threats and might increase the
expectation of one side that a first strike could be successful
by paralyzing the will of the opponent. On the other hand, such
a communication system may be crucial for both sides if they
desire to limit general war.18 On balance, it would seem that
such a communication system is worthwhile and desirable.

CRISIS AGREEMENTS

The value of crisis agreements is that they would imply the
desire of both sides not to let a crisis lead to inadvertent
general war. Specifically, preparing-for-crisis arms control
would suggest planning and discussion between the two sides of
possible inspection schemes for reassuring each other that could
go into effect in a crisis, but would not be politically tenable
during peacetime. Both sides might discuss ways in which

18. For a discussion of the motives that might lead both
sides to want to limit general war, see Schelling and Halperin,
Strategy and Arms Control, pp. 21-24.
inspection could be carried on, ways in which inspection could reassure the other--without actually agreeing to institute the inspection during a non-crisis period.19

The United States might unilaterally undertake to train a group of inspectors who would be available in crisis situations and to develop equipment which might be valuable during a crisis. The Soviets might be encouraged to do likewise. The whole area of crisis arms control requires a good deal of imaginative study. What kind of stand-by agreements can we make with the Russians, or what kind of unilateral action can we take which would facilitate the sudden enactment of arms control during a crisis in which each side wanted desperately to assure the other that it is not about to initiate nuclear war?

SLOW-REACTING STRATEGIC SYSTEMS

Even if, on the basis of technical strategic analysis, there does not appear to be any advantage to striking first, it may still appear to the policy-maker that there is a major advantage in carrying out a controlled, well-coordinated attack. Even if it is only the sense of being in control of the situation, of being master of one's moves, there may be strong imperatives to "get on with" the war and not wait for someone else to begin it. This suggests the vital importance of developing in advance of a crisis slow-reacting strategic systems (systems which clearly depend for their survival not on attacking first, but on their ability to withstand attack), and of developing well-protected command and control systems which suggest to the leading policy-making officials that they will in fact be able to control their strategic forces even after an attack. This is important because it should reduce the strategic incentives for striking first as well as the internal pressures on policy-makers to strike first. In fact, some kinds of measures, whether adopted unilaterally or by agreement, may make it impossible to strike quickly. A major, and perhaps the principal, way in which the danger of inadvertent general war can be substantially reduced is by the adoption by both sides of slow-reacting strategic forces.

The essence of this system is that it does not depend on warning for its survival, and that, if it gets warning, it uses it in ways which do not decrease the time it would take to attack the other side. Strategic forces in this situation depend for their effectiveness on their survivability. This survivability may be the result of hardening or mobility. What is ruled out are systems of invulnerability which depend upon warning, such as alert bombers which depend on getting in the air and heading towards the Soviet Union for their protection. It would not rule out systems that maintain aircraft on airborne alert, particularly if their planes flew in an area further away from the Soviet Union than their home bases, over the Caribbean and South America, rather than Canada and Alaska. Such a system would also require effective command-control over the forces which could survive a nuclear attack. It would depend on the civilian leadership of the government being confident it could survive a nuclear attack so it could effectively command its forces, determine what targets they should attack, and which forces should be used. And it would require that, should one side expect nuclear war, it would not do anything provocative. Ideally, a slow-reacting strategic system should make it possible to do absolutely nothing even if one suspects that war is about to come. The strategic system, including the command and control apparatus, should be so protected at all times that nothing needs to be done which suggests that one thinks that war is about to break out. This is probably impossible; at the very least, the leaders of the government may want to move to their shelters. There may be operations which make planes and missiles more protected but which cannot be maintained at all times. It is vitally important that such measures not be provocative, that they not increase the speed with which a first strike can be carried out, and that they clearly increase the invulnerability of the forces rather than their effectiveness to strike.

A slow-reacting strategic posture does not require, but is significantly enhanced by, both sides moving their strategic systems away from major population centers and both sides recognizing that population centers will not be targets at least in the early stages of a general war.

Even this brief outline of the slow-reacting posture suggests that, in addition to reducing the danger of inadvertent war, it has major implications for the kind of general war strategy that either country adopts. It clearly rules out strategies which depend on massive strategic strikes, particularly the policy of massive retaliation, and it probably significantly reduces the
potency of the threat of engaging in limited war in the sense that it may bring on an inadvertent general war. It probably does not rule out, and may in fact make more credible, a policy of limited retaliation. It probably necessitates a major reliance on an effective local war capability for the defense of third areas. The United States could probably proceed on its own a long way, though not all the way, towards implementation of such a policy without Russian cooperation. However, it is important to note that the effectiveness of the adoption of such a policy depends upon its recognition by the Soviet Union. Little is accomplished by developing slow-reacting strategic forces unless the other side recognized their implications. Unless we can be sure that the Soviets recognize that we will not pre-empt and that there is no incentive for them to pre-empt, the danger of pre-emption may remain very great if a "triggering" event occurs. It is only if we know that the Soviets recognize that we have adopted a slow-reacting strategic posture and recognize the implications of it that we have in fact broken the spiral of expectation which might cause an event to trigger an inadvertent general war. The amount of "agreement" here, then, could be minimal: simply Soviet recognition of the implications of the posture which the United States has adopted.

Much more could be accomplished, however, if both sides could agree on the necessity to adopt slow-reacting strategic systems. Simply an informal discussion of the problem—an exchange of views by the two sides concerning the means of adopting such systems, and acceptance by the two sides of the need to adopt such systems—would go a long way toward damping the danger of inadvertent general war. Each side would, in effect, have exchanged an understanding with the other, an agreement not to trigger such a war, not to take measures in the event of a crisis or accident or catalytic action which might move both sides over the brink of war by beginning the spiral of pre-emptive expectation.

The arms control agreement might go further in that each side would agree to explain to the other the ways in which it modified its strategic forces to make them slow-reacting, invulnerable, and less accident-prone. Such a discussion could probably be carried on so as not to jeopardize the invulnerability of the forces. Finally, there might be some kinds of international inspection machinery or an exchange of inspection facilities which would further enhance the credibility of the slow-reacting strategic forces. One of the more interesting examples of this would be an agreement to keep submarines in home
territory. Such an agreement could probably be reached in a way that would not reveal the location of the submarines. Before pressing for this kind of inspection agreement it would be necessary to determine how much more would be gained by the adoption of such systems. It is probably desirable at least in the initial stages of discussion with the Soviets not to raise the question of these kinds of inspection procedures. If, on the basis of informal discussion and agreement, it appears that the Soviets are seriously interested in the mutual adoption of slow-reacting strategic systems, then it might be appropriate to raise with them the possibility of exchanging inspection systems. It might, however, be stressed that inspection was not absolutely necessary, that the establishment of at least the informal agreement did not depend on inspection systems, and that the problem was to work out inspection systems which increased security without exposing the Soviets to espionage or internal political difficulties. The United States might, in fact, want to invite the Soviets to design the inspection procedures if they seem to be interested in them.

The agreement sketched here perhaps will strike some readers as not being arms control (and even less "disarmament"). It is clearly not something that one negotiates with pomp and circumstance in the Palais des Nations in Geneva, and not something to which 10 or 99 nations could put their signatures.

It is in fact probably something that cannot, and should not, be reduced to paper. It depends rather on an informal dialogue at some level between the United States and the Soviet Union. Such an agreement might not be easy to achieve and the Soviets might not even be willing to engage in such a dialogue, but the problem is different from that of negotiating formal agreements. There may be no connection between the Soviets' willingness to negotiate seriously in one of these arenas and their unwillingness to negotiate seriously in the other.

It may be desirable, to enhance this distinction, not to refer to the measures proposed in this memorandum as "disarmament" or even "arms control," but to develop some new terminology which does not suggest to the Soviets that we propose these as a substitute for disarmament negotiations. It may be that we are both so committed to disarmament as a propaganda game that we cannot use it for any other purpose, and that the kind of serious agreement of a technical nature suggested here can be carried on as effective serious business only if neither side thinks of it as part of the traditional disarmament game.

25