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U. S. Strategic Nuclear Weapon Policy Do We Have One. Should There Be One

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U.S. STRATEGIC NUCLEAR WEAPON POLICY --
DO WE HAVE ONE?
SHOULD THERE BE ONE?

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I. INTRODUCTION

In his first Foreign Policy Report to the Congress (February 1970), President Nixon spelled out a distinct dissatisfaction with the strategic policy he had inherited from the previous Administration. He therefore mounted an effort to develop a new set of policy criteria which would more realistically reflect, as he described it, the "inescapable reality" of the Soviet strategic buildup, plus the emerging Chinese capabilities.

Toward expressing his unhappiness with the former policy, the President asked two questions: (1) Should a President, in the event of nuclear attack, be left with a single option of ordering the mass destruction of enemy civilians, in the face of the certainty that it would be followed by the mass slaughter of Americans; and (2) should the concept of assured destruction be narrowly defined and should it be the only measure of our ability to deter the variety of threats we may face?

Toward outlining his plans for developing and implementing a new strategic policy, he noted that:

"We reached general agreement within the government on four specific criteria for strategic sufficiency. These represent a significant intellectual advance. They provide for both adequacy and flexibility. They will be constantly reviewed in the light of a changing technology."

Subsequently, these criteria were openly divulged in the form of four basic planning factors for designing U.S. strategic forces. These factors were:

- o Maintaining an adequate second strike capability to deter an all-out surprise attack.
- o Providing no incentive for the Soviet Union to strike the United States first in a crisis.
- o Preventing the Soviet Union from gaining the ability to cause considerably greater destruction than the United States could inflict in a nuclear war.

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- o Defend against major damage from small attacks or accidental launches.

Unquestionably, the major and most important development which was initiated to help implement the realization of the sufficiency criteria was the Safeguard Program. As stated by President Nixon, the objectives of the Safeguard deployment were:

1. Protection of our land-based retaliatory forces against a direct attack by the Soviet Union.
2. Defense of the American people against the kind of nuclear attack which Communist China is likely to be able to mount within the decade.
3. Protection against the possibility of accidental attacks from any source.

In addition to Safeguard, the Administration, to counter the anticipated expansion of the Soviet ABM capability, placed high priority on MIRVing the Minuteman and Poseidon missile systems. Toward the end of this decade, the bulk of our strategic missiles will have this advanced feature and this has been held forth as a decided advantage for the U.S., vis-a-vis the presumably less-advanced Soviet MIRV program.

Whereas it is certainly true that the profound strategic changes of the late sixties called for a re-examination of U.S. strategic nuclear policies, it is also true that since the initial new look was taken in 1969 -- resulting in the establishment and adoption of the Sufficiency Criteria -- there have been a number of changes and events which, by almost any standard, can be regarded as equally profound.

Although in the years immediate to 1969 the U.S.-USSR strategic balance underwent substantial and highly significant change, during the three years subsequent to this time, the change was much more pronounced -- more so than during any other preceding period.

At the same time, the Safeguard Program commenced to fare poorly from the time it first was set forth. Its proposal by the Administration created a public and Congressional controversy which had no precedent in debates over U.S. strategic policy and associated weapon de-

velopments. Well before the extent of Safeguard was defined and constrained by the SALT I accords sharp limitations already had been imposed by the Congress and it was clear that the achievable levels of deployment would fall far short of original goals. Now, with the SALT I accords, while legally limited to two sites, ICBM defense and NCA defense, Safeguard seems, realistically, to be heading solely to the defense of one Minuteman site.

While in 1969 SALT was viewed with some optimism, the specific nature of possible agreement was a matter of sheer speculation and certainly the terms of agreement actually reached would not have represented initially preferred or even acceptable outcomes. Whereas SALT I received overwhelming national approval, the consequences of the accords, as they relate to U.S. strategic policy and, in particular, the viability of the Sufficiency Criteria, have received relatively little public attention.

In fact, the terms of SALT I have had a very major impact on the efficacy of the Sufficiency Criteria and, thus, on U.S. policy itself. If these terms, particularly the interim agreement on offensive weapons limitations, are to hold into the longer-range future, then to assume that U.S. policy, as now constituted, can be safely projected into this future seems fallacious. However, because of the impact of SALT I, it is fair to ask whether a present assessment of the Sufficiency Criteria gives clear indication that a defensible, rational, strategic nuclear policy now exists. For it is not at all clear that collectively these criteria have been implemented in any useful form and, if not, whether a re-embracement of assured destruction (in modified, from 1969, form) is at all acceptable or even desirable.

In discussing, last year, the problems of SALT and its relationship to those of NATO, Senator Henry M. Jackson stated the need for a new strategic doctrine: *

* *Credible Deterrence in a SALT Environment*, address by Senator Henry M. Jackson before the Military Committee of the North Atlantic Assembly, Bonn, Germany, November 1972.

"The United States, in consultation with its alliance partners, must develop a coherent strategic doctrine based on a set of objectives understood in the West and communicated effectively to the East. We do not now have one. Even without continuing arms control discussions we would need, in the United States and within NATO, to reformulate fundamental nuclear strategic objectives to take realistic account of the extraordinary growth of Soviet strategic forces that first set the stage for and then were confirmed by the Moscow accords of last May. But most precisely because we are continuing the strategic arms negotiations, the need for a careful formulation of doctrine and objectives remains important. Without it we have no careful, reliable means of measuring the wisdom of the various proposals that are under consideration, we have no guidelines by which to take account of the attitudes of our friends and allies and we have no basis for responding to the various positions taken by the Soviet Union.

When I say that the United States today lacks a coherent strategic doctrine, I do not mean that America lacks ideas about the nature and purposes of its strategic forces but, rather, that we have several such notions, some of which are in conflict with others. For example, we seem, on one hand, to hold to the view that America's European allies should rely on the U.S. strategic deterrent to protect them from Soviet threats and intimidation. On the other hand, our arms control policies -- and the explicit pronouncements of many American specialists and diplomats -- appear to be based on an extreme concept of minimum deterrence that would limit the role of the U.S. strategic force to the striking of Russian cities in response to a direct attack against the continental United States. Clearly, such a doctrine is inconsistent with the objective of extending the U.S. nuclear guarantee to our NATO partners and marks a departure from longstanding alliance policy. What makes this doctrinal inconsistency both real and important is the growing awareness, on both sides of the Atlantic, that the strategic balance, which is increasingly adverse to the United States, leaves little room for an alternative American strategic posture."

In these statements Senator Jackson, in effect, was posing some critical questions which, in the absence of concrete U.S. strategic nuclear policy, if they are to serve as a foundation for constructing answers, must remain just that -- questions.

While not dealing specifically with the impact of the changes, leading to and formalized by SALT I, on the Sufficiency Criteria, quite clearly, in stating that SALT I was consummated on minimum deterrence underpinnings, the Senator was inferring that the Criteria did not constitute basic SALT guidelines and, therefore, as a consequence of SALT I, had fared poorly. As such, he was asking just what U.S. strategic

forces mean and what our strategic objectives are, in connection with our basic national security and with the conduct of our foreign policy -- especially with respect to nuclear guarantees to NATO allies. Although his displeasure with minimum deterrence seemed to match that of the President's displeasure with assured destruction (the difference between these two concepts being highly obscure), in the absence of a declared preference for something else, he was obliquely querying as to what alternatives might exist, yet allowing that such existence may not be possible without a new coherent doctrine.

Since Senator Jackson was addressing a NATO-oriented audience, left unsaid and unposed was the question of U.S. strategic policy as related to the nuclear capabilities of Communist China and to nuclear pledges to U.S. Asian allies as covered by the Nixon Doctrine. For although the Nixon Doctrine promises a nuclear shield to Asian allies threatened by nuclear powers, no specifics regarding the nature and applicability of this shield have thus far emerged. Therefore, on the Asian side of the house questions comparable to those posed by the Senator's remarks on the Soviet Union and NATO seem in order.

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II. WHO DETERMINES U.S. STRATEGIC NUCLEAR POLICY?

It is noteworthy that President Nixon, in questioning, three years ago, what U.S. strategic policy ought to be, highly personalized his office with respect to the execution of strategic options:

"Should a President, in the event of nuclear attack, be left with a single option..."

"A President," being the Commander-in-Chief, would, it would seem, naturally be the one to exercise strategic nuclear options and, therefore, this personalized phrasing would appear to be thoroughly proper. But, heretical as this may sound, is it?

Despite the national and Congressional reservations expressed over Presidential direction of the Vietnam War, it still was generally conceded that U.S. policy for prosecuting this war properly belonged to the President; and, as in previous conventional wars, this responsibility and purview was never seriously challenged. However, despite the crucial nature of certain of these wars -- particularly World War II -- the American psyche, conditioned by its experience with non-nuclear conflict, held the expectation that such wars could be fought with both meaning and an ability to effect a satisfactory outcome.

At the basis of this national attitude was a belief that whereas the nation's political survival may have been at stake (directly or indirectly, as a consequence of events which might follow an unsatisfactory military outcome), there was no paramount concern that its biological survival was seriously threatened. There were ingrained feelings on how destructive conventional munitions could be, and the upper limit was not held to menace survival.

On the other hand, if there has not been an overt challenge to the President's control over our strategic nuclear arsenal, in recent years there also has not been a national acceptance of a President's right to use these weapons as he might see fit to use them. For at least the last ten years the U.S. horror-image of strategic nuclear warfare -- which has not been contradicted by any Administration and,

in fact, generally has been supported by a series of apocalyptic statements on the inconceivability of thermonuclear war -- has been of a nature which essentially rejects such conflict as rational or even possible, at any level.

We should recall that when major national debates have taken place over various aspects of strategic warfare (the civil defense issues of the early 1960s and the ABM debate during 1969-1970) these debates were cast mainly in a mold which equated nuclear war with national extinction.

In rejecting President Kennedy's proposed civil defense program, the nation was rejecting the presumed, highly-intellectualized logic that differences in levels of catastrophe represented meaningful differences in outcome. And, by so doing, the nation was refusing to cooperate in Presidential attempts to establish a "rational" strategic policy which, by admitting to the possibility of nuclear war, sought to establish a U.S. posture which would produce favorable war outcomes.

Similarly, during the ABM debate the area (population) defense component of the Administration's Safeguard proposal fared poorly in public and this part of the program was effectively removed by Congressional action before it was formally ruled out by SALT I. Since the Safeguard Program, as originally conceived and advanced, represented the most important step to implement the strategic Sufficiency Criteria -- which also was an attempt to set up "rational" policy -- the failure to achieve the sought-after implementation constituted, in effect, a failure to understand the nation's attitude toward strategic war and what latitude it was willing to give a President in his personal efforts to formulate and implement strategic nuclear weapon policy.

In essence, these national constraints have been rebuffs to Administration efforts to set forth, for public acceptance, preferred versions of strategic policies. These efforts, which admitted to the possibility of strategic war and even went so far as to publicly rationalize proposed policies in considerable quantitative detail dealing with specific thermonuclear exchanges, were attempts to enlist public support by anticipating a national rationality comparable to that established at the Presidential level. Therefore, those rebuffs have, in effect, shown that the public (including the great bulk of

its most erudite and intellectual citizenry) when forced to "think about the unthinkable," is not really capable of "rational" thought as practiced in Washington.

In the real world, as to whether Presidential advisors on nuclear policy or the public hold the more rational views on nuclear warfare, with its enormous imponderables, this is not a resolvable issue. However, in the real world of how the U.S. deals with nuclear policy, whenever this subject becomes a matter of national debate, when Presidential decisions have surfaced and public support has been solicited, we should observe that rational approaches developed by the Executive Branch may enlist little public understanding or support. So, perhaps the most salient point to be made on strategic nuclear policy is that its implementation should not be attempted on a "rational" basis, within a theoretically or academically desirable analytical framework of nuclear exchanges and outcomes, but rather on the basis of a war that cannot happen because one cannot contrive and analyze a set of circumstances which permits this possibility.

In other words, if we are to move forward in strategic weaponry, we might do best by emphasizing weapon systems which cannot be incorporated into the calculus of strategic exchanges and outcomes and, thus, which can stir up public concern that they have rational, and thus possible, use -- for the overwhelming public attitude is that there is no such thing as rational or possible use for these weapons. Or, in the context of former Defense Secretary Melvin Laird's position of Realistic Deterrence, we should understand that realism, when dealing with such weaponry, is best defined against a political, rather than analytical, backdrop.

Returning to President Nixon's question ("Should a President, in the event of nuclear attack, be left with a single option of ordering the mass destruction of enemy civilians, in the face of certainty that it would be followed by the mass slaughter of Americans?"), this query deserves a question in response -- namely, who is "a President?"

First of all, as to who is "a President," even a given President does not necessarily remain a given President and, in the course of his office, can change considerably in his views and objectives in

accordance with changes in the world around him. Thus, with respect to strategic policy and requirements, it is entirely possible that a President may later regard as an albatross around his neck a nuclear policy which originally seemed to be highly desirable, and his attitude toward the matter may change appreciably.

In this regard, subsequent events and circumstances having profoundly affected the viability of the original strategic Sufficiency Criteria, the President's current attitude toward strategic nuclear matters almost certainly must be very much different from that of some four years ago. (Yet, if Senator Jackson's surmial is correct, there seems to have been no apparent change in national strategic nuclear policy, even though the President must have changed substantially from his former views.) So, by no means is a given President necessarily cast in the concrete of the policy tenets he first formulated, even if he has not seen fit to formally change those tenets.

Secondly, "a President" hardly 's any more an invariant on national security matters than he is on domestic issues and a new President may bring in very much different beliefs on security policy than his predecessor held. This was certainly the case when President Kennedy came into office with his Administration's flexible response doctrine, which placed the utility of nuclear forces into a drastically different role than had been the case under President Eisenhower. Moreover, it was apparent in last year's election that had the Presidency passed into new hands, national security policies -- including those affecting strategic weapons -- would have undergone very considerable change, at least at the theoretical level.

The point to be made here is that by no means is it clear that "a President" in office will embrace strategic politics which will best assist "a President" who will succeed him, nor is it clear that his successor will even be desirous of inheriting such policies. On the other hand, for the reasons brought out earlier, it is far from clear that, beyond a differently intellectualized assessment, a new President can do very much toward effecting realistic change in the strategic posture developed by his predecessor.

What is being suggested here is that, at least in the strategic area of our national security policy formulation, The President, who is our Commander-in-Chief, and who is, officially, solely and uniquely responsible for releasing strategic nuclear weapons and controlling their use throughout the period of hostilities, may be severely curtailed in determining and implementing the policy of his personal choice. However, we might go one step further here and suggest that this is the one policy area where the President should be constrained, by national opinion, in his efforts to fulfill his constitutionally anointed role. For this is the one area where, rightly or wrongly, the nation has sensed and feared its very existence is directly at stake.

In this context, rightly or wrongly, strategic nuclear war seems to be regarded by the nation as too important to be left in the hands of "a President" (who, in turn, has long stated that nuclear weapons are too important to be left in the hands of the generals). The public reaction to the President's efforts to change and implement new policy has shown that it will not dutifully accept Presidential decisions which relate so crucially to the nation's very survival. And, perhaps it might be wise and even best for Presidents to accept this as a fact of life -- the life of the nation, as the nation chooses to see it -- when they seek to determine strategic policies and new weapon requirements for themselves and their successors.

III. HOW CAN U.S. STRATEGIC FORCES BE USED?

Coming back to the President's query once more -- "Should a President, in the event of nuclear attack, be left with a single option..." -- Mr. Nixon quite plainly was inferring that, considering the terrible consequences of exercising this option, such a response would be highly incredible (indeed, even irrational). However, left out of his discussion (plus all other discussions on strategic matters by this Administration and its predecessors over the past dozen years) has been the question as to whether this "single option" ever represented an actually possible response to Soviet nuclear attack on the U.S. Also left out in such discussions has been the question as to whether alternative options are at all credible and realistic possibilities.

Practically all of the scenarios on strategic war, which have been set forth for public consumption by the Government, when it found it necessary to seek public support (which usually was not forthcoming) for certain strategic programs, have been predicated on a Soviet massive surprise attack against U.S. strategic forces. Based on U.S. intelligence estimates of Soviet capabilities (but never even suggesting what the Soviet intentions and expectations might have been, in view of the awesomeness of such an attack and profoundness, beyond belief, of its consequences) our strategic systems analysts, over the years, have applied themselves to the (extremely sophisticated) calculation of Soviet strike outcomes and what the results of the U.S. counter-strike would be.

Happily, there seems never to have been a calculated case where the U.S. retaliation against the Soviet citizenry and economy was not of such a horrendous magnitude that clearly the Soviet attack had been irrationally conceived and planned. Ergo, the U.S. had preserved its strategic deterrence against Soviet attack, for obviously this scenario, with its terrible consequences, could not be credible to Soviet planners.

Now there are a number of questions and reservations regarding the efficacy of the myriad assumptions (many of which are highly questionable and imprecise; others which are spun from whole cloth when factual

inputs do not exist) which go into such analyses. In fact, President Nixon has expressed his essential unhappiness over such deterrence calculations which, to quote him, are predicated "solely on some finite -- and theoretical -- capacity to inflict casualties presumed to be unacceptable to the other side." However, aside from such qualms on the validity and accuracy of the U.S. strategic systems analytic process there is the fundamental question bearing or just what scenario may have interest and significance to the Soviet planning process which, most probably, is mainly devoid of U.S.-style analysis.

From this standpoint, it is difficult to imagine what the Soviets scenario might be but it seems almost inconceivable that a Soviet calculation of a strike against U.S. strategic forces would lead to U.S.-calculated results. In other words, for the Soviet planner to calculate a strike which leads to, say, 20% of the U.S. force surviving, which then results in a U.S. response that destroys 25% of the Soviet population and 60% of its industry, which then provokes a Soviet countervalue strike against U.S. cities -- all this seems absolutely ludicrous. Somehow, considering that, by practically any historical standard, this action would have to be the most momentous military step ever taken, it is almost impossible to imagine that the Soviet planners would accept a confidence factor significantly below 100% for the destruction of 100% of the U.S. strategic force. It would seem overwhelmingly probable that, for obvious reasons, the Soviet attack would leave the U.S. with essentially none of its "assured" retaliatory capability.

What is being strongly suggested here is that however a U.S. President may view his assured destruction options, for the Soviets to execute an attack whose outcome allowed him to retaliate even roughly in accordance with his analytically-based planning factors, seems wildly implausible. So, aside from the credibility of an assured destruction option (which the President does not find very credible) there are serious and valid doubts that it is even feasible or possible.

On the other hand, if assured destruction is both incredible and unfeasible then what possibilities are there for using our strategic nuclear forces in a meaningful way? Or is it possible that there are

no realistic possibilities for use -- in which case the changes in the strategic balance during recent years may have rendered our weapons truly unusable.

Plainly, the President, in questioning the efficacy of assured destruction, was, at that time, seeking other solutions to strategic problems. And in contemplating (in his first Foreign Policy Report) different possibilities which could provide him with the sought-for flexibility, he stated:

"Our review produced general agreement that the overriding purpose of our strategic posture is political and defensive: To deny other countries the ability to impose their will on the United States and its allies under the weight of strategic military superiority. We must insure that all potential aggressors see unacceptable risks in contemplating a nuclear attack, or nuclear blackmail, or acts which could escalate to strategic nuclear war, such as a Soviet conventional attack on Europe."

These considerations led to the establishment of the strategic Sufficiency Criteria discussed earlier which, with their heavy accent on defense, placed high priority on the development and full deployment of the Safeguard system. Designated to protect our land-based strategic forces from Soviet missile attack and also to provide a population defense against small (Chinese) or accidental attacks, Safeguard presumably would have been instrumental in fulfilling the President's strategic objectives and thus made viable his strategic policy. However, as remarked previously, the Safeguard Program was crippled by a lack of domestic acceptance and all but emasculated by the terms of the SALT I treaty. And if this has meant the demolition of former strategic policy, what possibilities has it left for using our strategic forces in a manner which would "insure that all potential aggressors see unacceptable risks in contemplating a nuclear attack, or nuclear blackmail, or acts which could escalate to strategic nuclear war, such as a Soviet conventional attack on Europe."

Below the level of a massive surprise attack against the total U.S. strategic force what might the Soviets have in mind toward using their strategic weapons? At this sub-Armageddon level some have sug-

gested that the Soviets might be entranced with the notion of initiating a limited strategic counterforce war which could involve a "war at sea," where an effort would be made to attrite the U.S. SSB capability, or a protracted campaign against our land-based strategic forces -- the notion being that the U.S. would be constrained to responses in kind, for fear of the consequences of expanding the conflict into countervalue attacks.

Insofar as the war at sea concept is concerned, we have been assured that our Polaris-Poseidon submarines have been and remain an invulnerable force and, thus, one is hardpressed to envisage this possibility. On this basis, were the Soviets someday to achieve an ASW capability which tempted them into such an adventure, it would seem that the U.S. Government would have failed in its pledge to protect its nuclear missile submarines and the problem then would boil down to an anti-submarine warfare contest. Since, aside from the outcome of this contest, it would seem almost certain that, regardless of the psyche of an incumbent President, such action would provoke the United States into extreme measures toward expanding its strategic capabilities, plus others as well (to say nothing of a severance of relations with the Soviet Union), it is difficult to imagine why the Soviets would wish to even seriously contemplate such a move. In all, the notion seems so far-fetched that it does not really warrant sober consideration insofar as determining the role of our strategic forces in such a confrontation.

With regard to a protracted attack against our land-based forces (it being argued that these forces may become vulnerable to Soviet counterforce attack in view of Safeguard's demise), where the Soviets may have nuclear blackmail in mind (to what purpose has never been made clear or convincing), this is a horse of a much different color, for here we are concerned with thermonuclear weapons bursting on or over the continental United States. Whether or not a given President were willing to enter into a so-called limited strategic counterforce war of some unknown duration (which has been speculated to last weeks or even months), there is the key question: Would he be allowed to?

Considering the horror-image portrayals of thermonuclear warfare, at any level, which U.S. Presidents have made public for so many years ("Today any nuclear attack -- no matter how small; whether accidental, unauthorized or by design; by a superpower or by a country with only a primitive nuclear delivery capability -- would be a catastrophe for the U.S., no matter how devastating our ability to retaliate." Stated by President Nixon in his 1970 Foreign Policy Report), to contemplate a public willingness, especially in the absence of any effective civil defense, to tolerate a Presidential decision to prosecute a nuclear war toward some unknown goal seems beyond reason. What steps would be taken by the nation to force the President to end such hostilities we cannot say, nor can we predict how the President would seek termination. However, from a domestic political standpoint, almost everything points to an extreme national intolerance and unwillingness to accept this mode of nuclear conflict as a credible Presidential option.

Whereas we cannot, in this Paper, delve into the classified aspects of U.S. strategic weapons and the capabilities of the Commander-in-Chief to control and manage these forces during a protracted thermonuclear exchange, it is appropriate to ask: Is there a President who truly believes he is capable of directing and terminating (on satisfactory terms) such a war? Almost certainly the answer has to be no!

How can one expect any Commander-in-Chief of U.S. strategic nuclear forces to possess the knowledge and the intrinsic ability to preside over the battle management of a conflict which: (1) Has no historical precedent to give even a clue as to how military experience and judgement can be applied; (2) holds no background to allow realistic planning factors for the performance and reliability of his (untested) weapons, which have been purposefully designed to be ineffective against Soviet missile silos, in accordance with official policy, and thus poses an enormous question mark as to how effective or meaningful his management may be; and (3) holds no data to provide any insight into what military objectives are relevant toward dissuading the enemy from his objectives? Therefore, apart from the probably overriding political factors working against the possibility that such conflict can at all take place, for a President to be critically concerned with

a minimum use of his strategic weapons (in seeking conflict termination), because he is incapable of directing meaningful extensive use, seems highly probable.

Just what a President might do to end such a nightmare, this is a singular function of a given President whose behavior, in such a crisis, is impossible to predict or even imagine. To dispense with the problem, one might (and most would) be tempted to define it away by claiming that no nuclear adversary would even contemplate initiating such a conflict; but this we really cannot do since the matter of Soviet intentions is a Soviet matter -- not ours to judge for them. (It has been official practice to base U.S. strategic postures on the possibility of a massive surprise attack against U.S. land-based weapons and it would seem no less credible, or more incredible, to disallow lesser Soviet actions.) As to what to do toward resolving this (hypothetical) dilemma, this will be discussed later.

As to the possibility of a U.S. President initiating the use of strategic weapons against a nuclear power who has launched an attack against a U.S. ally -- for example, President Nixon's case of "a Soviet conventional attack on Europe" -- one such appraisal of this possibility is in the form of Secretary of State William Rogers' statement: "Sane national leaders do not initiate strategic nuclear war and thus commit their people to national suicide."^{*} (On the other hand, the United States long has officially held forth strategic nuclear pledges to allies -- most recently stated, but not enunciated, in the "nuclear shield" provision of the Nixon Doctrine for Asia.) Therefore, were we to give official credence to Secretary Rogers' statement then the credibility of U.S. strategic pledges could fairly be challenged since a strong affirmation of these pledges would, in effect, cast strong doubts on the sanity of a U.S. President. However, aside from this ploy of using a ranking official's assessment to determine the usability of U.S. strategic forces, there is the question as to whether U.S. strategic guarantees do have any residual credibility and, thus,

^{*}Address before Diplomatic and Consular Officers, Retired, Washington, D.C., November 1969.

whether U.S. strategic forces have any residual use toward deterring attacks on allies or, if deterrence fails, toward enhancing the position of our allies or ourselves, in their actual use against a nuclear power aggressor. Unquestionably, the answer has to be no!

As a consequence of the Administration's decision not to develop and deploy strategic weapons having counterforce, and thus first-strike, capabilities a U.S. attempt to effectively disarm the Soviet strategic forces, through a massive surprise attack would, essentially by design, fail. Consequently, the U.S. would be subject to Soviet counterattack, with its unthinkable consequences. Clearly, this action would not be in the U.S. interests or gain, and would serve no rational purpose.

Regarding the possibility that the U.S. might initiate a protracted strategic counterforce campaign against the Soviet Union to force a change of Soviet intentions toward NATO, or reduce the effectiveness of the Soviet attack: First, as mentioned, U.S. strategic forces have been purposefully designed to be poor at this task; and, second, as also mentioned, a U.S. national tolerance for this objective would be extremely low. Therefore, on both counts it is difficult to ascribe credible use to U.S. strategic weapons assigned to this peculiar campaign.

Moreover, regarding these above possibilities for strategic weapon employment to fulfill pledges to allies, it is difficult to see how such employment would, in any appreciable way, have any significant effect on the Soviet prosecution of a ground war in Western Europe. The great bulk of Soviet doctrinal literature indicates they are geared to a high-intensity ground war (most probably involving the use of tactical nuclear weapons) of short duration. On this basis, the Soviets, with their Warsaw Pact allies, should be able to accomplish their military objectives against NATO in time to be essentially independent of whatever might result from a U.S.-USSR strategic exchange.

In Asia, almost ten years after the first Chinese nuclear explosion, long and often predicted Chinese strategic nuclear capabilities have seemingly failed to materialize -- that is, in a form which U.S. intelligence has recognized and verified. That Communist China has had the physical ability to field a strategic system of intercontinental

range, the orbiting, on two occasions, of a several hundred pound payload leaves little doubt on this potential. However, a lack of specific data led the Defense Department, last year, to state:^{*} "It is difficult to assess either the strategic nuclear threat posed by the People's Republic of China or how that threat will evolve through the 1970s."

Considering that the Chinese began their nuclear weapons program by breaking a testing pattern established by other nuclear powers -- namely, using U-235, in contrast to plutonium used by the U.S., USSR, England and France; one can speculate that, in the development of their actual strategic weapon systems, they would not choose to emulate their predecessors by first producing long-range bombers and then ICBMs and SLBMs. Certainly, considering the vast strategic superiority which the U.S. would enjoy at the beginning of China's strategic deployments, why would they wish to follow in step and thereby provide fixed vulnerable targets which, in turn, might provide high incentive for a U.S. disarming attack?

In this respect, might not the CPR wish to modify their satellites to achieve a nuclear bombardment capability? China is not party to the UN Space Treaty, which forbids such a capability. Moreover, as a result of SALT I, the U.S. has been sharply limited toward deploying anti-satellite systems because of the ABM connotations of such systems. Other approaches might be the deployment of hidden mobile ICBMs, or sea-based missiles (concealed in merchant ships) which could suffice to provide an invulnerable force.

The point to be made is that whatever might emerge in the Chinese strategic arsenal remains to be seen; but, based on our apparent inability thus far to identify CPR strategic systems, might not be seen. Therefore, we cannot dismiss the possibility that the Chinese are building and deploying a concealed (until an appropriate time for revelation) minimum deterrent strategic force which could succeed in blunting U.S. strategic nuclear guarantees to Asian allies. For if, as President Nixon says ("Today any nuclear attack -- no matter how small...would

^{*}Secretary of Defense Melvin R. Laird's Annual Defense Department Report, FY 1973.

be a catastrophe for the U.S., no matter how devastating our ability to retaliate"), then were the Chinese to have a small secure strategic force, the U.S. nuclear shield promised by the Nixon Doctrine would be lacking in credibility and, indeed, rationality.

To summarize this discussion:

It would appear that the U.S. is fast approaching, if it has not already reached, the point where, for all intents and purposes, its strategic nuclear weapons are politically unusable. There seems to be no doctrine or strategy for the use of these weapons which is politically acceptable or rational. This is not to say they have lost their value, for obviously the nation's predicament without them would become intolerable. What is being implied, however, is that their value -- to a President and to his country -- must be appreciated on a basis of non-usability. And, in turn, the design of our strategic force should be predicated on an acceptance of this fact. In fact, such forces might best be designed so that their existence becomes a matter of national acquiescence and inattention -- not one of debate and concern, neither of which has solved or helped our strategic development efforts, let alone being of constructive assistance toward resolving our strategic issues. In other words, the U.S. might best forego new strategic policy formulation and maintain a "non-policy" for its non-usable weapons.

IV. WHAT KINDS OF STRATEGIC FORCES SHOULD WE HAVE?

During the 1950s the groundwork was laid for a "rational" methodology to quantitatively analyze complex problems -- namely, the technique of Systems Analysis; and during the early 1960s this approach was incorporated into the Defense Department planning process. Since then this process has largely dominated the decisions on new strategic weapon systems which have been made, including the Safeguard Program. In essence, this technique purported to be able to analyze, in exacting detail, the complex interactions of opposing strategic forces; and, as so presented, it was seized upon by the Defense Department as a powerful tool for evaluating the utility of our strategic forces and determining what new measures should be taken to ensure that these forces best support U.S. strategic nuclear policy.

To presume that an understanding of the technical and military aspects of strategic warfare may be sufficiently understood, so that meaningful quantitative inputs can be fed into an analytical model of such conflict, would, at the very least, seem highly questionable. As discussed earlier, our knowledge of this untested, inexperienced domain of warfare makes quite dubious any prospects for using strategic forces in any predictable controlled fashion and a President should be chary of scholarly advice that he is at all capable, in his role as Commander-in-Chief, of exercising those forces to achieve a predetermined objective. Moreover, if his uncertainties on U.S. strategic weapon performance are high, then his uncertainties regarding Soviet operational capabilities must be considerably higher. Yet, it is clear that the analytical community has had considerable impact on U.S. strategic force development decisions and, ostensibly, on Presidents involved in such decisions.

Whether or not Presidents truly believe they possess a thorough comprehension of their strategic forces, and how they can use them, is one matter (which no President has chosen to discuss openly; and, one wonders whether he would express his confidence or qualms on such use even in closed circles on high); but the trouble seems to be that when the results of analyses are presented to a President he does not, or

cannot, find it possible to dismiss these results and chooses, supposedly prudently, to accept them as a basis for decision-making because, the way the game has been played, there seems to have been no persuasive alternatives.

In this vein, the "logic" of strategic systems analyses performed in the Defense Department dictated, several years ago, that because of a growing Soviet large missile threat (the SS-9) the problem of U.S. Minuteman missile vulnerability could best be dealt with through the Safeguard ABM system. However, as discussed here, the decision to accept this analytically-based recommendation: (a) Produced a sharply divisive national debate; (b) led to mounting Congressional suspicions and program cutbacks as it became clear that realization of the (analytically) defined and required performance would force costs up substantially; (c) resulted in an apparent need to redefine the SS-9 threat as it became apparent that the Safeguard Program was being delayed and would not produce the originally required capability; and (d) was ultimately victimized by agreement in SALT.

Now the President now feels about the utility of his strategic forces, in view of Safeguard's demise and the Soviet ability to achieve the feared offensive threat against Minuteman sometime during this decade -- this is a matter of conjecture, for we are not privy to his inner thoughts. On the other hand, we might wish to conjecture on the President's feelings regarding the advice he has received on strategic force developments for, clearly, the course of events has cast such advice into poor perspective.

Perhaps the paramount lesson to be learned, with respect to decisions on strategic weapon development, is that recommendations should not be based on theoretical divinations of offense-defense relationships, which presume to gauge a weapon's utility in the framework of strategic exchanges and war outcomes and in terms of specific desired objectives -- such as an assured destruction level. Rather, it would appear that a more preferable approach would be to discard notions of operational utility which call for quantitative determinations of performance and achievement, and seize upon new weapon systems whose characteristics deny the possibility for such determinations. Or, putting

It another way, these characteristics should be of a nature where the vulnerability, to enemy attack, of a proposed system cannot be seriously questioned because it cannot be known and, therefore, cannot be analyzed. In other words, in the process of defining a new weapon system, why should we define a new problem, or even admit to a going problem, when we have ample evidence that the nation reacts apprehensively and largely negatively to the exposure of problems which are vitally related to its very survival -- witness the Safeguard episode.

In effect, the Polaris program has been a cardinal example of a system whose vulnerability cannot be calculated. It is to be noted that whereas fixed ICBM and bomber bases have been seriously questioned in public, regarding their vulnerability to Soviet ballistic missile attack, with the government officially admitting to worrisome levels of vulnerability and seeking (unsuccessfully) means to significantly reduce such vulnerability, essentially no such questioning has been made of the security of our Polaris submarines. Here, the government, happily so, has continually vouchsafed the invulnerability of this system to possible Soviet ASW capabilities. And it is noteworthy that those who have voiced the strongest misgivings on such systems as Safeguard and the B-1 bomber have been practically unanimous in their acceptance of the submarine-launched ballistic missile concept.

Furthermore, it should be noted that our Minuteman ICBM system is now more than a dozen years old and, since this development took place, no new ICBM program has been initiated; and our B-52 force is now some twenty years in being, with no clear indication that a new bomber -- i.e., the B-1 -- will be approved for production.

At this juncture, a new generation of SLBMs, the Poseidon, has completed development and is entering the submarine force in increasing numbers. And at this time it appears that funding will be allotted for for an extremely expensive new class of even more-advanced missiles and nuclear-powered ballistic missile submarines, the Trident system.

To explore in detail why it has not been possible to move ahead, from a governmental basis, to new fixed-based strategic weapons, ICBMs and bombers, but why it has been so relatively easy to secure funding for new SLBMs and nuclear submarines, would probably be not only a time-

consuming task but an unrewarding one as well. For this would involve plumbing the enormously complex analytic process which has so critically affected the national security decision-making process.

On the other hand, on a pragmatic basis it might just well be that the underlying reason why a dozen to twenty years of impressive technological progress still has not provided a green light for new land-based systems is that there has been an underlying queasiness, in and out of the government, that a questionable vulnerability for those systems would raise widespread qualms about their contribution to our national survival -- qualms which never have existed significantly over our submarines.

With these observations in mind, if we are seriously interested in a new land-based strategic weapon system, what might its preferred characteristics be so that its necessity would essentially be obvious and undebatable, rather than questionable and provocative of intense national debate? To address ourselves to this problem, we might first review the discussion in the previous section which concluded, in effect, that there are no rational uses for strategic weapons, and then ask ourselves the following questions:

If our strategic weapons have deterrent value only and provide no means for rational response, in the event of an enemy attack, then what's the hurry for this response? What difference does it really make whether the response takes place within minutes, or an hour after the attack, or twelve hours, or even a day?

Going one step further, there long has been a Strangelovian fear that our strategic weapons may be launched without authorization from the President (who might well pray that he could bank on authorization from someone higher up the ladder than himself). On this basis, might not we be best off by not only seeking a built-in delayed response in designing the system but, moreover, by making it impossible for the military operators of those weapons to respond at all unless a specific Presidential authorization takes place. In other words, can we design a weapon system whose security is not dependent upon the trustworthiness, high as it has been, of the military custodians, but is replete because the weapons lack certain basic components which make them op-

erable? Or, put another way, can we design a weapon system which is absolutely safe because there is no fail-safe mechanism which might conceivably fail?

What we seem to be searching for, in determining preferred characteristics, is a system whose survival, like that of our nuclear missile submarine force, is held to be guaranteed because we are unable to convince ourselves to the contrary. That is to say, we are looking for a new force of strategic weapons which cannot be put into an offense-defense "systems analysis" model: For to modelize the problem then makes it possible to conjure up assumptions on enemy strike capabilities which can seriously threaten the force. (This, of course, has been the unhappy situation with our present land-based systems, where the results of such analyses have thrust these systems into sharp contention, internally and publicly.) In addition, for the reasons just mentioned, we also should prefer a force of weapons which, having no credible military utility, cannot possibly be used by the military operators unless express steps are taken by the President to make it possible for those weapons to become operable.

In this requirements context, what would seem highly attractive is a land-mobile ICBM of drastically different design and purpose than has been considered thus far and, apparently, rejected -- presumably on the basis of comparative systems analyses which failed to show sufficient gains in cost-effectiveness for this approach. Specifically, we might give serious consideration to a very small, cheap road-mobile ICBM which could be deployed, inconspicuously and inoperably, in very large numbers throughout the U.S. countryside. And, in accordance with President's Nixon's second sufficiency criterion -- "providing no incentive for the Soviet Union to strike the United States first in a crisis" -- the primary design feature for these weapons would be that they hold no significant capability to neutralize Soviet strategic weapons -- i.e., no counterforce capability.

Missile propulsion technology (essentially unclassified) has progressed to a point where it is entirely feasible to contemplate an ICBM weighing on the order of 10,000 pounds which, having no vital (security) components, could be carried around in inconspicuous vehicles with min-

imum crews (also inconspicuous). By "having no vital (security) components," what is implied here is that, in its normal peacetime deployment, the missile would contain no guidance and control package and thus, in effect, be incapable of being launched on an intercontinental trajectory and, in addition, would be devoid of its nuclear warhead. It would be essentially an unclassified rocket booster with no brains and no worrisome nuclear explosive.

In this configuration, the problem of unauthorized launch would not exist, nor would there be a worry that an accident might trigger a low-order nuclear detonation, or spread radioactive contamination over the area, or necessitate, because of security considerations, an amassment of government personnel, almost certain to produce alarm and concern, to seal off the area. In fact, it is not at all clear that such accidents, if they did occur, would be cause for any undue attention, since solid propellant materials are extremely difficult to ignite without a very high temperature source.

The guidance and control package, plus the nuclear warhead, would be contained in a small light re-entry vehicle (RV) which could be readily attached to the booster. Those RVs would be stored in a large number of secure sites, with aerial means, such as helicopters, to quickly dispatch them from these sites in the event our early warning system detected an attack was under way. (In essence, this would represent a launchless substitute for a launch-on-warning procedure, which is officially regarded as unacceptable as a means to cope with a surprise Soviet missile attack.) Or, like the boosters, they could be made mobile and, from time to time, shifted from place to place (on Government reservations), with no apparent way for the Soviets to observe this pattern.

As to which RVs would be sent to mate with which boosters, and how soon (or if at all, should the warning turn out to be false) -- this would be the White House command-control decision. However, considering the basic invulnerability of such a system, barring Soviet irrationality (or insanity, as inferred by Secretary Rogers' remarks), it is almost impossible to imagine the circumstances which might engender the need for such a decision.

Now that the SALT I Treaty on ABM limitations ostensibly has laid both sides open to ballistic missile attack, the problem of survival of ICBMs and SLBMs no longer has to include penetrability through enemy defenses. Therefore, the land-mobile missile concept just discussed, as well as submarine-launched missiles, need be evaluated primarily only in the framework of its basing system. However, for strategic bombers, which do have severe base vulnerability problems, the question of penetrability into enemy territory must remain nagging since SALT, thus far, has not come to grips with limiting or reducing Soviet air defenses.

In regard to the bomber problem and the need, expressed by many, to preserve the so-called Triad of strategic forces, if there is to be an official acceptance of the non-utility, or unusability, of strategic weapons then it is difficult to foresee the future role of bombers -- for much of the case advanced on behalf of these delivery systems rests on their warfighting (counterforce) capabilities.

As to the force size of strategic weapon systems which, we believe, are essentially immune to enemy attack and, therefore, whose full-scale employment can be guaranteed, this is a truly unsolvable problem. Were we to have such systems, not only would we find it almost impossible to divine rational enemy motives for strategic attack against the U.S., but we also would find it extremely difficult to determine what our retaliation should be to presumed irrationality on the enemy's part. Perhaps the pragmatic solution to force size, under these unquantifiable conditions, would be to continue to uphold some version of response based not on the deterrent calculus of assured destruction (which the President holds to be unsatisfactory), but rather, on a level of retaliation against the Soviet national existence which we can convince ourselves would represent a credible deterrent to possible Soviet irrationality. For, thus far, we have fashioned and rationalized our strategic forces on the basis of deterring a planned, seemingly rational (to the Soviets) attack having a calculable outcome.

In this respect, were there a national willingness to support strategic budgets at the present level, unquestionably we could guarantee a level of retaliation which would provide a strong deterrent to possible

Irrational trends in Soviet strategic planning. And we would intuit that a U.S. strategic force which, indeed, had the trappings of invulnerability would also provide a strong disincentive for the Soviets to expand their own strategic offensive forces beyond current levels -- on the basis that our forces clearly posed no threat to their forces; and theirs, allegedly designed to exploit U.S. fixed base vulnerability, no longer would hold military utility against ours.