What Is Wrong Witha Nuclear Freeze

Captain David H. Petraeus, US Army

Proposals aimed at halting the testing, production and further deployment of nuclear weapons have received considerable attention recently. While this concept may enjoy widespread appeal, there are serious questions to be addressed in connection with any implementation.

ITH the world increasingly in a nuclear shadow and this country faced with troubling budget deficits, few ideas have proved more seductive than that of freezing the nuclear arms race. Combining widespread fear of nuclear war, concern about the high cost of nuclear weapons, anxiety over a seemingly endless arms race and frustration at the lack of progress in arms-control negotiations, the nuclear freeze movement has gained considerable support throughout the United States and Western Europe.

The freeze crusade long ago ceased being one of those movements that can be

dismissed as the emanations of fringe elements. While it does have its share of activists looking for a cause, by far the largest percentage of support comes from serious-minded citizens worried about nuclear weapons and seeking ready solutions.

The widespread support for a nuclear freeze has been reflected in many different forums. In the 1982 elections, one-fourth of all US voters were offered nuclear freeze resolutions. Freeze referendums were approved in eight of nine states and in 32 of 35 localities. In Vermont, 178 of 246 communities adopted resolutions call-

ing for a nuclear freeze.

A freeze resolution failed, by only two votes in the 1982 House of Representatives, and a version linked to arms reductions was adopted by the 1983 House. The National Conference of State Legislators adopted a freeze resolution in 1982, and the United Nations General Assembly adopted similar resolutions by wide margins in December 1982. Even the churches have become involved, with the Catholic bishops and some Baptist, Presbyterian and Jewish officials endorsing various freeze proposals.

In the face of such considerable support, many government officials, military leaders and strategists have cautioned against the concept of a freeze. President Ronald Reagan and Secretary of Defense Caspar W. Weinberger have repeatedly warned against the adverse effects of a nuclear freeze on this country's nuclear deterrent. They have stated that a freeze would leave a significant percentage of US strategic deterrent forces ineffective. eliminate incentives for the Soviets to negotiate meaningful arms reductions and prevent the United States from modernizing its aging bomber and intercontinental ballistic missile (ICBM) forces.3

Reagan administration officials are not alone in their unfavorable assessment of a nuclear freeze. Many strategists argue that a freeze would lock in the "window of vulnerability" of the United States' strategic triad and increase the significance of asymmetries favoring the Soviets in the areas of civil defense, air defense and even space defense. They also remind us of the serious intermediaterange nuclear force imbalances that exist in Europe which would be preserved by a freeze.

Others, who claim to be "realists," describe a freeze as a triumph of "hope

over experience." The realists explain that the deceptive simplicity of a freeze masks many complex and crucial issues that would have to be resolved—if indeed they could be resolved. For example, agreements would have to be hammered out over verification and dual-purpose systems such as bombers which can carry conventional or nuclear weapons. Negotiations with the Soviet Union over such points have in the past proved extremely difficult.

Unfortunately, debates over the nuclear freeze issue often degenerate rapidly from substantive issues into emotional arguments. Dispassionate analyses and discussions are rare. Freeze proponents have frequently presented their case by asking questions such as: "Are you for a nuclear freeze or for nuclear war?" That is tantamount to asking "are you for peace or war?" Of course, there are other alternatives, but they are difficult to explain in the charged atmosphere of the typical freeze debate forum.

On the other side, opponents of a nuclear freeze frequently dismiss the "freezeniks" by unfairly characterizing them as pacifists and unilateralists. Such anti-freeze groups are fond of arguing that a nuclear freeze falls into that category discribed by H. L. Mencken who once said, "There's always an easy solution to every human problem—neat, plausible, and wrong."

But what about the issues? Is the present-day window of vulnerability really crucial? Would a freeze eliminate hopes for arms reductions and undermine NATO? Or could we be in what Jerome B. Wiesner, president emeritus of the Massachusetts Institute of Technology, feels is an optimum time for a nuclear freeze—a "window of opportunity" for safer, saner alternatives to a major arms buildup?* Who is right?

What is a Nuclear Freeze?

As illustrated by the resolution presented in 1982 by Senators Edward M. Kennedy and Mark O. Hatfield, the overall concept of a nuclear freeze is simple and easily understood. The Kennedy-Hatfield Resolution states that, as:

... an immediate strategic arms control objective, [the United States and the Soviet Union should] decide when and how to achieve a mutual and verifiable freeze on the testing, production and further deployment of nuclear warheads, missiles, and other delivery systems.

They would then move on to nuclear arms reductions. As Leon V. Sigal noted in his article, "Warming to the Freeze":

The freeze idea captures the layman's sense that both superpowers have enough nuclear weapons to destroy each other as viable societies and that further deployments would at best compound redundancy, or at worst, precipitate Armageddon.

The wonderful simplicity of a freeze and its deceptively easy solution to a costly and terrifying nuclear problem have made it very appealing. But what would it take to achieve a mutual and verifiable freeze in which both sides could have confidence? And how would a freeze affect the strategic balance, NATO and hopes for arms reductions?

Would the United States Be Frozen Into Strategic Nuclear Inferiority?

Whether the concept of nuclear superiority has any validity in these days of grotesque overkill is debatable. But we would be remiss in not at least considering if the Soviet Union has gained some strategic nuclear edge that would be preserved by a freeze and, more importantly, what a Soviet edge would mean to the United States. In assessing the strategic nuclear balance, we find that the traditional US advantage in bombers and warheads is vanishing, and the balance of strategic nuclear power has shifted steadily toward the Soviets over the past two decades.

The Soviet Union's advantage now is more than 600 strategic delivery vehicles—ICBMs, bombers and submarine missile launchers—and an almost 3-to-1 ratio in missile throw weight. In addition, there has been a precipitous decline in the effectiveness of US systems against the increasingly large number of Soviet hardened targets such as Soviet command and control facilities as well as ICBM and antiballistic-missile silos—their SS17, SS18 and SS19 ICBMs are housed in the world's hardest silos.

Improvements in Soviet ICBM accuracy and warhead yield now provide the Soviet Union with a first-strike capability (which the United States does not share) that threatens this country's 1,045 land-based missiles. Further, besides being deployed in more survivable, hardened silos, several types of Soviet missiles have a cold-launch capability (which the United States lacks) that allows reloading (generally in not less than 24 hours) for a theoretical second strike. 10

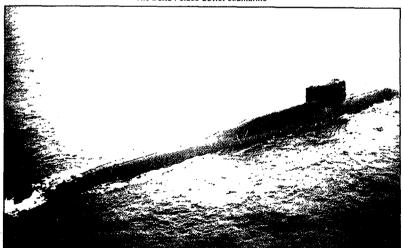
Still, many nuclear freeze advocates feel that such Soviet advantages are marginal, at best, or at least not militarily significant, and are offset by the greater survivability of a larger percentage of US warheads—primarily those on submarine-launched ballistic missiles (despite the missiles' lack of hard target kill capability which limits targeting options). Freeze supporters also argue that the United

States has greater flexibility because of a more even distribution of warheads throughout its triad and because of a larger number of weapons on manned bombers. Bombers can be called back after launching or retargeted in flight in a way that missiles cannot.

As Albert Wohlstetter explained more than 20 years ago in his classic article "The Delicate Balance of Terror," to deter an attack means being able to strike back in spite of it—in other words, a capability to strike second. This is especially true for the United States which has traditionally shunned the idea of a pre-emptive strike—no US president wants to be the "American Tojo." Wohlstetter also described the many obstacles which a second-strike capability must overcome and showed that deterrence is not merely an automatic consequence of both sides having nuclear weapons."

Today, certain scenarios of Soviet counterforce first strikes are very unsettling—especially those which place the US forces at a day-to-day alert status. But there should be little doubt as to the effectiveness of the US ability to conduct a second strike and, therefore, to deter an allout nuclear war. Despite the current vulnerabilities of US land-based ICBMs. bomber bases, submarine home ports and strategic command systems to a Soviet first strike (hence, the window of vulnerability), and despite reduced confidence in the ability of US bombers and cruise missiles to penetrate the increasingly sophisticated Soviet air defenses. the relatively secure US nuclear missile submarines at sea should still provide an effective deterrent.

Beyond whatever US ground-based ICBMs and bombers survive an attack, each *Trident* submarine alone is capable



The Delta I-class Soviet submarine

Jane's Fighting Ship

of launching enough nuclear warheads—each approximately eight times as powerful as the bomb dropped on Hiroshima—to theoretically destroy 192 Soviet cities. The Soviet leaders would have to be mad to contemplate a nuclear exchange that could produce such a result. Thus, an effective, if less than optimum, deterrent still exists at the strategic nuclear level. And it should continue to exist for at least the near term barring unexpected Soviet technological breakthroughs in antisubmarine warfare or antiballistic-missile defenses.

However, we should not forget that at least one leg of the US nuclear triad-the ICBM force-has become vulnerable to a Soviet first strike in a way that the massive Soviet land-based force is not. This enables the Soviets to threaten destruction of "a very large part of our strategic force in a first strike, while retaining overwhelming nuclear force to deter any retaliation we could carry out."13 The aged B52 and F111 bombers. and even the air-launched cruise missiles, will have increasing difficulty in beating the rapid advances in Soviet air defenses-advances which would not be halted by a freeze.

For example, Soviet SA10 air defense missiles now being deployed are effective even against the current generation of US cruise missiles. 4 Of course, there is disagreement concerning the chances of a Soviet first strike taking out all of this country's ICBMs, and there is still little likelihood of Soviet air defenses defeating all of the US bombers and cruise missiles. Besides, the United States would still have its submarines. But what if the command and control link to those submarines became vulnerable or there were an unprecedented Soviet breakthrough in antisubmarine warfare?

John D. Steinbruner argues that the US

strategic command system could no longer survive a deliberate attack by the Soviet Union and that as little as "50 nuclear weapons are probably sufficient to eliminate the ability to direct U.S. strategic forces to coherent purposes." And what is the situation in regard to antisubmarine warfare? The United States has made great strides in that area, why should the Soviet Union not do likewise? 14

The current structure of the ICBM forces of both sides, with a large percentage of the missiles mounting multiple warheads and all in fixed silos, may not be optimum in terms of crisis stability. Coupled with advances in warhead accuracy, the increased number of multiple independently targetable re-entry vehicle missiles has created a situation in which the side which strikes first can theoretically gain significant advantages.

The improvements in accuracy provide an extremely high probability of kill when two warheads are targeted against a single launch silo. If the missile in the silo is not launched in time, the missile and its warheads will be destroyed. Very favorable exchange ratios are possible if the missile knocked out happens to be carrving more than two warheads. US missiles carry up to three warheads, and Soviet missiles carry up to 10 warheads. This also illustrates why the MX missile, with its 10 warheads has been labeled a "first-strike weapon" and why the Scowcroft Commission and others have recommended the development of a mobile, single-warhead missile.

The current ICBM structure may be destabilizing in two respects. Since the side which launches first stands to gain advantages in a strategic exchange, there are destabilizing incentives for being the first to launch. In addition, since neither side would want to be caught with its missiles still in its silos, the current struc-

ture creates pressures for the rapid launching of a retaliation strike by the side which detects an incoming strike from the other side.

Obviously, pressures for quick action are hardly desirable when such critical decisions hang in the balance. Thus, as Henry A. Kissinger has noted, the current situation has revived "the destabilizing danger of surprise attack. From this point of view, a 'freeze' would perpetuate an inherently precarious state of events.'17

Thus, we find the United States with serious strategic vulnerabilities and both sides with ICBM structures that are potentially destabilizing. Coupled with possible Soviet technological breakthroughs in antisubmarine and antiballistic-missile warfare, and continued improvements in Soviet civil defense capabilities, neither of which would be limited by a freeze, such a situation could prove disastrous in a time of crisis. It is possible to see how Soviet leaders might perceive that they could emerge from a nuclear exchange in so much better shape than the United States that they would be tempted to push a confrontation to the brink to protect or achieve a vital national interest.

Implications of the Shift in the Strategic Balance

While deterrence at the strategic level may be the major issue, it is far from being the only concern. Perceptions regarding the nuclear balance—and perceptions are the key—permeate world affairs today. The strategic deterrent is the fulcrum on which all military force pivots and, beyond its value as a deterrent, has tremendous political utility. As such, it seems to follow implicitly that major

asymmetries in the overall strategic balance critically influence Soviet risk calculations and policies and could lead to Soviet encroachments on US allies or vital interests.¹⁸

Recent international events appear to indicate that the Soviets' "relative strength at the strategic level emboldens [them] at lesser levels and allows them to coerce friends, foes, and neutrals alike." 19 It appears that the Soviets now feel free in the use of force at lower levels, confident that the United States will shy away from a threat of escalation. 20

The standoff at the strategic level, with both sides desiring to avoid an exchange that would trigger national suicide. coupled with the gradual shift in the global military balance and the unprecedented "correlation of forces" toward the Soviet Union, has been an important factor in recent increases in Soviet risk-taking at lower levels—such as in Afghanistan, Angola and Ethiopia. This ability of Soviet military power to deter a decisive US-allied response to such lower level initiatives, and, therefore, to consolidate geographic expansion without a major war, is clearly desirable in the Soviet view.21 The increasing Soviet aggressiveness would not be possible but for the perceptions of emerging Soviet strategic superiority. Kissinger cautioned in a speech at the Naval War College:

We like to believe that we can prevail through the superiority of our maxims and, of course, our moral convictions are of great importance. But there can be no security without equilibrium.²²

That equilibrium could be threatened by a freeze when there are serious deficiencies in US nuclear forces which lead to overreliance on one leg of the nuclear triad or at a time when Soviet nuclear and conventional advantages have undermined deterrence on a number of levels.

Could a Freeze Be Adequately Verified?

Before his retirement, General David C. Jones, then chairman of the Joint Chiefs of Staff, warned that "it would be sheer folly for us to enter any [freeze] agreement which did not include very stringent and workable stipulations to verify compliance." Understandably, most US citizens feel the same way and would never support a freeze that could not be verified.

Virtually all nuclear freeze resolutions reflect such sentiments and call for the freeze on the testing, production and deployment of nuclear weapons to be mutual and verifiable. However, it would be extremely difficult to achieve the levels of verification required. There are many almost insurmountable difficulties that frustrate efforts to adequately verify compliance with a freeze of nuclear weapons production, deployment and testing.

Few freeze advocates acknowledge US inability to verify a freeze on the production of nuclear weapons. Yet, with present national technical means, it is not possible to closely monitor what is produced on assembly lines—satellites and spy planes just cannot see through roofs of manufacturing plants. In fact, as Sigal has cautioned, "even agreements providing for on-site verification could not offer firm assurance against covert production."²⁴

However, many freeze supporters will argue that an inability to verify a freeze on production is unimportant because, even if unauthorized nuclear weapons were produced secretly, they could not be deployed in militarily significant numbers without detection. That may have been the case in the past when large, difficult-to-conceal launch silos had to be dug for each missile. Nowadays, it is becoming

much more difficult to detect missile deployment due to the Soviet Union's increasing use of mobile launchers and coldlaunch capability (which allows existing missile silos to be "reloaded" and used again).

Obviously, it is relatively easy to conceal mobile launchers such as the SS20 in large garages. And, even when they are not under cover, it is difficult to follow mobile launchers around the countryside to accurately count them. Further, the Soviet ICBM reload capability negates the axiom that one silo equals one missile, especially if the extra missiles are deployed covertly and hidden from satellite observation.

Freeze supporters will correctly claim that a freeze on testing is relatively verifiable and that this would dissuade both sides from producing new, untested weapons. They also argue that neither side would be likely to spend the money to produce and deploy a new weapon if reliability testing had not been conducted. However, they fail to note the difficulties in verifying low-yield nuclear weapons tests and bench tests of system components and the possibility of covert Soviet production and deployment of more nuclear systems of the types already tested and fielded.

It should be noted that, as a closed society, the Soviets "enjoy" several advantages in the realm of verification relative to the United States. Soviet intelligence acquisition, and hence verification of agreements, is much easier because of the openness of this nation's democratic society and the wide publicity given defense (especially nuclear) issues. There are no Soviet counterparts to the antinuclear or "defense watchdog" organizations that exist in the United States.

For example, imagine the grateful ap-

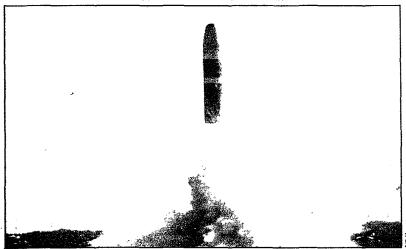
preciation of the Soviets to the publication of the Defense Monitor which in one 1982 issue provided a seven-page list detailing the locations and numbers of US nuclear weapons, delivery means, Strategic Air Command and air defense bases, production facilities, ICBM fields and much more.25 Yet none of that information came from classified sources. I am not implying criticism of such organizations or publications. I am merely illustrating the intelligence acquisition and verification advantages enjoyed by the Soviets because of this democratic society. US intelligence agencies can look forward to no such Soviet assistance in attempting to verify compliance with arms agreements.

Since normal means of verifying arms agreements (national technical means) would be inadequate in monitoring compliance with some testing, production and deployment aspects of a freeze, could

other methods be employed? There are other measures that could be used to construct a verification system capable of providing a high degree of confidence. Examples include provisions for frequent onsite inspections (which the Soviets have in the past "viewed as a form of espionage" and monitoring the use of special nuclear materials such as uranium and plutonium.

Even better would be for each side to allow the other free access, on very short notice, to any location requested—thus precluding covert production of nuclear weapons. However, such measures go far beyond those of SALT I and are almost certainly more than the Soviet Union would be willing to accept. In fact, such measures are so unrealistic that we are left with the conclusion that the United States could not confidently verify Soviet compliance with a freeze agreement given the assets realistically available.

Trident submarine-launched ballistic missile



US Navy

Would the Soviets Honor a Freeze Agreement?

If the United States and the Soviet Union could reach an agreement on verification of a nuclear freeze, there is some doubt that the Soviets would honor the accord. There have been press accounts of deliberate Soviet interference "with the theans of verifying compliance with the SALT I treaty."27 Soviet violations have included digging unauthorized silos, scrambling SS20 radio signals during missile tests (which complicates US efforts to determine the SS20's capabilities) and attempting to conceal movements of a new ICBM.28 In addition, there is good evidence "that the USSR has stretched the meaning of the SALT provisions to stockpile far more than the permitted number of missiles."29

Soviet disregard for other international agreements is also illuminating. The Soviet Union was a party to the Geneva Protocol of 1925 which banned the first use of chemical agents and to the 1975 Biological Weapons Convention which renounced the use and production of biological weapons. In spite of those agreements, the United States has acquired overwhelming evidence indicating that the Soviets and their allies used chemical and biological (toxin) weapons in Laos, Kampuchea and Afghanistan.³⁰

In addition, an outbreak of pulmonary anthrax in the Soviet Union at Sverd-lovsk, the suspected result of an accident in a biological weapons production facility, still remains unexplained. Such actions create considerable doubt about the Soviets living up to any treaty or verification measures—even in the unlikely event that they agreed to the stringent measures on which the United States would insist.

And what would the United States do if the Soviets violated a freeze agreement? What could this nation do if it discovered that some unauthorized Soviet activity had left it more vulnerable than before? A realistic appraisal reveals that it would be possible to do little more than rue the day the Soviets were allowed to mount their deception, engage in some tough talk and economic reprisals, cancel the freeze and try to catch up from an even weaker position.

Would Strategic Arms-Reduction Talks Be Frozen Too?

A "satisfactory" nuclear freeze would have to contain many, if not all, of the elements we normally associate with arms-reductions talks. It would necessarily be far more complicated than the simplistic resolutions so widely supported and would have to include agreements on many items other than just nuclear arms. To prevent further deterioration of strategic stability, agreements would be required for dual-purpose weapons systems (for example, aircraft or missiles that can carry conventional as well as nuclear warheads), maintenance and safety improvements to existing systems, civil defense measures, development of antisubmarine warfare technology, air defense systems and perhaps even space weapons.

As explained earlier, the underpinning for such an agreement would have to be provided by the negotiation of complex verification measures. Obviously, such an accord might well be more difficult to negotiate than arms reductions. However, unlike the hoped-for arms-reductions agreements, even a relatively all-inclusive freeze would leave the United States with

the undesirable vulnerabilities in our nuclear deterrent that exist at the present time. Equitable arms-reduction accords, on the other hand, would leave us with increased strategic, •crisis and arms-race stability.

What would happen to our hopes for an arms-reduction treaty if we indicated the willingness to settle for a freeze? Weinberger contends that the acceptance of a freeze would show a lack of resolve to strengthen US nuclear defenses and would virtually destroy this country's ability to negotiate genuine arms reductions. Weinberger argues that the United States must continue to demonstrate resolve:

... to modernize our nuclear capability, even though we of course earnestly hope to negotiate major and effective arms reductions agreements. Only by maintaining our strength can we produce the pressure necessary to get the Soviets to agree to advantageous arms reduction agreements.⁵²

The United States' efforts to obtain a verifiable ban on chemical warfare through bilateral arms-control agreements with the Soviet Union are illustrative of the impossibility of gaining an agreement when one side is asked to surrender an advantage. Because the Soviets have a significant margin of superiority in chemical warfare capabilities, they have shown little interest in seriously negotiating an agreement which includes adequate verification.

The Soviets have everything to lose and, because of our lack of comparable modern weapons as a result of US unilateral restraint since 1969, little to gain.³³ It is now apparent that, until the United States improves its chemical deterrent, there will be no incentive for the Soviets to negotiate a comprehensive, verifiable ban on chemical weapons.

A similar situation existed in the 1960s when the Soviets initially refused to negotiate an antiballistic-missile treaty. Initially, when only the Soviet Union had an antiballistic-missile system fielded, the Soviets showed no inclination to reach an agreement. It was not until the United States developed its own system that the Soviets changed their minds and negotiated in earnest.³⁴

While the Soviets do not have superiority in strategic nuclear weapons comparable to that which they enjoy in chemical weapons, the failure to reach agreement on chemical weapons shows that the United States cannot successfully negotiate from a position of relative weakness. Therefore, if we accept the premise that the United States' nuclear deterrent has certain vulnerabilities in its ICBM and bomber forces not shared by the Soviet Union, it seems logical that the Soviets will not surrender their position unless they perceive that this nation intends to correct the existing deficiencies to ensure strategic balance.

Only then can the United States expect the Soviets to realize that it would be futile and extraordinarily expensive to continue their effort to achieve decisive strategic advantages. And only then will they recognize that arms reductions are in their best interests.

Such reasoning should also illustrate precisely why the Soviets would have no motivation to negotiate more stabilizing arms reductions if the United States settled, instead, for a mere freeze and a continuation of the status quo. Kissinger summed up the situation quite well when he wrote that:

If the U.S., by its abdication, guarantees the invulnerability of Soviet missile forces while the Soviets keep ours exposed, any Soviet incentive for serious negotiation will vanish.35

What About Western Europe and NATO?

Our focus to this point has primarily been at the strategic nuclear level. Now, we need to look at Western Europe—an area of vital interest to the United States—focusing specifically on NATO's Central Region to assess the effect of a nuclear freeze on that area. While the balance of forces between NATO and the Warsaw Pact is endlessly debated, with the numbers often manipulated to support various arguments, 36 few would disagree that the Warsaw Pact has a significant advantage in virtually every area of conventional, chemical and theater nuclear arms.

The NATO forces, by virtue of the large number of US artillery and Lance missile nuclear warheads, retain "approximate parity" only in short-range—less than 100-kilometer range—nuclear weapons.³⁷ The lack of conventional balance is especially acute in the critical Central Region where the failure of NATO conventional forces to stop a Warsaw Pact offensive could result in escalation to nuclear weapons.

A relatively best case (for NATO) estimate of the conventional balance. which includes French forces and USbased ground and air reinforcements often left out of such comparisons, indicates that the NATO forces in the Central Region would be at about a 1-to-2 disadvantage in numbers of divisions (although Warsaw Pact divisions have fewer personnel than most NATO divisions, the combat power is roughly the same), a 1-to-3 disadvantage in numbers of tanks, a 1-to-4 disadvantage in artillery and mortars, and about a 1-to-1.4 disadvantage in numbers of combat aircraft. The figures would be roughly the same

even under conditions that prevented reinforcement from the United States and the Soviet Union.³⁸

Despite the unfavorable statistics, the NATO forces in the Central Region should not be lightly dismissed. They pose a very significant war-fighting capability, particularly considering that they will have the advantages of being the defender. Furthermore, there are several important factors which work to NATO's advantage. Some factors are the political unreliability of several of the Warsaw Pact countries (Poland is the best-example), better levels of training in the Western forces and rigid (and, therefore, predictable) Warsaw Pact operational doctrine.

On the other hand, despite all of its efforts to improve interoperability, NATO still presents a less homogeneous force both in organization and equipment. Therefore, NATO suffers more from compatibility problems. In sum, despite the imbalance in the Central Region which favors the Warsaw Pact, the NATO forces have "the conventional strength to force the Soviet Union to launch a massive attack and prevent any easy victory in a limited war." ¹³⁰

Should a massive Warsaw Pact attack be launched across the West German border and should NATO's conventional forces prove unable to stop it, NATO would have to resort to short-range nuclear weapons-"the capstone of NATO's deterrent and the linchpin of [the US] strategy of flexible response."40 As noted here, the NATO forces have approximate parity in this area. However, the majority of the NATO warheads are on relatively old artillery and Lance missile rounds whose use is limited due to their short range (hence, the US Army's current willingness to reduce the numbers of such nuclear rounds in Europe).

This is a serious limitation as it decreases the NATO threat to the lucrative deep targets presented by the followon echelons of the Warsaw Pact. The Soviet counterparts to these weapons, though less plentiful, have superior range and accuracy. One step up the "ladder of escalation" are the tactical surface-to-surface missiles in which the Warsaw Pact heavily outguns the NATO Alliance by 6-to-1 in missile launchers and 5-to-1 in warheads. 41

In addition, NATO still has not deployed any weapon comparable to the accurate and mobile Soviet SS20 theater nuclear missile which is reloadable, has a range of 3,000 miles and has three warheads on each missile. At the present time, the Soviets have more than 243 SS20 launchers deployed in Europe, and each SS20 unit is assessed to be equipped with an additional refire missile per launcher.⁴⁷

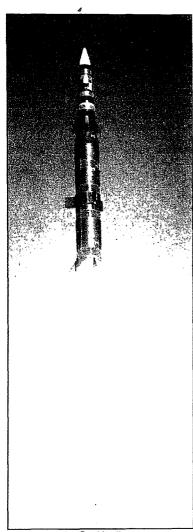
Some have argued that the absence of NATO counterparts to the SS20 is of little consequence because US. British or French strategic nuclear weapons can just as adequately target a location as theaterrange missiles can. The NATO Alliance has not shared their view. The allied strategic nuclear missiles are not as accurate or responsive to targeting changes as the Pershing II and cruise missiles promise to be. Beyond that, however, the paramount issue for the NATO countries has been ensuring deterrence born of the "coupling" or "linkage" between US medium-range nuclear missiles and the US strategic nuclear force.43

The result was the NATO decision of 12 December 1979 to deploy US *Pershing II* and cruise missiles in five European countries beginning in December of this year. Not surprisingly, the Soviet Union has used every available political and psychological tool to oppose this deployment, in-

cluding a massive propanganda effort and outright attempts to bully NATO." Yet, despite well-organized and very vocal campaigns in Western Europe to prevent the upcoming deployment of the *Pershing II* and cruise missiles, no major allied government has given in. Were the United States to adopt a nuclear freeze—thereby precluding following through on the 1979 decision—it would cut the ground out from under the European leaders who have steadfastly held to the implementation of that decision.

Thus, it should be evident that a nuclear freeze would have a serious impact on NATO, particularly in the critical Central Region where the Warsaw Pact forces have true advantages in conventional, chemical and nuclear forces. A freeze would preserve the weakened state of deterrence that results from NATO's lack of theater nuclear forces and leave the key issue of coupling unresolved. In preventing the deployment of US Pershing II and cruise missiles, a freeze would weaken the Atlantic Alliance and encourage perceptions of growing Soviet strength at a time of US weakness and decline.

"Such perceptions have already led some Europeans to urge their governments to reduce ties with the United States and NATO."45 and the United States' acceptance of a nuclear freeze would seem to confirm the feelings of those Europeans urging reduced reliance on the United States. Soviet leaders would certainly promote and manipulate such European anxieties in hopes of weakening the unity and resolve of the NATO Alliance and in an effort to extend Soviet influence without risking the dangers of a major war.46 Thus, while a freeze would by no means be a guarantee of a Warsaw Pact invasion, the NATO nations would very likely have to pay a heavy political price somewhere down the road.



Pershing II

The Impact of the Soviet Strategic Orientation

Ultimate deterrence is achieved by each side holding the other side's civilian population hostage. However, this assumes that "both the USSR and United States will freely offer up their populations for massacre." "Unfortunately for the United States and deterrence, the Soviet Union has seen things differently. Because of a history filled with invasions in every century, to include three in the 20th century, the Soviets have been very concerned about protecting their citizens in case of war. Consequently, the Soviets have:

. . . implemented large programs for defending their citizens from nuclear attack, for shooting down American missiles, and for fighting and winning a nuclear war.⁴⁸

Together with the huge buildup in their offensive nuclear capabilities, such Soviet actions are quite destabilizing, especially when they are not matched by similar US efforts. The result is a belated realization by the United States that mutual assured destruction never became mutual—as Senator Daniel P. Moynihan described it, "a policy in ruins." 19

What is usually forgotten or overlooked is that while the strategic orientation of the United States emphasizes measures for preventing war, Soviet deterrent thinking "concentrates largely on the requirements for responding effectively and surviving in the event deterrence fails." Studies in 1977-78, directed by Secretary of Defense Harold Brown, concluded that the Soviets are serious about winning a global nuclear war. The Soviets believe that "victory" is an attainable goal for a nation that studies the problems of nuclear war, works out a strategy for vic-

tory and develops doctrines, forces and strategic defensive programs, together with an allocation of economic and human resources for the implementation of such a strategy.⁵¹

The result of these different approaches is that while the United States' civil defense program has been neglected for years, the Soviet Union has forged ahead with a huge, well-coordinated effort. Annually, the Soviets spend approximately 20 times as much as the United States on civil defense.⁵²

To maximize their chances of national survival and to secure the optimal outcome, the Soviets have also been developing a massive strategic defensive force. This force includes active defenses such as modern interceptor aircraft, surface-to-air missiles (there are none defending the United States) and ballistic missile defense systems (the United States has had none since 1976). It also includes passive defenses such as surveillance and warning systems, hardened bunkers and electronic countermeasures. 55

The late Herman Kahn, one of this country's foremost nuclear strategists. argued that the United States would be more responsible and probably enhance deterrence if, after trying to "deter the use of nuclear weapons by others," we would "then go one painful step further and envisage their use."64 However, only the Soviet Union seems to have heeded his advice, although Presidential Directive 59, under President Jimmy Carter. and recent Reagan administration initiatives indicate gradual US recognition of civil defense and command, control and communications system survivability as elements of the strategic balance.65

While Soviet strategic defense programs are far from perfect, the distinct asymmetries that have emerged could contribute to a Soviet belief that they

could survive a nuclear exchange and emerge in much better shape than the United States. Such Soviet perceptions could encourage them to take greater risks in a crisis situation and possibly lead to miscalculations concerning the limits of deterrence.

A nuclear freeze would exacerbate such destabilizing problems since the typical resolutions fail to address any of these areas which are so important in determining the success of deterrence. While a freeze would not prevent the United States from attempting to catch up with the Soviet head start in some of these areas, the resulting asymmetries would be difficult to overcome. In combination with the vulnerabilities frozen into the US ICBM and bomber forces, such asymmetries could reduce the United States' confidence in its deterrent forces (and increase Soviet confidence in theirs) as well as hamper US actions in the international arena.

Conclusion

While the United States recognizes that there could be no winner in nuclear war, to ensure effective deterrence it is paramount that the Soviet leadership understands this as well. This is especially important because the Soviet buildup in the 1970s:

... has belied the action-reaction theory of the arms race which holds that the Soviet military build-up is always a response to increases in American defense spending.⁵⁶

Unilateral US restraint during the 1970s, which was tantamount to a freeze, was not met with similar Soviet restraint. On the contrary, the Soviets built far greater numbers of ICBMs than would be

necessary for a deterrent capability⁸⁷ and complemented their strategic offensive capabilities with the development of massive strategic defenses.

The new generation of Soviet ICBMs was specifically designed to attack US missile silos and allows Soviet planners to envision a nuclear confrontation in which they probe US resolve to retaliate by attacking a smaller and smaller subset of our military forces while US options for retaliation are limited.58 In the same period, the Soviets deployed mobile SS20 theater nuclear missiles to decouple US nuclear weapons in NATO from this country's strategic ballistic missiles. The inescapable conclusion is that the Soviets are bent on achieving true strategic superiority which they can then exploit to achieve their political, economic and geostrategic aims.

A nuclear freeze would codify Soviet advantages and leave a significant number of the US strategic retaliatory forces ineffective against Soviet targets or vulnerable to Soviet attack. A freeze would also eliminate Soviet incentives for meaningful arms-reduction talks and prevent the United States from modernizing its aging strategic triad.

A freeze could also leave each side with inherently destabilizing ICBM structures which, because of their large number of multiple independently targetable reentry vehicle missiles, offer tremendous theoretical advantages to the side which strikes first. In addition, the Soviets could continue to improve their sophisti-

cated air defenses, but we could not replace our *B52* bombers which are now more than 25 years old. This hardly seems like the path to increased stability, particularly considering the improbability of achieving adequate verification.

However, those are not the only short-comings. A nuclear freeze would also have serious consequences for NATO because it would prevent the deployment of the Pershing II and cruise missiles called for under the 1979 NATO decision. In so doing, the United States would seriously undermine the Atlantic Alliance and undercut the European leaders who have steadfastly supported the deployment decision in the face of vocal opposition.

Finally, a freeze would carry with it the serious international implication that the United States lacks the resolve and national will to maintain an effective nuclear deterrent. Soviet perceptions of such a weakness could very well increase Soviet political bullying and risk-taking at all conflict levels and thereby further threaten world stability.

Though it is difficult to argue against "virtuous talk of peace, reduced defense budgets, and moral rectitude," on hopefully, this article has dispelled some of the illusions regarding a nuclear freeze. It is time this nation's citizens realize that, instead of providing the answer to their fears and frustrations, a nuclear freeze leaves only the paradox that a proposal intended to prevent nuclear war would actually increase the likelihood of such conflict

NOTES

I Joyce E. Larson and William C. Bodie, The Intelligent Leyor Service to the Nuclear Freeze and Peace Debate, preface by Gerald L. Steibel, National Strategy information Center Inc., N.Y., 1983, p.3. 2. "Nuclear Freeze Plans Endorsed," Army Times, 15 November

^{2 &}quot;Nuclear Freeze Plans Endorsed," Army Times, 15 November 1982, p 63, "Vermonters Voice Anti-Nuclear Attitudes," The Kansas

Cry Irmes, 3. March 1983, p. 4.13. Michael Zielenzüger, "Nuclear Freeze Backers Plan Lobby Bittz, 'The Kansas Cry Irmes, 5. March 1983, p. 4.5, "Legislators Vole to Seek Nuclear Freeze," The Kansas Cry Irmes, 11 December 1982, p. 4.19, "UN Supports Freeze on Nuclear Arms," The Kansas Cry Irmes, 14 December 1982, p. 4.13," and "House Links Nuclear Freeze to Arms Reductions," The Kan-

sas City Times, 5 May 1983, p A 1

- 3 'Weinberger Urges Nuclear Freeze Rejection," Army Times, 8 November 1982, p.8
- 4 Kelly H Burke "Arms Control in the Real World." Armed Forces Journal International, November 1982, p 108 5 Ibid
- 6 Jerome B. Wiesner, "Russian and American Capabilities." Parameters, Volume XII, Number 4, p 86
- 7 Leon V Sigal, 'Warming to the Freeze,' Foreign Policy, Fall
- 8 Sources for the figures in this paragraph are Soviet Military Power, 1983, US Government Printing Office, Washington, D.C. 1983 pp 18 27, Anthony H. Cordesman "M.X and the Balance of Power Reasserting America's Strength," Armed Forces Journal international, December 1982, pp 29-41, Annual Report to Congress, FY 1984, US Government Printing Office, Washington, D.C., 1 February 1983 pp 51-55, United States Military Posture for FY 1984 Organization of the Joint Chiefs of Staff, US Government Printing Office, Washington, D.C., 1983, pp. 13-18; and "Preparing for Nuclear War President Reagan's Program, Defense Monitor, Volume X, Number 8, 1982, pp 1 16
- 9 Theodore H. White, Weinberger on the Ramparts." The New York Times Magazine, 6 February 1983, p 17
- 10 Andrew C Tuttle, "Strategic Balance in the 1980's," National Defense July-August 1982, p.24
- 11 Albert Wohlstetter, "The Delicate Balance of Terror," Foreign Allairs, January 1959, p 213
 - 12 Sigal on cit p 57
- 13 Annual Report to Congress, FY 1984, pp. crt. p.53 14 "Estimates of Missile Defense Costs Rise," The Kansas City
- Times, 18 May 1983, p.A.2 15 John D Steinbruner, Nuclear Decapitation, Foreign Policy
- Winter 1981-82 p 18 16 Joel S. Witt, "Advances in Antisubmarine Warfare." Scien-
- tific American, February 1981, pp 15-25 17 Henry A. Kissinger, "A New Approach to Arms Control."
- Time 21 March 1983, p 25. 18 Leon Goure, Another Interpretation ' Bulletin of the Atomic Scientists, April 1978, p 51
- 19 Donald Rumsfeld, in a letter to Armed Forces Journal Inter national, February 1983, p.8
 - 20 Larson and Bodie, op cit p 39
- 21 Richard B Foster, On Prolonged Nuclear War Interna tional Security Review, Winter 1981-82, p.501
- 22 Henry A Kissinger, The Admiral Spruance Lecture, ' Naval War College Review, Summer 1978
- 23 David C Jones, Can We Be Secure With a Nuclear Freeze?," Defense/82, July 1982 p 15
 - 24 Sigal op cit. p 55
- 25 "Preparing for Nuclear War President Reagan's Program, Defense Monitor, op cit
- 26 Amos A Jordan and William J Taylor Jr , American National Security The Johns Hopkins University Press Baltimore, Md. 1981, p 518
- 27 Robert Jastrow, 'Why Strategic Superiority Matters,' Com mentary March 1983, p.30
 - 28 Ibid
 - 29 Larson and Bodie, op cit, p.4
- 30 Chemical Warfare in Southeast Asia and Afghanistan, Department of State Special Report Number 98, US Government

- Printing Office, Washington, D.C.
- 31 Use of Chemical Weapons in Asia, Department of State Bulletin, US Government Printing Office, Washington D.C., Jan uary 1982, p 54
- 32 Caspar W Weinberger, "Seeking a Consensus for the Common Defense," Detense/82, December 1982, p 7
- mon Defense, "Defensedz, December 1992, p. 7.
 33 Annual Report to Congress, FY 1984, op. cit., p. 237
 34 Charles Doe, "Study Sees Standoff on Strategic Arms Control," Army Times, 9 May 1983, pp 23-24
- 35 Kissinger, "A New Approach to Arms Control," Time, op cit.
- 36 For en excellent discussion of the shortcomings in the numbers used for force comparisons see Milton Leitenberg. The Numbers Game or Who's on First?: Bulletin of the Atomic Scientists, June July 1982, pp 27-32.
- 37 Donald B. Cotter James H. Hansen and Kirk McCoppell. The Nuclear 'Baiance' in Europe Status, Trends, Implications, US Stratedic Institute Report Number 83-1, US Strategic Institute, Washington, D.C., 1983 p.3
- 38 Anthony H. Cordesman NATO's Estimate of the Balance. The Meaning for US Security Policy, Armed Forces Journal International August 1982, pp 56 57
 - 39 Ibid , p 57
- 40 Richard R Burt, Implications of a Nuclear Freeze Department of State Current Policy Number 470, US Government Printing Office, Washington, D.C., 9 March 1983, p.2
- 41 "NATO Behind Nuclear 8-Ball, Study Says," Army Times, 31 January 1983, p 22, and Cotter, Hansen and McConnell, op cit, p
- 42 Soviet Military Power, op. cit., p.37, and 'New Soviet Missile. Bases Reported in Asia," The Kansas City Star, 1 May 1983, p.A.2. 43 Richard H. Ullman, "Out of the Euromissile Mire," Foreign Policy, Spring 1983, p 44
- 44 Anthony H Cordesman. "Using a Strategy of Fear to Counter a Fear of Strategy," Armed Forces Journal International, February 1983, p. 60, ' Soviets Launch Propaganda Fitort Against U.S.," The Kansas City Times, 16 March 1983, p.A.6 and Moscow Issues Warning on Nuclear Retaliation," The Kansas City Times 30 November 1982, p A 1
 - 45 Larson and Bodie op cit, p 39
 - 46 Ibid p 40
- 47 Jastrow, op cit, p.27 48 Ibid , p 28
- 49 Ibid
- 50 Captern John F. Troxell. Soviet Civil Defense and the Amer-
- ican Response," Military Review, Jahuary 1983, p. 37 51 Foster, op. ct., p. 497 52 Henry Kearney, "Can We Defend Against the Bomb? Army Reserve, Fail 1982, p. 22.
- 53 Soviet Military Power, op. cit., pp.7. 30 and 31. 54 Herman Kahn, Thinking About Nuclear Morasty, The New
- York Times Magazine, 13 June 1982, p.50 55 Troxell, op cit
- 56 Jastrow. op cit. p 30
- 57 Annual Report to Congress FY 1984 op cit p 26
- 58 Ibid , p 5, and Burt, op cit
- 59 "Weinberger Urges Nuclear Freeze Rejection," Army Times,
- 60 Colin S. Gray, "Nuclear Strategy: A Regrettable Necessity," SAIS Review Winter Spring 1983, p 14

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