

SUMMARY

1. No one can win a thermonuclear war. Therefore preventing it--by deterrence--remains overwhelmingly our most important strategic goal. Though we will want to continue to have the option of limited strategic retaliation, a strategic exchange between the U.S. and the U.S.S.R. will almost certainly end in mutual destruction. We should therefore seek strategic arms limitation agreements that enhance stable deterrence at a lower level of forces than now exists. An agreement can be reached only if each of the signatories considers that the agreement is in its own interest.

2. Our strategic strength is such, and we intend to keep it such, that the Soviet Union will not have a military advantage over us. A more serious risk is that those among us who disparage U.S. military strength and say we are second best will deceive our allies, ourselves or (worst of all) the Soviets as to the true situation, with severe psychological and political effects.

3. To reduce the possibility of mistaken judgments about the outcome of a nuclear exchange, and reduce still further the incentive for a preemptive strike, we should negotiate a total ban on deployment of ABM systems, and on shelter and evacuation programs based on the illusion that either participant can survive a thermonuclear war.

4. To make clear our belief that security is increased by reducing the numbers of nuclear weapons, we should negotiate with the Soviets a ceiling on strategic offensive systems well below the Vladivostock figure of 2400. A figure of 2000 will force both sides to reduce below their present forces. It will also signal to the world the intention of the superpowers to depend less on strategic nuclear forces, as a step toward the renunciation of such forces as a peaceful order in the world is achieved, and as encouragement to other nations to seek security by means other than nuclear weapons. To this end, a goal of 1000 should be sought by 1986.

5. The strategic arms agreements reached so far have been insufficiently comprehensive, and have thus encouraged the diversion of strategic arms development into channels not limited by agreement. Because the present strategic forces of the two sides are in approximate balance, we should aim for a verifiable agreement that would prevent further development or deployment of any strategic weapons beyond those now in place. Such an agreement would have to prevent deployments of systems termed "modernization and replacement" if the replacement involved changes. Failing that goal, further testing of MIRVed missiles should be forbidden, and severe numerical limits placed on the annual number of missile tests of any kind. By removing the possibility of, or at least confidence in, high accuracy, this would reduce the incentive for a first-strike to eliminate part of the other side's deterrence force.

6. Our bomber force requires some cruise missiles for penetration aids to compensate for (unrestricted) Soviet air defenses. We should be prepared, in return for satisfactory limits on numbers and sizes of ballistic missiles, to negotiate severe limits on other cruise missiles. The Soviet Backfire bomber should be constrained in capability, along with other non-central U.S. and Soviet systems including MR/IRBMs.

7. The United States is the only nation on negotiating terms with all the other powers possessing strategic nuclear arms. We should now begin the process of negotiating limits on the strategic arms of others as well as those of the U.S. and U.S.S.R. This would serve also as a step toward limiting the growth of the numbers of such nations.

GOALS

The U.S. purpose in negotiations and agreements on strategic arms should be to improve U.S. security over what it would be in the absence of such negotiations and agreements. U.S. security is also the goal of military policy, so that arms control can be seen as the other side of a single coin. But arms control involves tradeoffs, limiting or foregoing U.S. deployments in return for corresponding constraints on Soviet (or other countries') actions. There are a number of different, and sometimes conflicting, measures and factors even in unilateral U.S. decisions on our military security. (There are also non-military factors such as economic strength, degree of self-sufficiency or surplus in energy, food, etc., domestic cohesion and will, living up to a set of ideals that we believe in and are attractive to people in other nations.) Consequently there are a number of goals for SALT, including:

1) Improving or stabilizing deterrence, that is reducing the probability of thermonuclear war between the U.S. and the U.S.S.R. by increasing the stability of the strategic situation. This includes reducing the incentives for a first strike against deterrent forces and for the inauguration of new weapons systems or strategies that could threaten deterrence.

2) Improving war fighting capabilities--that is, improving the likely outcome for the U.S., either absolutely or relative (to the U.S.S.R. or the rest of the world) if a thermonuclear exchange does take place. This aim is to a degree inconsistent with the first because we are not the only participant in the negotiations. The U.S.S.R. is well-informed and independent. It has interests adverse to our own in this second, if not the first, goal. To the extent that either side presses for a meaningful advantage in war fighting capability, in negotiations/or in unilateral decisions about force structure and strategy, it erodes stability.

3) A perceived equality (some would strive for a perceived advantage) in military capabilities of strategic forces, and in political effects thereof. Some believe that there is a direct political effect of quantitative or qualitative strategic force disparities. Others believe that this can be so only for very large factors of differences across the board. Still others conclude that beyond some modest number of bombs and warheads, whose survival and delivery are reasonably assured, larger numbers of strategic forces confer no advantage military or political.

4) Achievement of a shared view of the purposes of strategic forces. Some would argue that this has in no sense been realized, others that (e.g. in the limiting of ABMs to one site) it has been implicitly accepted.

5) Slowing the growth of the number of powers with strategic nuclear capability, and the proliferation of nuclear weapons to nations and sub-national groups.

6) Limiting the economic and/or technical burden of strategic arms development and deployment. The economic costs are a few percent of GNP for the Soviet Union and substantially less for the U.S. Thus the direct economic advantages of limitation are unlikely to be great. But there are signs that the Soviets want to release technical resources. Suggestions have also been made that U.S. industrial research and development could be helped by a resource transfer.

7) A hope that cooperation in strategic arms limitation could lead to progress toward limits on conventional arms, and to political agreements limiting military or non-military intervention elsewhere.

With respect to (1) SALT has had some success. (2) is inconsistent with it; SALT has probably not decreased and may even have increased the U.S. forces aimed at war fighting above what they would have been without SALT; Soviet war fighting forces (especially ABM) are probably less than they would have been without SALT. (3) was being well-served until some U.S. security experts implied

that U.S. strategic forces are (or will be) inferior to those of the U.S.S.R. in some militarily or politically meaningful sense. Since the only likely political effect is a psychological one on other countries, this could become a self-fulfilling prophecy. (4) is unlikely to be achieved in a formal sense, but such effects probably have occurred on decision-influencing groups both in the U.S. and U.S.S.R. (6) and (7) are respectively not of major importance and very unlikely in the face of existing basic national goals, but (5) is worth seeking, and the recent "suppliers" agreement on nuclear technology was marked by the cooperative leadership of the U.S. and U.S.S.R.

THE CURRENT SITUATION

In 1972, the U.S. and U.S.S.R. signed a Treaty limiting antiballistic missile systems to no more than two "sites"--actually limited areas--subsequently reduced to one site. The Soviets have one around Moscow; the U.S. has deactivated its site at a Minuteman base in North Dakota. ABM interceptors and radars at the one site are limited in number to a level ineffective against a deliberate mass attack. Deployment (but not development) of exotic ABM systems (e.g. lasers) is forbidden, as is testing or upgrading of surface-to-air missile systems to give them an ABM capability.

At the same time, the parties signed an interim agreement on strategic offensive missile launches. This expires in October 1977. It limits numbers of missile silos and their sizes to those existing or under construction at the time. It limits SLBM (submarine-launched ballistic missile) launchers and the number of such submarines by a complex formula. Missile systems may be "modernized and replaced" within the launcher size. "Modern large ballistic missile" launchers are limited in number to those existing or under construction; this allows the Soviets about 300 and the U.S. none; the U.S. could, under this agreement, replace its Minuteman system within the present silos by a larger missile with three or four times the payload, but has not chosen to do so. The agreement in effect allows the Soviets about 2300 missiles and the U.S. 1710 (1000 Minuteman, 54 Titan, 656 Polaris/Poseidon SLBMs). The Soviets could have up to 950 SLBMs within this limit by phasing out older land-based missiles. The rationale for these differences is still valid but, in varying degrees, has eroded and will erode with time--hence a temporary agreement. This rationale includes: the U.S. advantage in heavy bombers, not limited in the interim agreement; the fact that the U.S. planned force structure to 1977 was not constrained by the agreement; and the U.S. technological and force structure advantage in MIRVs--multiple independently-guided reentry vehicles (ballistic missile warheads).

No limits were placed on U.S. forward-based systems in Europe or Asia, or on Soviet MR/IRBMs or air defenses (except that the latter not be given ABM capability).

Verification of compliance is by national technical means (satellites, etc.) rather than on-site inspection. These national technical means are not to be interfered with.

Following the SALT 1 agreements, SALT 2 negotiations to replace the interim agreement and achieve other strategic arms limitations have been under way for over three years.

In December, 1974, at Vladivostock, Ford and Brezhnev agreed on the principles for a 10-year, more comprehensive, agreement on strategic offensive forces to replace the interim agreement on strategic ballistic missiles. It includes a maximum of 2400 heavy bombers, ICBMs, and SLBM, and a sub-limit of 1320 on MIRVed SLBM and ICBM launchers. It would ban air-launched or surface ship-launched missiles of more than 600 km range (there has been subsequent dispute about whether this applies only to ballistic missiles or to cruise missiles as well).

Since that agreement in principle, the negotiations have bogged down in disagreement on whether the Soviet Backfire aircraft is to be counted as a heavy

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bomber, whether and how cruise missiles (in which the U.S. is believed to have a technological advantage of some years--as it did with MIRVs at the time of SALT 1 negotiation) are to be limited.

A number of other issues which were considered the central ones before the ascendancy of the Backfire and cruise missile questions appear to have negotiated to near-agreement. ~~It~~ This includes, for example, what missiles are to be counted in the 1320 MIRV limit. This includes the counting of launchers as MIRVed, depending on whether the corresponding missile has been tested in MIRVed form and the missile has been deployed in that type of launcher. This is intended to provide adequate verification of compliance, based on observable criteria without on-site inspection.

But since "nothing is agreed until everything is agreed," the SALT Talks remain stalled.

ISSUES FOR PRESIDENTIAL ATTENTION

1. Deterrence vs. war-fighting. Deterrence of a nuclear attack on the U.S. is by far the most important function of our strategic forces, and this is enhanced before the event by the expectation of maximum damage to the society of an attacker. However, an actual nuclear attack would call for a response aimed at minimizing the physical and political damage to U.S. society, not maximizing that to the attacker. If one calls such a response "war-fighting capability," then war-fighting capability may be a useful criterion for our forces, even in their deterrent role. But the chances that a limited nuclear exchange could fail to lead to counterpopulation attacks, with deaths of the order of 100,000,000 both in the U.S. and in the U.S.S.R., appear small if one considers possible scenarios. Should we seek to limit war-fighting and counterforce capabilities in SALT?

2. Force levels. The Soviets have more missiles, larger ICBMs, and more missile payload than the U.S. The U.S. has more bombers and bomber payload. In most technologies (MIRVs, cruise missiles, solid propellants, perhaps in guidance systems) the U.S. leads, but the Soviets probably have equal potential, together with both a greater variety of systems in development and (for missiles) a larger payload that can make up for the weight penalty of less advanced technology. The overall effectiveness of the two forces is now probably equivalent within the margins set by their differing natures and functions and by the nature of thermonuclear war (vulnerable populations, much less vulnerable strategic forces). But both sides have active new development and deployment programs; each may consider itself threatened by the other's and impelled to respond in kind.

Moreover, in the face of agreed numerical limitations, emphasis is shifted to qualitative improvement rather than larger numbers. Deployed numbers can be verified with some assurance. Detailed characteristics are more difficult to tell, but the development status of new systems can generally be monitored quite well. Should we shift emphasis to try to stop both sides where they are, in what is generally considered a satisfactory relative position? Or does this make us vulnerable to Soviet cheating, or to a "breakout"--a planned and carefully prepared later withdrawal from the agreement, with rapid development and deployment that can be planned in secrecy and executed with the discipline of a totalitarian society?

3. Verification. We have had and can expect good success in verifying deployments as they occur, with adequate numerical accuracy. Deployments of substantial forces of strategic systems takes several years from the onset of construction. To this point, we have usually been able to predict deployments as much as a few years in advance, in part by monitoring development activities. There are some indications of Soviet steps to limit our abilities to forecast.

In any event, some limitations (missile and silo sizes and numbers) are easier to verify than others (cruise missile range, missile accuracy). Moreover, the degree of certainty that verification must provide about the numbers and nature of a particular weapons system depends on the balance between the Soviet incentive to violate (i.e. the strategic importance of evasion) and the risk and consequences of being caught. What degree of assurance of verifiability shall we require? What degree of Soviet action to limit our knowledge (advance or current) is unacceptable?

4. Backfire. This Soviet bomber has range/payload capabilities (or could have, with refueling, and/or improvements) such as to be able to reach much of the U.S. from northern Soviet bases. It is currently assigned to and planned for (training, deployment) theater force use. Even with improvements, it is usable against U.S. targets only in a restricted mode (high and slow). Various proposals for including it in the 2400 numerical limit have been made. It should be noted that a modest U.S. investment in air defense forces would probably make the Backfire profiles that qualify it as intercontinental not acceptable to a Soviet planner. Should the U.S. insist on counting Backfire in the 2400 limit at the risk of no SALT agreement? Is a side agreement possible? Are there alternative proposals or packages including comparable systems with which Backfire limits can be included?

5. Cruise missiles. Recently developed technology for engines and guidance will probably allow greatly increased range and accuracy for these systems. They could become a new kind of strategic force, based on land, surface ships, submarines or aircraft. Moreover, if their costs can be kept down they could replace and be more cost-effective than tactical aircraft in many missions against heavily defended targets. The technology is similar for strategic and tactical uses, and the U.S. is probably five years ahead. Tactical missions--of range--about equal to the mission radii of tactical aircraft, about 1000 km--and the use of cruise missiles as penetration aids (of range about 2500 km--somewhat larger than the radius of interceptor aircraft) for strategic bombers appear of special value. Replacing SLBMs or SSN torpedo tubes with cruise missiles for naval warfare appears less so. Naval targets can't be detected and identified even at 650 km, despite decades of attempts, so that preprogrammed cruise missiles of that range do not have a clear use in naval warfare. For use against land targets in Europe, it is politically questionable whether we want to replace land-based air (or cruise missiles) with longer-range sea-based ones, because presence counts. Since U.S. cities are closer to the coast, 600 km range allows more standoff for Soviet than for U.S. cruise missiles at that range. However, our ASW defenses extend out from our coast by a distance that exceeds Soviet ASW range by an amount comparable with the difference in distance inland of the respective major cities. The advantages of having 5,000 nuclear-armed SLCMs 5 years before the Soviets do will be less obvious when that 5 years has gone, especially since the Soviets have extensive air defenses (of some effectiveness against cruise missiles) and we have essentially none. Something of the effects of time on such an advantage can be seen by noting that we were (and remain) ahead in MIRV technology, but the relative advantages to the U.S. that argued in 1967-9 against delaying development and deployment of MIRVs now are harder to see (though I think they still exist to a degree because MIRVs put at risk the larger fraction of Soviet than U.S. forces constituted by the silo force).

Shall the U.S. try to limit development and deployment of cruise missiles? Is it desirable to limit all land, sea, and air-launched nuclear-armed cruise missiles to 600 km range, or to allow a longer range on air-launched cruise missiles (ALCMs) used as strategic penetration aids against (unlimited) Soviet air defenses? Can a distinction be drawn between tactical and strategic, or between nuclear and conventionally armed, cruise missiles?

6. Mobile missiles. The prospect of increasing vulnerability of silos to highly accurate MIRVs suggests replacing fixed land-based missiles by land-mobile or air-launched ICBMs. These suffer variously from problems of cost, verifiability, public acceptability, and command/control. The Soviets have a developed but not deployed land-mobile ICBM. Should these mobile missiles be banned, or allowed within the aggregate?