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United States National Security  
Policy and Nuclear Weapons

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UNITED STATES NATIONAL SECURITY

POLICY AND NUCLEAR WEAPONS

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ABSTRACT

The first part of this paper is a brief critical analysis of present U.S. national security policy. The roles of fundamental elements of that policy are considered: escalation, deterrence, force structure, technology, nuclear weapons, and arms control. The second part of the paper proposes a new policy that would emphasize the deterrent value of defensive theater forces to protect allies and that would suppress threats of retaliation as the ultimate deterrent to territorial aggression.

I. INTRODUCTION

This discussion deals with two closely related topics. The first has to do with the fact that present U.S. security policy provides no way to accommodate either the economic realities that constrain us or the reality of the changed strategic balance. The second topic is a description of a new policy that would face those realities without sacrificing vital national interests.

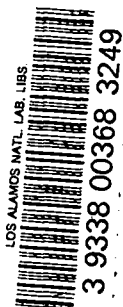
II. ANALYSIS OF PRESENT POLICY

We begin by recalling that Mr. Schlesinger's tenure as Secretary of Defense has been marked by proposed changes in strategic doctrine and by a reaffirmation of the U.S. position supporting a strong conventional defense of Western Europe. The exact nature of the changes in strategic forces required to provide additional options for the U.S. to choose from in a crisis is still a controversial subject, and we have not heard much from the Secretary on his views of the implications of these changes for U.S. theater nuclear forces. There have been recent indications that changes in the numbers of weapons the U.S. has deployed in overseas theaters are under consideration. Whether these

changes would be accompanied by a more persuasive description of the role of theater nuclear weapons remains to be seen. If no better expression of this role is forthcoming than is to be found in present statements of policy with regard to responses to aggression against U.S. allies, there are grounds for serious concern. We now turn to a discussion of these grounds.

A. Escalation

The cornerstone of current U.S. military strategy is the assumed ability of our forces to fight at any level of conflict, whether the level is chosen by us or by potential enemies. How this capability would be controlled in a crisis is a frightening thing for a rational President to ponder. He must recognize that the very existence of the nation is his paramount concern, and that he cannot justify the release of U.S. military forces, particularly nuclear weapons, if that release unduly jeopardizes national survival. This consideration explains the real reason for firebreaks (and our Army keenly appreciates this reason), and explains why we have a firebreak between the use of conventional forces



and tactical nuclear forces. We should add that the same reasoning severely inhibits the commitment of even conventional forces. We thus have every reason to expect that a major conflict would result in a political-military disaster because needed forces would not be released. There are some for whom the President's prudence is not an issue, who hold that we have a continuum of force, that control of that force would be precise enough to stop escalation at any point, that the President need not have the assurance of a clear distinction between the use of nuclear weapons on the battlefield and the use of nuclear weapons for wider purposes. We strongly disagree.

We recognize the widely held belief that a threat of escalation is necessary to deter aggression against our allies. Again, we must disagree. Our threat simply cannot be implemented unless, God forbid, a U.S. President is willing to stake our survival on that response when the conflict has involved no direct attack on the U.S. For these reasons and others to be discussed, we believe that a philosophy of deterrence based on deliberate escalation will not work: it is dangerous; it is unnecessary; it introduces extraordinary complications; it implies a costly force. We would discard the philosophy.

#### B. Deterrence

Deterrence of political or military aggression is a product of two factors: the manifest capability of our force and the assurance, particularly in the mind of the aggressor, that the force will be used if challenged. Because of the changing strategic balance, we contend that our NATO force is losing whatever deterrent value these factors might have had. At the same time, we believe that a theater force can probably be defined, within acceptable constraints, that would afford a strong deterrent.

#### C. Force Structure Problems

The fundamental assumption on which the U.S. has based the structuring of its present theater forces, and which accounts primarily for their very high costs, is that a major conflict will have a conventional phase. This means, presumably, that we are prepared for both of two eventualities. One is the mobilization and deployment of many millions of men to conduct a war distinguishable from World War II

only by the greater destructiveness of the weapons used, all obtained, of course, at staggeringly higher costs. If a major conflict takes this form, presently juxtaposed forces should be regarded as mere vanguards whose present relative strengths are irrelevant, and whose costs are only tokens of what actual conflicts would require. The other eventuality, to be faced if conventional forces prove to be inadequate to prevent successful aggression, would call for us to exercise nuclear options with forces implicitly structured for conventional war. Just how using nuclear weapons would help in a deteriorating military situation has never been explained, and perhaps this is why much is made of our willingness to escalate. In the meantime, first use of nuclear weapons by an aggressor, to which present U.S. and allied forces in their conventional posture are extremely vulnerable, is assumed to be effectively deterred by our promise to retaliate with nuclear weapons regardless of risk to our own survival. The logic behind our present theater forces is thus seen to be based on dubious assumptions that we believe are overdue for strenuous challenge.

#### D. Role of Technology

Technology has a role to play in resolving this political-military-economic problem. To play its proper role, technology must support a meaningful strategy. Unfortunately, technology can induce a false sense of confidence in an inappropriate force; the U.S. may be facing that danger today. In fact, as nominal members of the technological community, we are distressed that "modernization" of weapons systems is too often seen as an end in itself.

#### E. Unresolved Role of Nuclear Weapons

We believe that no one has successfully analyzed, seriously and from first principles, the role of the nuclear weapon. We are concerned over the lack of definition of the roles assigned to the thousands of nuclear weapons deployed today with U.S. forces abroad; those of the Navy, for example, apart from the strategic missile launching submarines, and those deployed with tactical air forces. The Department of Defense has never explained convincingly how our forces would use battlefield weapons. In fact, cumbersome command structures, release procedures, and control processes severely limit their utility. We argue that nuclear weapons

must play a vital role and must be as responsive, when needed, as any conventional weapon. Admittedly, we must have some differences in the way we treat conventional and nuclear weapons but we should scrutinize these differences most carefully.

#### F. Arms Control

Whatever may be said of their utility, political or military, the destructive potential of strategic nuclear weapons creates a powerful incentive to reduce, and eventually to eliminate, the risk that these weapons might be used. The task would be difficult under any circumstances but is almost impossible with our current complex strategy, which defies a rational position at the conference table. In approaching the subject today, we frequently hear proposals to spend vast sums so we can achieve "positions of advantage" from which to bargain. An approach that focuses on the deterrent value of defensive theater forces, one that attempts to make the ground-gaining war machines of potential adversaries obsolete, might well allow strategic nuclear weapons to become the subject of fruitful arms control discussions, and the problems of nuclear arms races and proliferation might diminish.

### III. BASIS FOR A NEW POLICY

Let us now turn to the second part of this discussion, a proposal meeting the needs discussed in the previous paragraphs.

#### A. Approach

We base our proposed new policy on two distinct kinds of forces: a strategic force and theater forces. These forces must be essentially independent of each other so the President can release theater forces without fear that his action will precipitate the release of the strategic force or any of its elements. These release decisions will always involve the subjective view of the President, who will act to minimize the risk to national survival in wars that have not involved a direct attack on the U.S.

Both kinds of forces must meet economic and social constraints. To the degree possible, both must also have high survivability, utility, and insensitivity to the threat.

NATO is recognized as the principal theater of U.S. commitment. The examples set forth apply

specifically to the NATO German front, but the principles outlined would also apply in other theaters.

#### B. Additional Characteristics of the Strategic Force

The strategic force should be structured with the following points in mind:

- Allies and potential aggressors must see that the force can do what it is designed to do, namely, survive an initial attack and still perform its grisly mission.
- The U.S. should not declare its policy as to how or when it would use the force. The high deterrent value of this force lies in the havoc it would create if released.
- Although the strategic force must be able to perform its required task, it is vital that this task be continually reevaluated with the understanding that such forces can only exist in a metastable state. The human race cannot indefinitely tolerate a finite probability that these forces will be released. Even the release of a small fraction of a strategic force entails a high escalatory risk that is not pleasant to contemplate. In the long run, the hope of deterring war by such forces must be abandoned by all who possess them and be placed instead in theater forces.

#### C. Additional Characteristics of Theater Forces

Theater forces should be designed with the following points in mind:

- The forces are to assist our allies in defending and maintaining their borders with appropriate interdependent conventional and nuclear elements. The forces would have no heavy offensive maneuver elements, and no maneuver elements would be deployed forward. The forces would thus pose little threat of significant intrusion into enemy territory.
- To make the forces survivable, the detection of all lucrative theater military targets for aggressor nuclear weapons would be made as difficult as possible through dispersal, concealment, and mobility. There would be no force elements in the theater not required for defense. Defensive, survivable forces would provide little incentive or opportunity for a preemptive enemy attack.
- The primary mission of the nuclear component of the forces would be to stop massed attacks; the conventional component would cope with lesser

threats. Both would operate in concert against invading elements only. The operational intent would be to frustrate an invasion attempt from the outset.

- The forces would perform their mission and hold collateral damage from their own actions to a level acceptable to the allies affected. Collateral damage from enemy operations is obviously beyond allied control, but a survivable disposition of allied forces would degrade the utility of aggressor nuclear weapons. Moreover, the aggressor would not be allowed to feel confident that he could destroy the theater force without at the same time totally destroying his prize. Of course, an aggressor could choose to use high-yield nuclear weapons to destroy a major part of the theater force and accept the resulting devastation of wide areas of allied territory. The response to such a tactic would be to use the surviving elements of the theater force to contain the aggressor within the devastated areas, leaving him with the problem of taking the remainder of his objective intact. A possible additional response to a wide use of high-yield weapons by the aggressor would be to deny the devastated areas to the aggressor by using high-yield nuclear weapons incorporated in our theater forces for that purpose. The capability to make the latter response would have to be subject to a number of constraints. First of all, that response could only be made at the explicit request of the political leadership of the ally whose territory was affected. Secondly, the delivery systems for the high-yield nuclear weapons would have to present no target set that would be vulnerable to a preemptive attack by the aggressor. Thirdly, to be a credible deterrent to massive use of high-yield nuclear weapons by the aggressor, the systems would have to be clearly available to the threatened ally without posing an unacceptable risk to the ally providing the systems, i.e., the systems would have to be unambiguously identified as part of the theater force. In brief, the decision to deploy such systems in theater forces can be made only by the allies whose essential national interests would be involved in providing, deploying, or using the systems.

- Release of theater forces to meet threats to the defense must be timely to permit continuous and appropriate engagement of any intruder on allied

territory. To this end, close peacetime consultation with allies, individually and collectively, must produce agreements on the conditions under which nuclear defensive elements would be released. The conditions must have no ambiguity that would jeopardize timely and effective defensive action.

- The theater forces must provide for maximum deterrence of any aggressor hoping to seize territory of our allies. They must therefore inspire confidence in our allies that their territory can be effectively defended, and must deny confidence to potential aggressors.

#### D. The Structure of a Theater Force

Defensive theater forces would differ in structure from theater to theater depending on particular theater conditions. For example, the force defending the NATO central region would be optimized for defensive operations, involving both nuclear and conventional weapons, and would be able to frustrate any invasion attempt without the need for extensive mobilization and reinforcement. U.S. and allied contributions to this NATO force would consist of the following elements:

- Substantial numbers of small, highly mobile units armed with conventional weapons to deny success of dispersed attacks by infiltrating aggressor units or by air-delivered invading elements. The bulk of these forces would be drawn from the militia, appropriately organized, equipped, and trained for this mission. There may well be other roles for the militia, such as local defense of cities throughout the nation.

- Observer teams with sensory aids to locate enemy maneuver units as they cross the border and to call immediately for nuclear fires as required to disrupt attacks.

- Small protective units suitably armed to defend the observer teams against infiltrating enemy soldiers.

- Mobile launcher units equipped to respond quickly to requests with accurate delivery of terminally guided surface-to-surface missiles carrying low-yield nuclear warheads. The missiles would have sufficient range to give a suitable depth to the defense and to cover wide fronts.

- Large numbers of dispersed and highly concealed surface-to-air fire units to deny the

enemy close air support of his invading maneuver units and to counter airborne and air-mobile attacks.

- A command, control, and communications network decentralized to maximize real-time response and survivability.

- A supporting logistics structure to sustain the defense. This structure would also be widely dispersed and concealed for survivability and would not have the burden of providing for offensive operations in a protracted conflict.

Such a force would be relatively invulnerable. Its organization would be much simpler than that of the present NATO force in Central Europe, and would allow us to reduce the NATO standing professional force substantially while greatly increasing its effectiveness against both conventional and nuclear-supported attacks designed to gain West German territory.

Appropriate mixes of the same elements as described above also appear adequate to deter aggression in other areas of NATO and in other theaters. The total forces required would not necessarily be small but the cost of maintaining them would be far below present cost levels because NATO would rely much more on militia and reserve forces and would eliminate the requirements for massive conventional armaments. Furthermore, we would not have to plan for enormous force expansion to conduct World War II-like campaigns.

#### E. Nuclear Armament for the Theater Force

- The backbone of the arsenal, contained in the nuclear weapon delivery element, would be a cheap, limited range (about 75 km) terminally guided missile delivering a nuclear warhead of less than 1-kt yield. Although redundancy of system elements might ensure adequate survivability, the development and deployment of the missile may require more than one technological approach to avoid fielding a delivery system vulnerable to counter-measures. This delivery capability would always be "ready," dispersed, and located at sufficient depth to ensure concealment. It would offer few targets to the enemy and would be available to meet attacks as they were launched. The total number of missiles required in, say, the NATO theater would probably be comparable to the total number of nuclear weapons of all kinds deployed in Europe today.

- If requested by the FRG, and provided by its allies, the force would include systems that could deliver high-yield nuclear weapons into areas already devastated by high-yield Warsaw Pact nuclear weapons. These systems would have to be effectively invulnerable to preemptive attack by an aggressor.

- Detailed studies, particularly of areas outside Central Europe, might show that a successful defense against invasion would require supplementary nuclear weapons such as Davy Crockett-like systems, ADMs or earth penetrators. Any proposals for such weapons should be rigorously analyzed.

#### F. Analysis of Current Nuclear Weapon Stockpile for Theater Forces

The following analysis assesses the utility of our current nuclear weapon stockpile in Europe for implementing the strategy proposed above. We should first say, however, that we feel it would be a grave mistake to remove any of these systems from the stockpile without replacing them with systems better suited to a rational strategy. To the extent that present systems do provide a nuclear capability to NATO and thus pose a formidable obstacle to Soviet prediction of a favorable outcome of aggression in Europe, they are indispensable, though hardly optimum, as a deterrent to aggression. So long as NATO Europe is well aware that it lacks an effective defense, they are probably indispensable to the political cohesion of the Alliance by providing a visible link to U.S. strategic forces.

1. Atomic Demolition Munitions (ADMs). ADMs of appropriate low yield that are properly buried to minimize fallout could provide limited support to the proposed forces in specific areas of some theaters. The ADMs would be used to create obstacles that might slow an attack and give the defense more time to react. Since we already have ADMs and can superimpose them on any force structure, they can serve to crystallize political-military thought. If suitably refurbished to provide for multiple, simultaneous detonation, the SADM would fill the ADM requirement. The yields of the bulky MADM are too high.

2. 155-mm and 8-in. Nuclear Projectiles. Because the range of cannon artillery is inadequate to ensure depth, it does not ensure survivability to the defense or provide flexibility in covering wide

fronts in a nuclear defense. The artillery system does, however, incorporate the target acquisition capability, the communications, and the short response time needed to engage attacking units with nuclear weapons before the units close in force with the defense. Its disadvantages, in addition to short range, are the insufficient number of cannon to cover all the NATO central region, its commitment to conventional modes of employment (requiring large numbers of people), and its extensive use of special nuclear material. These disadvantages should be kept in mind when new projectiles are proposed.

3. Lance. Only the lowest yield of the Lance warhead would be useful in defense, and Lance does not have the required delivery accuracy. The small number of launchers that could be acquired within economic constraints would not make a crucial difference to the defense. The large number of people required for Lance units compounds the economic difficulty.

4. Nike-Hercules. The low-yield nuclear warheads of this system could be used very effectively in nuclear defense. The present command and control structure, however, could not accommodate the exercise of the system in this role. Further, the fixed locations of present sites make the system very vulnerable. Nevertheless, Nike-Hercules could be made to contribute a substantial interim capability to conduct nuclear defense.

5. Pershing. Because we can only use the Pershing system against fixed targets, it has no application in the proposed theater defenses. Although it could be used to deliver high-yield warheads into devastated areas, it would be vulnerable to preemptive attack.

6. Air Delivered Nuclear Weapons. We find many reasons to be skeptical when we try to define a role for fighter-bomber aircraft in the nuclear defense. First, it would be extremely difficult to assert the independence of strategic and theater forces if the latter had aircraft capable of reaching the homelands of potentially aggressive nuclear powers. Also, aircraft would find it very difficult to survive in intensely hostile environments. Therefore their cost-effectiveness in the defense and their suitability for the high-yield response are both open to serious question. Finally, even if these objections are overcome, it must be recognized that the difficulties of coordinating air and ground activity would be enormously compounded on a nuclear battlefield.

#### IV. CONCLUSION

The principal long-range goal of our defense policy should be to deter aggression against our allies by deploying truly effective defenses against territorial encroachment, rather than by threatening retaliation that poses extreme risk to our own survival. Current high-level reviews of security policy should specifically recognize that the attitudes we held before the USSR built up its present stockpile of strategic nuclear weapons have no place in a sensible policy for the future.