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A Military Strategy for Strategic Nuclear Deterrence Through the Year 2010

LtCol Richard S. Roszak
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This paper will address the type of strategic nuclear forces the United States will find most effective to best achieve nuclear deterrence over the next twenty years. I will use the approved National War College Framework for Military Strategy as a tool for examining the political objectives of our nuclear deterrent policy, the military objectives that will support those political objectives in the outyears, and the capabilities and vulnerabilities of both superpower arsenals. Finally, I will define the force structure required by the strategic plan to accomplish our objectives and discuss the potential results.

Before looking at the political objectives of our deterrent policy, I feel it appropriate to point out the curious aspects of discussing a military strategy that depends for its success on never being proven out. In many cases, the successful application of a military strategy requires hostilities to exist -- the military strategy of the Allied Powers to defeat the Axis Powers in World War II being a case in point -- and involves the use of force to cause the enemy to do something he would not otherwise want to do. Judging our nuclear deterrent strategy of the past four decades as successful implies that the Soviets would have initiated a nuclear war had our strategic forces not existed. This is an implication that absolutely cannot be proven to be true, yet it is the very basis of our stated need for a triad of forces capable of devastating the Soviet Union.

Whatever future strategy the United States pursues to deter a major nuclear

war with the Soviets, it will only be successful if such a war does not occur. Therefore the strategy must be one of war prevention. This does not mean, however, that we should concentrate on cost issues and ignore the warfighting capabilities of these forces. Rather, we must field affordable forces that guarantee a great amount of credible retaliatory capability regardless of the mode of attack the Soviets choose.

Deterrence doesn't work without this credible retaliatory capability. The argument made by some that we don't need nuclear bombers because their only mission is to bomb the rubble left after our missiles have landed in the Soviet Union shows a lack of understanding of how deterrence works. Deterrence occurs when a potential adversary perceives that we have enough destructive retaliatory power, regardless of his first strike, that the resulting devastation would completely outweigh any possible advantage he could expect from his attack.

A last aspect of deterrence we should touch on is stability. Deployed forces should not only be devastating in their employment but stabilizing in their deployment. Stability is enhanced by weapon systems that do not threaten an adversary with a first strike capability and are relatively survivable, capable of surviving an attack and not being viewed as "use 'em or lose 'em" systems. With this view, it is important to understand that a force which threatens to substantially destroy or make ineffective an opponents arsenal should be viewed

as highly destabilizing -- giving the adversary the thought that his weapons must be used preemptively to prevent their loss. Allowing the Soviets a force structure that we cannot effectively attack -- giving them an assured capability to retaliate -- will enhance stability as long as we also field survivable forces. This nuance will be important to the proposed military strategy put forth in the remainder of this paper.

DEVELOPING OUR MILITARY STRATEGY

The political objectives of our nuclear deterrent policy are clearly called out in Secretary of Defense Cheney's 1991 *Annual Report to the President and the Congress*. These objectives are as follows:

- Maintaining effective deterrence, so that a potential aggressor would conclude that the cost of an attack against the United States or its allies would far exceed any expected gain;
- Fostering nuclear stability, a condition whereby no nation is pressured to use nuclear weapons preemptively; and
- Maintaining the capability, if deterrence fails, to respond flexibly and effectively to an aggressor's attack.

These objectives should, of course, be viewed within the context of our domestic society. We must field forces that will successfully deter nuclear war because the survival of our nation is at stake should deterrence fail. However, since the day-to-day likelihood of nuclear war is low, the American taxpayer will not pay for a force so costly it denies him other aspects of society he deems

essential if there are other alternatives. We therefore enter the arena of ~~risk~~ management, where we develop affordable forces which, when employed, guarantee the total devastation of an opponent, yet are deployed in such a way as to reduce the chance of their use.

The military objectives drawn from the political goals identified above require the complementary application of force deployments and arms control agreements. Both of these elements must be aimed at the enemy's center of gravity, which I will define as the will of the people (leadership and citizen alike) to continue to survive as a society. I will therefore define military objectives that are diverse in nature yet complementary in application:

- Deploy, and allow the Soviet Union to deploy, weapon systems that are survivable enough to provide a high degree of confidence in retaliatory capability, yet whose mode of deployment does not undermine stability in a crisis;
- Significantly reduce the number of deployed nuclear weapons through mutual force reduction agreements; and
- Deploy forces which, should deterrence fail, will guarantee the capability to terminate an aggressor nation's existence as a functioning society.

These military objectives clearly call for a departure from our strategic force goals of the past decade. They will be satisfied by deployment of a relatively small number of warheads, deployed in such a way as to preclude being targeted by an adversary, and employed under an announced countervalue targeting policy should deterrence fail.

We must evaluate the capabilities and vulnerabilities of potential forces before determining the types which will best guarantee deterrence in the outyears.

I will group strategic forces into three types: mobile ballistic missiles, non-mobile ballistic missiles, and strategic bombers. Each force will be treated generically and the strengths and weaknesses will apply to both U.S. and Soviet forces.

MOBILE BALLISTIC MISSILES

Mobile ballistic missiles are the preferred weapon for our future force structure because of their relative survivability in both deployment and employment modes. These weapons will generally fall into two categories: United States submarine launched ballistic missiles (SLBMs) and Soviet land-based mobile intercontinental ballistic missiles (ICBMs.) Arms control agreements that reduce the number of total weapons should in no way hinder the deployment of either category of mobile ballistic missile, nor should either nation be precluded from continuing to enhance the survivability of these weapons.

NON-MOBILE BALLISTIC MISSILES

The fixed-based ballistic missile -- the silo-based ICBM -- has an inherent stability problem. It is vulnerable to attack and its retaliatory capability depends on the enemy's attack plan rather than any attribute of its own. The stability problem is somewhat reduced for an ICBM with only a single warhead, based on traditional analysis that acceptable damage criteria requires two weapons targeted

on each silo -- attacking a single warhead missile is therefore the only case where the attacker suffers in the kill-ratio analysis. But even this analysis will no longer be valid once weapon accuracies are recognized as improved to the point that a one-to-one kill-ratio can be achieved against the single warhead missile.

ICBMs should be deployed in a minimized force and in as stabilizing a configuration as possible. They do have value, however, because they represent another means of potential retaliation that the enemy must contend with, they have a better prompt response capability than SLBMs, they pose a different attack problem to an aggressor (putting more strain on his planning), and because a threat to this system is an unambiguous threat to our national territory. Envision a force structure made up almost entirely of a small number of ballistic missile submarines. The loss of one submarine under unclear circumstances could raise world tensions because it would represent the loss of a significant portion of our deterrent capability, and we would have to consider the potential of hostile action. On the other hand, all ambiguity is removed once an aggressor attacks a fixed-based ballistic missile in the enemy's homeland. The ICBM represents a value that we should view as important enough to retain in any future force structure.

STRATEGIC BOMBERS

The value of bombers is harder to quantify in concrete terms, yet they carry

undeniable stability benefits. The deployment survivability of an alert configured bomber is a close second to the SLBM and continued improvements in low observable technology promise a similar level of survivability in the employment mode as well. They are the only system capable of launch without execution, recall, and reconstitution. They also carry the most diverse weapon loads to severely stress an enemy's defensive capability, and they provide the best accuracy/payload combination of any strategic system. Still another attribute prior to a failure of deterrence is the additive value bombers provide by generation to alert configuration during a crisis, clearly raising the devastation capability of our forces at just the time when pressure to attack may also be rising in the mind of an adversary.

Bombers should be included in our future strategic force structure, but as a generated force only. This would mean a smaller, more cost-effective force of aircraft which would assume alert only when in the national interest to do so. It will also more clearly recognize the fact that the bomber is the only strategic offensive system capable of missions below the nuclear war threshold, missions that will grow in importance as the United States evolves toward a regional power projection force strategy.

ACCOMPLISHING THE OBJECTIVES

The first step in the plan to accomplish our military objectives is to

determine the arms control thresholds under which our forces must operate. To meet our military objective of significantly reducing the number of strategic nuclear weapons, and to do so in a way that enhances stability and reduces the potential of nuclear war, we must really reduce weapons and not just come up with innovative ways to count them. By that I mean we must go well beyond START I, which will reduce our nuclear arsenal from about 12,000 total to 6,000 *accountable* weapons -- accountable in such a way as to allow us to still field around 9,000 warheads.

We must realize that deterrence can exist without the capability to subject 9,000 locations in the Soviet Union to nuclear attack. Deterrence only requires a force survivable enough to guarantee a retaliatory capability, yet capable enough to guarantee the complete devastation of the opponents society -- a small force, a survivable force, a force clearly aimed at the destruction of the enemy's national infrastructure. A good size for such a force in the next twenty years is about 3,000 weapons. If one believes a lesser number is achievable in this time frame, I would offer the comment that with national survival at stake we should take this course in a very measured way, and I would also recognize that even if a START agreement is signed this year, it will be 1998 before the 6,000 accountable level would be fully in place.

I would include only one counting caveat in this 3,000 weapon limit -- that

for strategic bombers. Bombers provide an invaluable contribution to conventional operations because of their unique range/payload capabilities, and some recognition of this nonnuclear role is appropriate in the arms control environment. This caveat can be satisfied by designating a verifiable portion of the bomber force as denuclearized, or by maintaining the penetrating bomber discount of START I, or a combination of the two. We should not expect this benefit to be free, however, and restricting bombers from daily alert should not be viewed as too high a price to pay for this one counting caveat.

Every other weapon in the nuclear arsenal should count as a full, non-discounted weapon -- every ICBM/SLBM reentry vehicle and every cruise missile (regardless of being air or sea launched.) Overall force structure guidelines should be as follows: 3,000 total weapons (bomber caveat included); 2,500 ballistic missile reentry vehicles, 80% of which must be mobile, 500 bombers/airbreathing weapons existing as a crisis generation force only; and, finally, nuclear-armed sea launched cruise missiles with ranges of over 600 nautical miles should be banned.

Fielding the force outlined above would be affordable and result in a survivable force structure. Affordability would be guaranteed because the current Trident fleet of 18 boats is near at hand, the future cost (beyond O&S) would be in modification to have that 18 boat fleet detubed/deMIRV'd to 2,000 total warheads. The ICBM force would be reduced to approximately 500 Minuteman IIIs -- the

current MM III force deMIRV'd to a single warhead configuration -- Peacekeeper would be retired and the SICBM continued in development as a silo-based replacement for the MM III after the turn of the century. The bomber force would be further reduced, incurring costs associated with the addition of no more than 50 B-2s, improvements to the B-1B fleet, and O&S upgrades to the B-52H fleet, a portion of which should be dedicated to conventional operations.

The force would be survivable and stable for a variety of reasons. Assuming a 100% alert rate for ICBMs, a 75% alert rate for SLBMs, and a 0% alert rate for bombers, we would have 67% of the total arsenal available to respond to a bolt-out-of-the-blue attack, and 75% of these warheads would be highly survivable and available for retaliation. We could also generate the remainder of the force in a relatively short period of time and all of these additional forces (SLBMs and bombers) would enhance crisis stability because they would be survivable. Generation of a discounted bomber force also provides a greater than one-for-one weapons ratio just when such a capability may be most needed. So the force structure we are discussing clearly supports our number one military objective: fielding survivable forces in a stabilizing manner to deter nuclear war. The only other objective we must address is the ability to credibly guarantee total destruction of the enemy should deterrence fail.

The final point of my military strategy for nuclear deterrence is the

underpinning of my whole concept. What will allow relatively small, survivable forces to continue to deter is the clear and up-front admission that their mission, once executed, is the functional termination of the targeted society. The traditional American counterforce targeting policy has some moral merit, but this attribute has no place in the discussion of nuclear war. This targeting philosophy is too expensive and is actually the basis the tremendous growth in nuclear arsenals over the past fifteen years. Why? Because it requires that we target every offensive force platform the Soviets have -- with 6,000-7,000 warheads based in silos we are talking an appreciable effort -- and we have no control over the success of our weapons employment. We may destroy the enemys capability to respond but by then the game is over and both sides have lost.

We do nothing to minimize the risk of war by designing forces of minimized destructive capability. Limited employment options are useful as a last resort prior to a full nuclear exchange, but their existence may mean increased potential for at least the start of nuclear operations and any prediction of what happens after such an option is executed is pure conjecture. Both sides need to discuss and fully understand that nuclear conflict between two nuclear powers is a cataclysmic event for civilization as we know it.

An avowed targeting policy aimed at the infrastructure of the enemy society is required to make nuclear deterrence possible with a small offensive force. Our

adoption of such a policy must be clearly transmitted to anyone who might consider launching a nuclear strike against this nation. We will still utilize military targeting guidelines and not just aim at the middle of a city, yet this means we will go after any appropriate military target, regardless of its location, with the full understanding that our policy will result in the total destruction of every major city, military installation, and transportation hub in the Soviet Union.

The potential results of this military strategy depend to some degree on the response of the Soviet Union. With national survival at stake, we must embark on this strategy at a prudent pace, evaluating our mutual progress at regular intervals and adjusting our efforts accordingly. Key to overall success is an arms control agreement to significantly reduce our nuclear stockpiles. This agreement must be mutually verifiable, allowing intrusive inspections so both parties can gain the confidence needed to achieve real reductions.

The arms reduction agreement must also reward deployment of retaliatory systems, and the United States has to recognize that this reward system must equally apply to the Soviets. Soviet mobile ICBMs are good for deterrence. They take a commitment of significant resources to maintain, and we should do nothing but encourage their continued development and deployment -- with the realization that mutual deterrence requires continued expenditures on our part to keep U.S. forces survivable also.

The proposed force structure will require constant budgetary attention. The United States must realize this attention is required for national survival and should not be neglected for short-term reasons. Problems in deployment/employment capabilities of these forces must also be addressed as they occur and our plans adjusted as necessary.

Only this constant review of our progress will guarantee the total, linked package of our military strategy unfolds as planned, allowing us to achieve the military and political objectives of our outyear nuclear deterrent policy.

