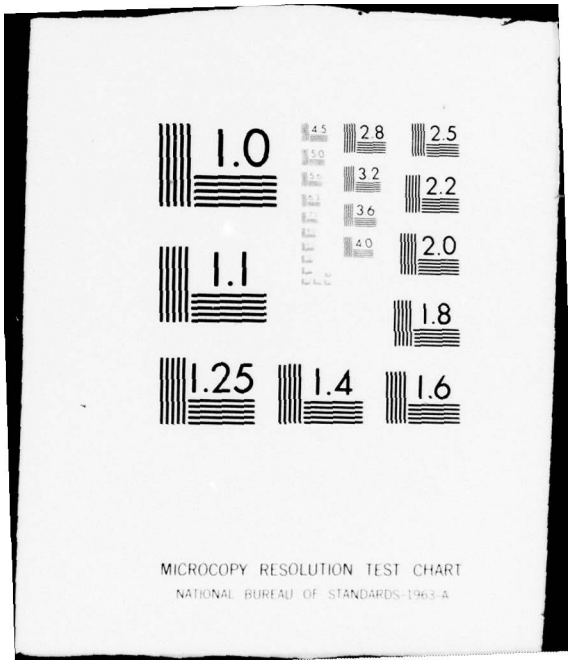
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The hypothesis of this study suggests that instead of enhancing strategic stability and promoting moderation of competition in strategic armaments--the SALT I accords and post SALT I Soviet behavior illustrate what may be a quest for Sovie strategic superiority rather than parity and a mobilization for war rather than detente and peaceful co-existence.

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A thesis presented to the faculty of the U.S. Army Command and General Staff College in partial fulfillment of the requirements for the degree

MASTER OF MILITARY ART AND SCIENCE

(10) by

JOHN P. ROSE, MAJ, USA

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1978

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Approved by:

Research Advisor

Member, Graduate Faculty

Member, Consulting Faculty

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Director, Master of Military Art and Science.

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THEME:

He who mistakes his eroding evaluations for the trend of history can be made to believe that slowing down his retreat is a gain, that preventing further enemy advances must be the limit of his ambitions, and that trying to recover what has been lost would be utter recklessness.

Fred C. Ikle
HOW NATIONS NEGOTIATE (NEW YORK: PRAEGER, 1967,) p. 253.

It has been argued that a balance of power between opposed nations or alliances, the possession on both sides of such forces and weapons that neither is able to impose its will on the other, is an important though precarious source of international security: precarious because...it provides no guarantee against war and defeat and...is inherently unstable: important, because in a world that is armed and divided...no less precarious source of international security is available. If this is so, measures of arms control which undermine the balance of power will defeat their own purpose. On the other hand, internationally agreed measures of arms control may have an important place in any concerted attempt of the powers to maintain a balance.

Hedley Bull, The Control of the Arms Race, (New York:Praeger, 1965), pp. 57-58.

COMMON FALLACIES IN AMERICAN STRATEGIC STUDIES

FALLACY 1	"Was" equals "is" equals "will be"
FALLACY 2	"Should" equals "may" equals "will"
FALLACY 3	Conflict is stylized
FALLACY 4	Crisis is bad
FALLACY 5	The adversary is a person
FALLACY 6	Adversaries are fixed
FALLACY 7	Strategic policy is separate from domestic policies
FALLACY 8	Political goals are beyond strategic analysis
FALLACY 9	What is good for the United States is good for all otners -- up to a certain point.
FALLACY 10	Everyone wants what we want
FALLACY 11	Development will help
FALLACY 12	Power breeds responsibility
FALLACY 13	Risk is minimized
FALLACY 14	Everyone plays it cool
FALLACY 15	Means serve ends
FALLACY 16	Negotiations help
FALLACY 17	Agreements are kept
FALLACY 18	World opinion is real/unreal

Yehezkel Dror, Crazy States - A Counterconventional Strategic Problem (Lexington, Mass.; Heath Lexington, 1971).

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CHAPTER 1 : BACKGROUND TO U.S./SOVIET STRATEGIC ARMS LIMITATIONS

> U.S. foreign policy is based on the assumption that the preservation of American military strength, together with the creation of partnership with allies is vital to the improvement of relations through negotiation with the Soviet Union. [1]

Since the explosion of the two atomic weapons over Japan ending World War II, strategic nuclear weapon systems[2] have become symbolic of superpower status. Strategic weapon systems have become a major political tool used by both superpowers. Strategic forces are influential when considering foreign policy objectives, in addition to providing the means available for superpowers to pursue their objectives, and further illuminate the constraints under which they operate in conducting their affairs.[3]

From 1945 to the late 1960s the United States enjoyed superiority over the Soviet Union in terms of strategic nuclear forces. During the 1960s and early 1970s the Soviet Union constructed both land-based inter-continental ballistic missiles (ICBM's) and submarine-launched ballistic missiles (SLBM's) at a rate which enabled it to exceed the total U.S. intercontinental strategic offensive delivery vehicles by late 1971.[4] This achievement marked the end of America's strategic numerical superiority and the beginning of Soviet symbolic and potential nuclear dominance.

Figures 1-1 through 1-5 illustrate the change in Soviet and U.S. strategic nuclear forces from 1962 to the SALT I agreement in 1972. The charts show that in the early 1960s U.S. strategic superiority provided a margin of safety over Soviet systems. However, with the enormous increase in Soviet capabilities a new and critical dimension was added to the U.S. relationship with the Soviet Union. According to Walter Slocombe in Adelphi Paper number 77, some American officials believed the Soviet Union would cease constructing strategic missiles upon reaching approximately half the size of the American force. That level would have given the Soviet Union an adequate second strike capability.[5] However, the Soviets went beyond a second strike capability. Some American strategists then believed the Soviets were striving for parity - the concepts of equality in strategic nuclear forces. While some may question Soviet intentions it appears clear that strategic superiority -- both quantitative and qualitative -- was and is their objective.

Concern over the massive growth in Soviet strategic nuclear forces in the late 1960s and early 1970s caused President Nixon to state in a report to the Congress on 9 February 1972:

> The Soviet Union is continuing to create strategic capabilities beyond a level which by any reasonable standard already seems sufficient. It is therefore, inevitable that we ask whether the Soviet Union seeks the numbers and types of forces needed to attack and destroy vital elements of our own strategic forces.[6]

The Soviets have reiterated the now familiar theme that Soviet military policy must aim at the attainment of superiority. Further, in doing so they site Lenin's advice about the inevitability of war between rival systems (capitalism versus communism) as a better guideline for Soviet military preparations than relying on the possibility of preventing war.[7] The dominant theme in Soviet military literature at the time of the strategic nuclear force buildup was not on the mutual destructiveness of nuclear war but rather on the possibility of victory in such a war. Military literature asserted that Soviet forces should be prepared to fight, survive, and win a nuclear war if one occurred.[8]

Figures 1 through 5 also show that the Soviets merely took advantage of available opportunities when the U.S. unilaterally froze the number of strategic nuclear forces. The undeniable fact is that the U.S. not only stopped strategic nuclear force deployments in the face of the Soviet buildup but also tolerated a substantial decline in the mid 1960s of its total intercontinental strategic offensive delivery vehicles. After 1967 the U.S. had no active or planned program for deploying additional ICBM launchers, SLBM launchers or long-range bombers. While the Soviet strategic nuclear force was growing rapidly, American arms inaction allowed the Soviet Union to close the gap in crude numbers of strategic systems.

It has been said (and most appropriate here) that "benign neglect will be paralleled by the malignant attention of

others," [9] and that "it is probable that measures of unilateral restraint will just encourage the other side to catch up and make a bid for superiority." [10] The Soviets did just that. The once wide margin of U.S. nuclear superiority has narrowed to a razor's edge even under the most optimistic of projections and there are strong arguments -- quite convincingly -- that the advantage in strategic nuclear forces has gone to the Soviets.[11]

The American commitment to strategic nuclear equality by not responding to the Soviet quantitative arms challenge in the later 1960s, was so overwhelming and the notion of "parity" was so powerful, that one noted analyst stated:

> The most striking illustration of America's faith in the Balance of Power (i.e. parity) principle was the decision to allow the Soviet Union to attain parity in nuclear weapons....

Furthermore, the author adds,

> It would be difficult to find in the whole history of international relations another instance of a country deliberately reducing its advantage over a rival for the sake of attaining an equilibrium. [12]

This faith in parity was obviously not shared by the Soviet Union who suffered from no such political-strategic discomfort and entered SALT with "the conviction that military superiority is both desirable and attainable." [13]

The purpose of this paper is to discuss the role of arms limitations at the strategic nuclear level between the United States and the Soviet Union as it contributes to arms control in general and to strategic stability in particular. This

approach to arms control/arms limitations is not designed to be technical in nature. Discussion will revolve around a conceptual framework. It is not within the scope of this paper to address individual weapon capabilities or hardware issues. This paper is designed to discuss what has been accomplished, what is currently underway, and what may be anticipated. Assuming no radical changes in the international political situation this paper does identify trends.

To judge the usefulness of past and on-going strategic arms limitation talks it may prove useful to establish a conceptual framework through which one can judge the utility or non-utility of arms control measures especially in terms of present and future strategic arms limitations. The next chapter will address just such a framework.

US AND SOVIET
INTERCONTINENTAL STRATEGIC OFFENSIVE DELIVERY VEHICLES
(ICBM LAUNCHERS, SLBM LAUNCHERS, AND INTERCONTINENTAL BOMBERS)

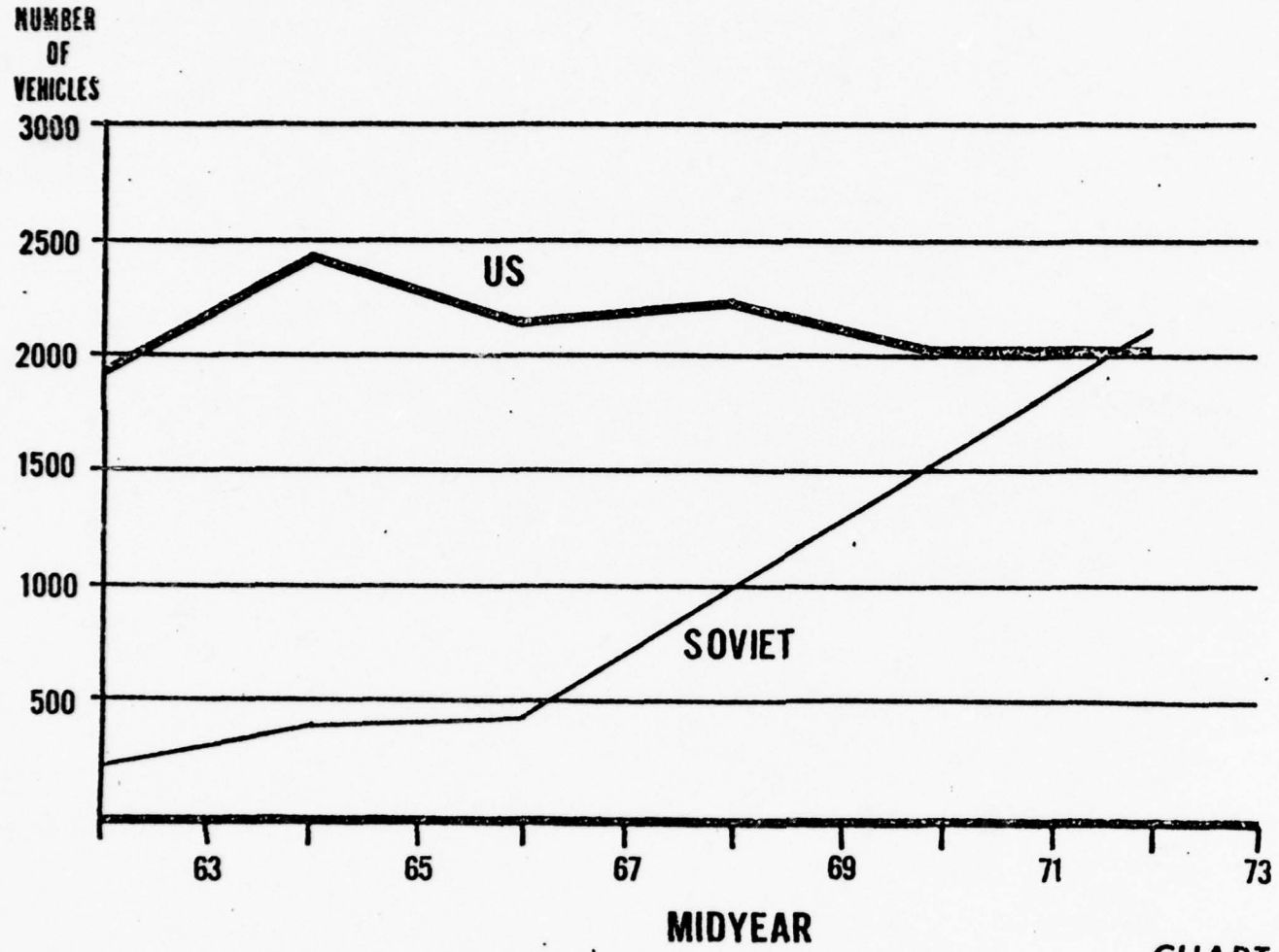


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SOURCE: United States Military Posture For FY 1973, Statement by Admiral Thomas H. Moorer, USN, Chairman, Joint Chiefs of Staff before the Defense Appropriations Subcommittee of the House Committee on Appropriations, (Washington, D.C.: GPO, February 8, 1972).

FIGURE 1-2

SOURCE: United States Military Posture For FY 1973, Statement by Admiral Thomas H. Moorer, USN, Chairman, Joint Chiefs of Staff before the Defense Appropriations Subcommittee of the House Committee on Appropriations, (Washington, D.C.; GPO, February 8, 1972).

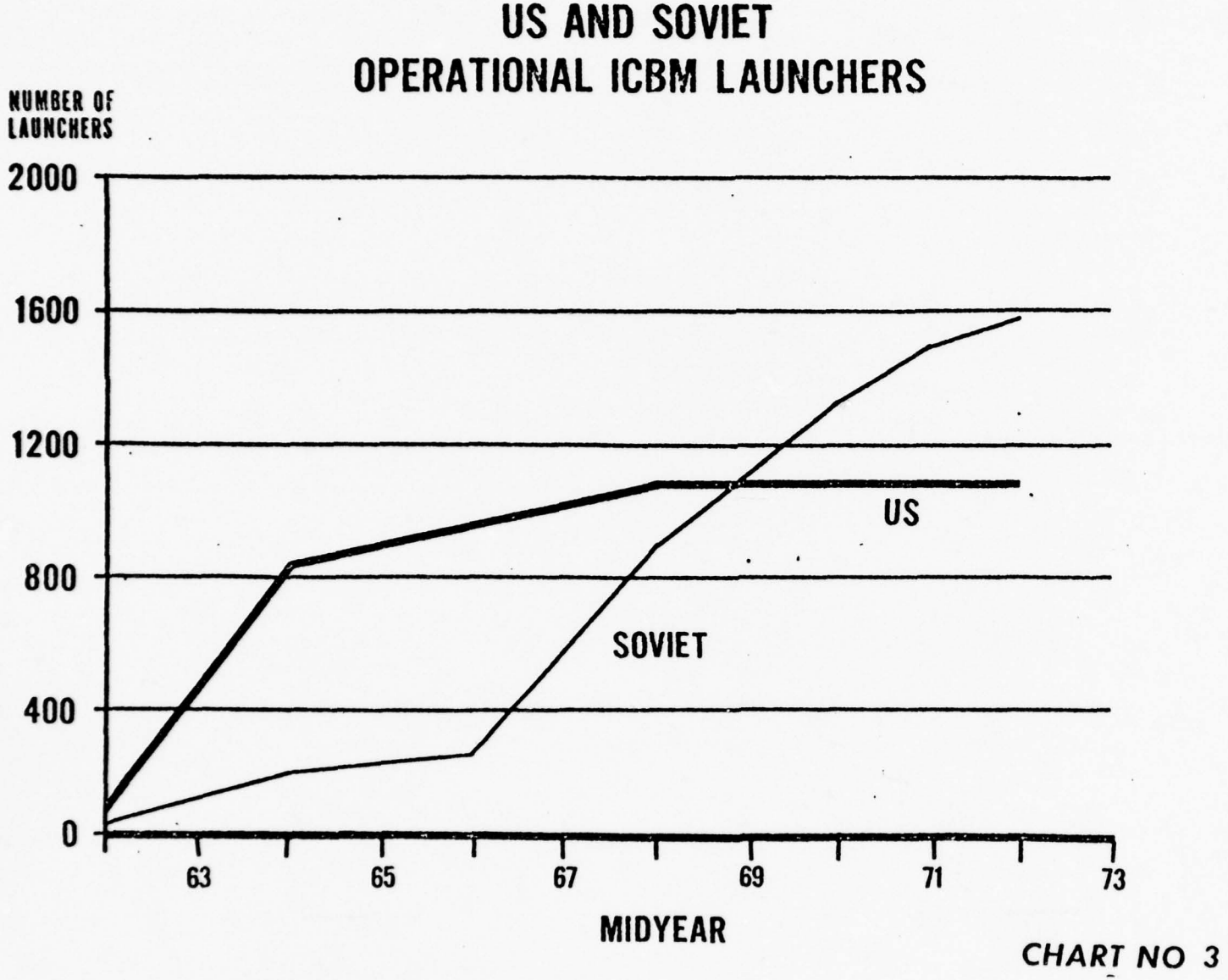


FIGURE 1-3

SOURCE: United States Military Posture For FY 1973, Statement by Admiral Thomas H. Moorer, USN, Chairman, Joint Chiefs of Staff before the Defense Appropriations Subcommittee of the House Committee on Appropriations, (Washington, D.C.: GPO, February 8, 1972).

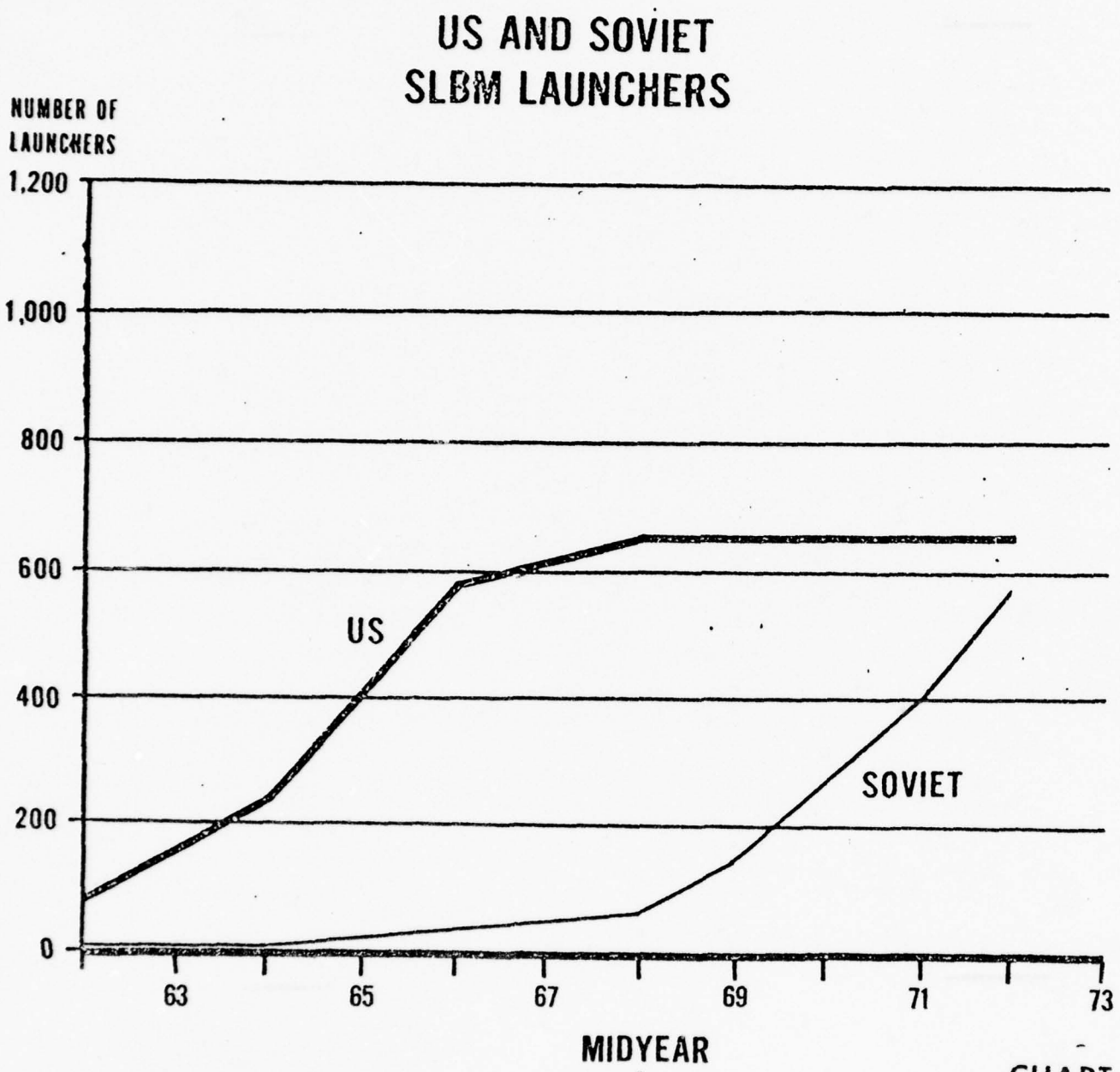


FIGURE 1-4

US AND SOVIET INTERCONTINENTAL BOMBERS

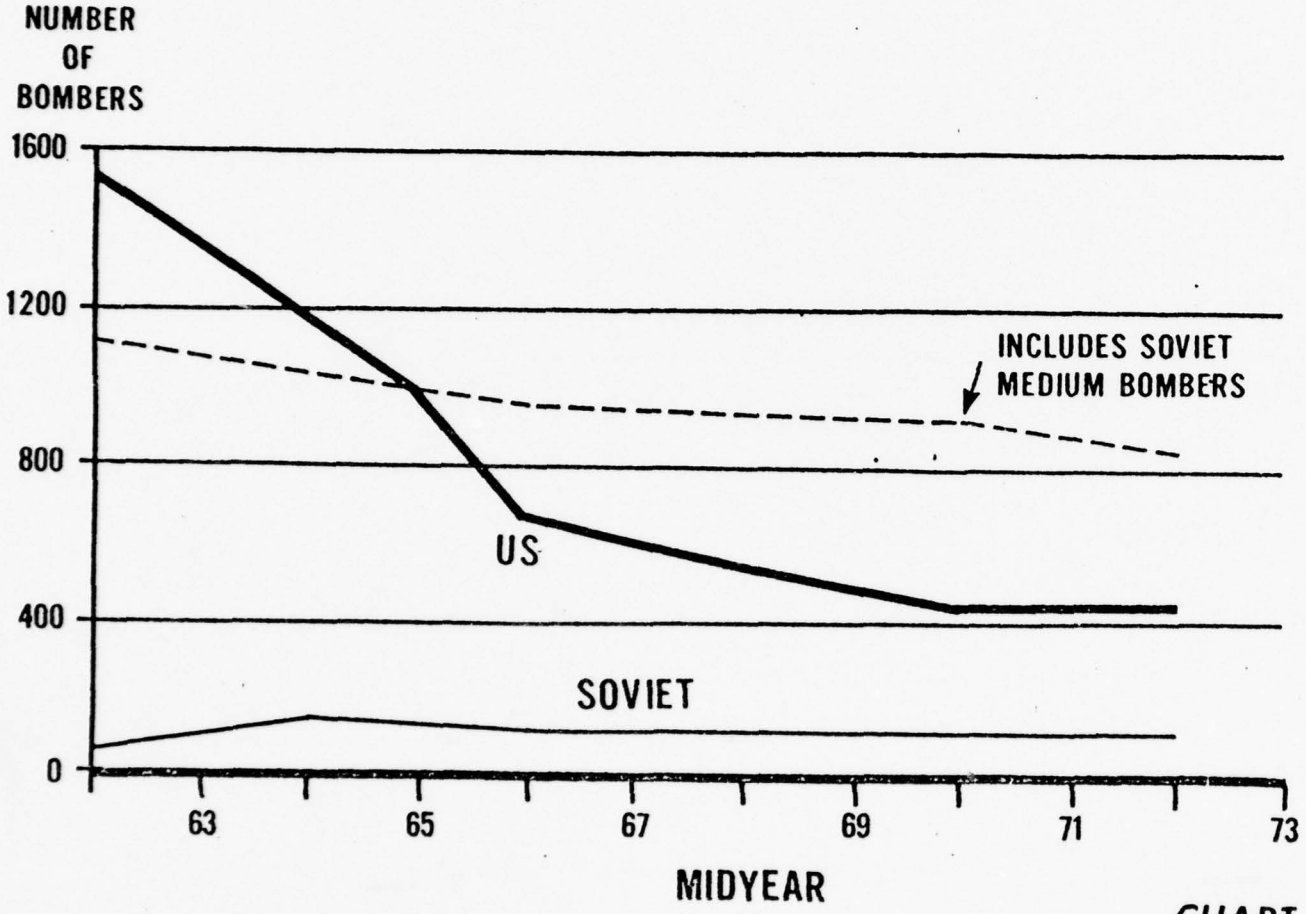


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FIGURE 1-5

HISTORICAL CHANGES OF STRENGTH 1962-1975 (MID-YEARS)

		1962	1963	1964	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974	1975
USA	ICBM	294	424	834	854	904	1,054	1,054	1,054	1,054	1,054	1,054	1,054	1,054	1,054
	SLBM	144	224	416	496	592	656	656	656	656	656	656	656	656	656
	LONG-RANGE BOMBERS	600	630	630	630	630	600	545	560	550	505	455	442	437	432
USSR	ICBM	75	100	200	270	300	460	800	1,050	1,300	1,510	1,527	1,527	1,575	1,618
	SLBM	SOME	100	120	120	125	130	130	160	280	440	560	628	720	784
	LONG-RANGE BOMBERS	190	190	190	200	210	150	150	150	140	140	140	140	140	135

SOURCE: THE MILITARY BALANCE 1975-176, (London: IISS, 1975)

FOOTNOTES

[1]Robert L. Pfaltzgraff, Jr., "The United States and the Strategic Arms Limitation Talks" in Contrasting Approaches To Strategic Arms Control, ed. Robert L. Pfaltzgraff, Jr. (Lexington, Massachusetts: D.C. Heath and Company, 1974) p. 23.

[2]Strategic nuclear weapon systems (strategic forces for purposes of this essay include ICBMs, SLBMs, and long-range bombers.)

[3]Arnold L. Horelick and Myron Rush, "The Political Use of Strategic Power: Soviet and Western Attitudes," in National Security and American Society, ed. Frank N. Trager and Philip S. Kronenberg: (Wichita: University of Kansas Press, 1973.)

[4]The Soviet Union began their major deployment of intercontinental strategic offensive delivery vehicles in 1966 (See Figure 1). The Soviet buildup surpassed the U.S. in number of ICBM launchers deployed as early as 1969 (See Figure 2). Although the comparison shows only the number of ICBM launchers, the Soviet launchers are generally substantially larger than the American. Consequently, the delivery capability -- called throw-weight-- was larger some time prior to the indicated cross-over point. (One should note that Soviet missile deployment, beginning in 1969, was the result of decisions made in the mid to late 1950s, and was not in reaction to the 1962 Cuban Missile Crisis. The interval from conception to deployment of strategic weapon systems is generally five to ten years.) A similar increase in Soviet submarine-launched ballistic missiles (SLBMs) began in 1968 (See Figure 3).

[5]Walter Slocombe, "The Political Implications of Strategic Parity" Adelphi Papers # 77, (London, 1971), p. 5.

[6]President Richard M. Nixon, U.S. Foreign Policy for the 1970s: (III) The Emerging Structure of Peace, a report to the Congress by Richard M. Nixon, February 9, 1972.

[7]See Colonel E. Rybkin, "Critique of Bourgeois Conceptions of War and Peace," Kommunist vooruzhennykh sil, September 1968, pp. 89-90; LTC V. Bondarenko, "The Contemporary Revolution in Military Affairs and the Combat Readiness of the Armed Forces," IBID, (December 1968), pp. 24-29; Major General K.S. Bochkarev, "V.I. Lenin and the Building of the Amred Forces of the USSR," Morskoi sbornik, February 1969, pp. 4-5; A. Galitsan, "For a Leninist Line," Voenno-istoricheskii zhurnal, (March 1969), pp. 12-13.

[8]See citations to footnote 7 above.

[9]Colin S. Gray, "Defense and Negotiation," Air Force Magazine, January 1974, p. 34.

[10]Colin S. Gray, "Action and Reaction in the Nuclear Arms Race," Military Review, August 1971, p. 23.

[11]The avowed purpose of the strategic arms limitations talks (SALT), from a U.S. perspective, was an attempt to regulate the strategic arms competition between the United States and the Soviet Union. President Nixon, addressing the North Atlantic Council on April 10, 1969 stated that the West no longer had "massive nuclear predominance" and SALT was a means to codify the present balance. "(Source: U.S. Congress, House, Hearings before the Subcommittee on National Security Policy and Scientific Developments of the Committee on Foreign Affairs," Diplomatic and Strategic Impact of Multiple Warhead Missiles," 91st Congress, 1st Session, 1969, p. 298). Further, in a 1972 foreign policy report President Nixon heralded the approaching strategic parity (in 1969) as

> ...an opportunity to achieve an overall agreement that would yield no unilateral advantage and could contribute to a more stable strategic environment. For the first time it was possible to conceive of agreements reflecting a genuine balance."

(U.S. President, U.S. Foreign Policy for the 1970s: The Emerging Structure, A Report To The Congress by Richard Nixon, President, February 9, 1972, p. 173).

In 1969 the U.S. viewed SALT as the best means to limit further growth of Soviet strategic nuclear strength.

[12]Richard Pipes, "Russia's Mission, America's Destiny," Encounter, October, 1970.

[13]Essay by Uri Ra'anan, U.S. Congress, Senate, Committee on Government Operations, Subcommittee on National Security and International Operations, International Negotiation: "The Changing American Soviet Strategic Balance-Some Political Implications," 92nd Congress, Washington D.C.: Government Printing Office, 1972, p. 7. William R. Van Cleave testified in U.S. Congress, Senate, Committee on Government Operations, Subcommittee on National Security and International Operations, "International Negotiation," 92nd Congress, 2nd Session, Washington D.C.: Government Printing Office, 1972, part 7, p. 228. "It never occurred to us the Soviets would build for superiority."

CHAPTER 2: ARMS LIMITATIONS: A CONCEPTUAL FRAMEWORK

Disarmament was once believed to be a viable option for solving problems relating to U.S. national security and strategic survival. The disarmament concept--the elimination of armaments--is an idealistic philosophy, utopian in nature. Even though one can take the weapons away one cannot take away the knowledge man has accumulated to create weapons. Disarmament would have resulted in a politically and militarily unstable society. As a result, a more realistic goal in which to solve defense problems surfaced--arms control. Disarmament of U.S. and Soviet strategic nuclear forces as a policy option is not believed to be a viable alternative.

What is arms control? As we shall discover arms control can mean almost anything. This discussion will focus on the strategic application of the term.

Theoretically arms control

> .....reflects a strategic philosophy which accepts the continued existence of national military establishments. Frequently but not always the notion of arms control implies some form of collaboration between adversary States - whether it involve formal agreement, tacit cooperation, or unilateral decisions taken with the expectation of reciprocal action - in those areas of military policy that are thought to be of common or coincident interest to the parties concerned. [1]

Militarily,

> Arms control agreements are.....designed deliberately to constrain the freedom of the parties in the planning of their offensive and defensive capabilities. [2]

Politically,

> the objectives of arms control seem to be to:
> 1) decrease the risk of war,
> 2) limit damage should war occur, and
> 3) reduce the cost of military preparation in peacetime. [3]

Such diverse expectations serve to illustrate that arms control is such a permissive term that it is often seen reflected in many diverse measures. For instance, arms control has been viewed as the

> administrative, technical, or political arrangements calculated to minimize the risk of nuclear accident, unauthorized use of nuclear weapons, precipitate response to an ambiguous warning, or strategic miscalculation of the adversary's intentions. [4]

Agreements reached under this view of arms control fall into a category one might call "promissory arms limitations." Generally they present neither meaningful nor hazardous ramifications to the two parties. The value to such accords are symbolic - reaching agreement for agreement's sake.

An arms control measure could be,

> ....a program of weapons research, development, and deployment, as well as a strategic doctrine, which stresses the nonprovocative and defensive aspects of national security postures, especially those associated with an 'invulnerable second-strike capability'. [5]

A defense emphasis posture, which hopefully has limited or reduced the total number of offensive weapons continues to be a realistic and viable option to solving defense problems. Generally speaking the objectives of arms limitations are to contribute to the national security, to enhance strategic

stability and to promote moderation of future competition in strategic armaments.[6] There exists a variety of criteria which can be used to evaluate arms control and arms limitation agreements. For purposes of this paper four categories for evaluation are suggested. Agreements on arms limitations as we know them today can be promissory, cosmetic, hazardous or meaningful.

PROMISSORY AGREEMENTS:

Agreements that promise to lead to further agreements or with the objective of leading to better political relations fall into the category of promissory. Accords of this nature undoubtly have political value in terms of establishing a precedence or acting as a guideline for follow on talks. In terms of utility, an agreement that just promises to do something is generally of political value only.

Those that view promissory agreements with positive utility vision the benefit of talks as aiding mutual understanding of concepts and objectives. Some believe that discussion in itself is a useful means to establish a basis for understanding and dialogue. Reaching agreement for agreement's sake may not automatically lead to real or meaningful arms limitations. Others feel the benefits arriving from such agreements are vague and questionable. Although they see that symbolic agreements in which two parties agree to agree have political utility; however, when viewed in real and meaningful terms, these authorities see such promises providing little but hope and speculation. This thesis hypothesizes that promissory

agreements tend to lure the public into a false sense of security. It is difficult to envision how promises preserve or enhance our nation's security. Promises do not lower the cost or effort applicable to strategic weapon systems. Promises do not reduce the threat. Promissory agreements can, at best, be viewed as optimistic hope for future agreements.

The agreement between the United States and the Soviet Union on the "Preventation of Nuclear War" signed in Washington on June 22, 1973 exemplifies a promissory accord. The agreement did nothing to enhance arms control or arms limitations. The accord simply stated that the United States and the Soviet Union would act to prevent developments that could lead to military conflict and the possible outbreak of nuclear war.

COSMETIC ARMS LIMITATIONS:

As used in this paper, cosmetic arms limitations will refer to specific international agreements that, in appearance, lead one to believe that the objectives of arms limitations have been favorably preserved. Cosmetic arms limitations appear to improve national security and strategic stability. They are a step beyond promissory agreements. Cosmetic agreements limit, restrict, or, in some instances, enhance action between two parties but do not reduce the number of actual offensive or defensive strategic weapons. In the past cosmetic agreements have served to limit the employment of nuclear weapons in places such as in space, in the seabeds, or on the polar ice caps. The Seabeds Treaty, the Antarctic

Treaty, and the Outer Space Treaty exemplify cosmetic agreements between the United States and the Soviet Union. The Hot Line, designed to provide an immediate channnel of communications between the United States and the Soviet Union exemplifies a cosmetic agreement that enhances action between the two parties. These "cosmetic" type agreements are generally easy to verify and are not presently hazardous or destabilizing to the parties concerned.

Perhaps the most that can be said of such agreements is that they have served to keep the process of diplomacy open between the United States and the Soviet Union. Speculating, one may believe that since no real or meaningful agreements could be reached between the two parties, cosmetic agreements, such as those described, were reached. Such agreements do have political utility in that some type of action is taken and agreement reached. Cosmetic arms limitation agreements, which do little more than constrain efforts, also tend to lure the public into a false sense of security.

Together, promissory and cosmetic arms control agreements can be viewed as confidence building measures. As confidence building measures they can act to reduce tension and promote detente between two adversaries. On the other hand they carry the danger of lulling governments and respective public's into an attitude of lassitude insofar as the need for continued defense requirements are concerned. A nonrealistic view of the need for deterrence requirements could result.

HAZARDOUS ARMS LIMITATIONS:

Hazardous arms limitations are those which clearly give the net military strategic advantage or potential for such advantage to one party. The net strategic advantage equates to numerical and qualitative superiority on offensive and defensive strategic forces. This does not imply that asymmetries in the strategic forces of the two sides cannot exist. One should be willing to tolerate the existence of asymmetries provided that these asymmetries do not favor one party. In essence it would seem logical that one side's advantage in one criterion should be balanced by the other sides advantage or advantages in comparable criteria.

In addition any agreement that fails to reduce the threat and fails to reduce the threat more than it limits the means by which one can use to counter a changing threat would also be hazardous. If the threat left by the agreement is capable either at present or in the future to call into question the viability of one's military forces, then the agreement is destabilizing, undesirable and hazardous. In strategic terms any accord that severely threatens survivability or restricts survivability options is also considered hazardous.

MEANINGFUL ARMS LIMITATIONS:

Generally speaking a meaningful arms limitation agreement reduces the threat. Reducing the threat is to be distinguished from limiting the threat which can imply a freeze, a build up to a particular level, or a reduction in the number of strategic weapon systems. Used in its strictest sense,

meaningful arms limitations will contribute to national security, to strategic stability, and to the moderation of future competition in strategic armaments.

Traditionally the criteria presumed necessary for arms limitations have been to:

1) reduce the threat;
2) reduce the threat more than one's capability for coping with the threat; [7]
3) lower the cost of strategic programs;
4) lower the effort in the strategic area;
5) not reduce the ability to promote security interests,
6) limit both sides;
7) agree to means of verification by both parties; and
8) agree that action taken to nullify the agreement must not give the withdrawing party an unfair advantage.[8]

The first step to a meaningful arms limitation agreement is to reduce the threat. Reduction of the threat implies lower levels of strategic weapons. Reductions can be either symbolic or real. A symbolic arms reduction may be a 2-3% reduction in strategic weapons while a 30% reduction in strategic weapons would be meaningful. An agreement that either freezes current levels of armaments or allows one or both parties to build up to a higher level neither reduces the threat nor will it lower levels of cost and effort.

An agreement allowing a build up to equal levels of weapons can, under some circumstances, aid national security and strategic stability but it does not reduce the threat or the cost and effort required to maintain them.

Simply reducing the threat is not sufficient. As stated by Dr. William R. Van Cleave,

> Unless a strategic arms limitation agreement reduces the threat, or stringently constrains it, and does so more than it limits our ability to cope with the threat, we will have to concern ourselves even more than in the past with the quality and adequacy of our strategic forces. [9]

The ability to cope with the threat means that one side does not have an offensive advantage for which the other side can not defend against and visa versa. It further implies that both parties have a limited freedom to mix their strategic forces so as to counter a changing threat. Any agreement that fails to reduce the threat more than one's capability for coping with the threat is destabilizing.

COSTS:

An often cited benefit of arms limitations is the lowering of the cost of strategic programs. This implies that strategic force limitations will reduce the spending applicable to them. This may or may not be true.

If the agreement does not prevent qualitative improvements the overall cost may rise. One or both parties may seek to intensify research and development efforts to maintain a qualitative advantage or may seek to find one. In addition

most strategic force modernization and improvement programs are certain to increase cost. These programs may also be a valuable hedge against future threats as well.

For instance, according to the Annual Defense Department Report for FY 1975, the acquisition cost of major strategic force modernization and improvement programs rose from 4.139 billion dollars in FY 1973 to a proposed 4.464 billion dollars for FY 1975.[10] Research and development costs, which were 4.813 billion dollars in FY 1964, grew to 6.463 billion dollars in FY 1973 and was projected to be 8.409 billion dollars in FY 1975.[11] These figures may be somewhat misleading in that they reflect all defense department research and development cost and not just funds applied against strategic forces. The point is that the SALT I agreements have not reduced spending attributed to strategic force modernization and improvement programs, nor to research and development costs.

A notion exists that arms control agreements reduce total defense department spending. This is not necessarily true. Many factors affect the budget. Funds spent on strategic forces are actually a small portion of total defense costs. In FY 1973, 7.2 billion dollars was spent on strategic forces from a total budget of 80.4 billion dollars.[12] In FY 1974, 6.8 billion out of 87.1 billion dollars went to strategic forces out of a requested 92.5 billion dollars.[13] (Strategic forces, according to the department of defense report, included costs applicable to the Minuteman and Titan II inter-

continental ballistic missiles, the Polaris-Poseidon missiles, strategic bomber squadrons, manned fighter intercepter squadrons, and Army air defense firing batteries.[14])

Noteworthy in the FY 1975 defense budget is that 55.4 percent of the entire budget was programmed for pay and allowances.[15] According to Secretary Schlesinger's annual report, the requested increase of approximately $12.1 billion over the FY 1973 budget (in current dollars) was almost totally consumed by pay and price increases.[16] General purpose forces alone accounted for 21.1 billion dollars of the proposed FY 75 budget.[17]

In testimony before the Senate Armed Services Committee in June 1972, Dr. John S. Foster, Jr., the Director of Defense, Research and Engineering, said the following in response to a question on specific programs in which the SALT agreement resulted in increased spending:

> We have asked for an acceleration of the site defense, we have asked for the initiation of development of the cruise missile for submarines, we have asked to accelerate the rebasing inland of the B-52, we have asked for additional funds to increase our capability to process intelligence information, we have asked for additional funds to improve the reentry vehicles for both our ICBM's and our Submarine-launched ballistic missiles and funds to study and develop efforts involving command and control and communications.[18]

Later testimony revealed that approximately $2 billion would be needed for fiscal year 1973 through 1978 to cover the proposed programs.[19] Testimony before the Senate Armed Services Committee revealed that the programs are necessary "to retain

our technological lead and continue to maintain an effective and high confidence deterrent, as well as to improve verification capabilities." [20]

At the Senate hearings on SALT I, Senator Barry Goldwater asserted that in his opinion, "....SALT or any other treaty has little or no bearing on the factors that go to make up defense costs except if and when there is a change in the size of the threat." [21]

In summary, it is likely that money saved on strategic forces will have a minor impact (if any at all) on overall defense spending. The cost applicable to strategic forces will be reduced only as the threat is reduced and qualitative restrictions imposed. Arms limitations that save money, restrict effort, reduce the threat, but reduce one's ability to cope with the threat are destabilizing and not meaningful arms limitations. Arms limitations, if negotiated merely because of cost savings, could result in hazardous agreements. Consequently, cost should not be a major factor in the quest for meaningful arms limitations. Cost savings should be a secondary objective to meaningful agreements.

QUALITATIVE RESTRICTIONS:

When evaluating effort applicable to strategic forces, one cannot overlook the dangers inherent in qualitative restrictions. Decisions to freeze qualitative improvements or to restrict new weapons do not necessarily represent or hedge against uncertainties.

Qualitative restrictions would probably require verification through on-site, unannounced, in-country inspection teams with freedom of movement. This seems certain to be unacceptable to both Americans and Soviets. Uncertainty of verification and fear of cheating does not lend itself to a stable relationship. Consequently, qualitative restrictions--an attempt to reduce the effort in the strategic area--should not be a major factor in the quest for meaningful arms limitations.

An agreement limiting strategic weapons, to be meaningful, must limit both sides. Arms limitation negotiations between the United States and the Soviet Union have revealed political and negotiating asymmetries. Strategic objectives are certain to be different as the values, goals, strategies, and technological levels differ. However, in spite of asymmetries there can be meaningful arms limitations. Reaching a meaningful agreement requires a careful comparison of the offensive forces of party A against the defensive posture of party B. In turn the offensive threat of party B is compared to the defensive posture of party A. Stability will be enhanced as long as offenses are compared to defenses and not when arbitrary freezes on offensive forces and equal limitaions to deployable defensive forces are made. Again it should be empnasized that an agreement that fails to reduce or limit the threat more than it limits the means by which one can use to counter the threat is destabilizing.[22] Any time "the threat left by the agreement is sufficient now or in the

future to call into question the reliability of our retaliatory capability" [23] an unhealthy agreement results.

The terms "stability" and "security" as used in this paper need to be defined. Stability as used in bilateral strategic arms limitations between the United States and the Soviet Union, should equate to a condition of equilibrium. Equilibrium equates to a state of balance between opposing countries. While asymmetries can exist in this equilibrium - one would balance against the other in an offensive-defensive comparison so as to preclude domination by any one party over the other. Stability means that neither side would have a net strategic advantage.

Security is the confidence that one's offensive strategic nuclear forces are nearly invulnerable to an opposing first strike. Security is knowing that one's defense is capable of limiting damage from the enemy's offensive forces and that one's offensive forces can penetrate the enemy's defenses.

Meaningful arms limitation agreements are achieved when both sides perceive a stable and secure relationship. This is achieved when both have confidence they can deter against a first strike while knowing they can defend and retaliate in the event it becomes necessary.

In terminating the discussion on what constitutes meaningful arms limitations it is necessary to note that controls used to enforce or verify the agreement must be equally applied to both parties. Each party must have confidence that the verification means employed will guarantee the terms of the

agreement. Moreover, if either side, for reasons of its national security, desires to withdraw from the treaty, no advantage must accure to the withdrawing party.

Finally, the overall effect of a meaningful arms limitation agreement should not reduce one's ability "to promote the security interests of one's allies" nor "contribute to regional instability." [24] For example, U.S. forward based systems deployed in defense of Western Europe are part of the theater forces designed and committed to West European defense and are not part of the U.S. strategic nuclear force. European confidence in the U.S. nuclear shield is seen in maintaining U.S. forward based systems. Generally speaking it seems doubtful that either party would act at risk to its regional commitments (allies).

RECAP: The above discussion modifies the original definition of meaningful arms limitations. The belief that meaningful limitations would lower the cost of strategic systems and programs is misleading. Further it is not necessarily a desirable characteristic since cost consideration could be placed before the interest of national security and strategic stability. Cost, therefore, has been eliminated as a criteria for meaningful arms limitations.

Also eliminated as a criteria is the goal of lowering the effort expended in the strategic area - referring to qualitative limitations. Any attempt to restrict qualitative improvements or the development of new weapon systems is beyond the degree of certainity and verification required for a meaningful

agreement. Qualitative restrictions cannot stop scientists from thinking about improvements, or new, better, and more efficient ways of doing things. In curtailing qualitative improvements in defense one limits possible spin-offs to other areas, such as medical research or trade - all of which are vital to the prosperty of the United States.[25]

Can there be meaningful arms limitations in terms of major arms control? Yes, however, it is more likely that arms limitations will encompass arms control measures that are promissory, cosmetic, or hazardous rather than meaningful. Meaningful arms limitations require a reduction of one's military capability but not below that level in which one can cope with the enemy threat. Only meaningful arms limitaions will enhance security, promote strategic stability and permit the moderation of future strategic competition. When judging through offensive and defensive strategic capabilities only meaningful arms limitations will reduce strategic uncertainties as it stabilizes a deterrent relationship.

Whether present attempts at strategic nuclear arms control/ arms limitations will act to "undermine the balance of power" or act to "maintain a balance" one may not yet know. The pessimist will express doubt -- the optimist hope. Both, however, share concern for the future.

FOOTNOTES

[1]James E. Dougherty, "Arms Control for the Late Sixties," in National Security and American Society, ed. Frank N. Trager and Philip S. Kronenberg (Lawrence: University of Kansas Press, 1973), pp. 404-405.

[2]James R. Schlesinger, Annual Defense Department Report FY 1975, (Washington D.C.: U.S. Government Printing Office, March 4, 1974), p. 27.

[3]Colin S. Gray, "The Arms Race is About Politics," (University of British Columbia, September 1972).

[4]Dougherty, "Arms Control for the Late Sixties," p. 405.

[5]Ibid.

[6]William R. Van Cleave, "Implications of Success or Failure of SALT" in SALT - Implications for Arms Control in the 1970's, eds. William R. Kintner and Robert L. Pfaltzgraff, Jr., (Pittsburgh: University of Pittsburgh Press, 1973), p. 315.

[7]Ibid.

[8]Traditional criteria presumed necessary for arms control/arms limitations have been derived from readings in the following sources: Robert L. Pfaltzgraff, Jr., ed., Contrasting Approaches to Strategic Arms Control, (Lexington, Mass: D.C. Heath and Company, 1974) and William R. Kintner and Robert L. Pfaltzgraff, Jr., eds., SALT: Implications for Arms Control in the 1970's (Pittsburgh: University of Pittsburgh Press, 1973).

[9]Van Cleave, "Implications of Success or Failure in SALT," p. 315.

[10]Schlesinger, Annual Defense Department Report FY 1975, pp. 53-54.

[11]Ibid., p. 235.

[12]Ibid., p. 235.

[13]Ibid., p. 235.

[14]Ibid., p. 235.

[15]Ibid., p. 20.

[16]Ibid., p. 18.

[17]Ibid., p. 235.

[18]U.S. Congress, Senate. Committee on Armed Services, Military Implications of the Treaty on the Limitations of ABM Systems and the Interim Agreement on Limitation of Strategic Offensive Arms (Washington, D.C.: Government Printing Office, 1972), pp. 240-241.

[19]Ibid., p. 39.

[20]Ibid., p. 39.

[21]Ibid., p. 39.

[22]Van Cleave, "Implications of Success or Failure of SALT," p. 315.

[23]Ibid., p. 332.

[24]Ibid., p. 332.

[25]Jacquelyn K. Davis, "Appendix A - The Qualitative and Quantitative Dimensions of Arms Control: Implications for Technological Innovation for SALT II - Report on a Panel Discussion" in Contrasting Approaches to Strategic Arms Control, ed. Robert L. Pfaltzgraff, Jr., (Lexington, Mass: D.C. Heath and Company, 1974), p. 77.

CHAPTER 3: THE 1972 SALT AGREEMENTS

Strategic arms limitation talks between the United States and the Soviet Union opened in Helsinki in November 1969. Negotiations between both sides continued for over two and one half years until the agreements were signed on May 26, 1972 in Moscow by the Secretary of the Communist Party of the Soviet Union, Leonid I. Brezhnev, and the President of the United States, Richard M. Nixon. They concluded two agreements constraining part of the strategic forces of the two sides -- a Treaty limiting anti-ballistic missile (ABM) systems and an Interim Agreement on strategic offensive arms limiting the number of intercontinental ballistic missile (ICBM) launchers and submarine launched ballistic missile (SLBM) launchers. These agreements accomplished no disarmament in that not one weapon had to be destroyed or moved. While it is not within the scope of this paper to discuss the various negotiating positions, asymmetries, or rationales for superpower arms control, the terms of the resulting agreements are important. Since the SALT I agreements are viewed as a necessary first step to a future strategic relationship and to future arms limitations a brief overview of its provisions follow. The complete text of the SALT I agreements can be found in Appendix A.

ABM TREATY:

Under the terms of the ABM Treaty each party was permitted to deploy two ABM systems -- one in defense of the national capital and a second system in defense of ICBM silo launchers.

The two systems were to be at least 800 miles apart in order to prevent the development of a territorial defense. In essence, neither side was permitted to deploy a nation-wide ABM defense or develop a base for such a defense. In each of the deployment areas, out to a 150 km radius, each side could deploy no more than 100ABM launchers and no more than 100 ABM interceptor missiles at launch sites. The treaty fixed a precise and low ceiling on deployment. While it may be unclear whether SALT resulted in a higher or lower ABM deployment in either country the treaty does clearly prohibit the deployment of the nationwide ABM system that might have otherwise occurred.

The treaty contains provisions which prohibit either the establishment of a radar base for the defense of populated areas or the attainment of capabilities to intercept ballistic missiles by conversion of air defense missiles to anti-ballistic missiles. Further, each side agreed not to "develop test, or deploy ABM systems or components which are sea-based, space-based, or mobile-land based."

Each party was to use national technical means of verification and each agreed not to engage in "deliberate concealment measures" which would impede verification nor to interfer with the means of verification themselves.

The treaty was for an unlimited duration, however, either party may withdraw when it perceives its supreme interest at stake.

In 1974 the two parties modified the terms of the treaty to allow just one deployed ABM system in each country. Moscow currently has such an ABM system while the U.S. unilaterally reduced its only means of ABM defense to essentially a surveillance and warning posture.

INTERIM AGREEMENT:

Under terms of the Interim Offensive Agreement the salient points were as follows. Each party was permitted to retain fixed land-based ICBM launchers operational or under construction as of 1 July 1972 while no new launchers could be constructed. This left the U.S. with 1,054 fixed land-based ICBM launchers and 1,618 for the Soviet Union.[1] The Soviets with 313 modern large ballistic missile launchers (the SS-9) could retain and modernize them but could not build new ones. Under the agreement neither the United States nor the Soviet Union could convert existing ICBM launchers to modern large ballistic missile launchers.

Due to the ambiguity about the definition of a heavy missile, the United States issued a unilateral declaration to clarify its position. The U.S. interpreted the agreement as prohibiting conversion of light ICBMs into missiles "having a volume significantly greater than that of the largest light ICBM now in operation on either side." The term "significantly greater" was not defined.

The launcher aspect was handled by an agreed interpretation that in the process of modernization the dimensions of silo launchers could not be increased more than fifteen percent

of the diameter of land-based ICBM silos.

On the subject of land mobile ICBMs, the U.S. delegation -- again in a unilateral statement -- stated that it "would consider the deployment of operational land-mobile ICBM launchers during the period of the interim agreement as inconsistent with the objectives of the agreement."

On submarine limitations, the Soviets were allowed a maximum of 950 SLBM launchers on 62 modern ballistic missile submarines (nuclear powered). The U.S. was limited to a maximum of 710 SLBM launchers on a maximum of 44 modern ballistic missile submarines.[2] To reach the maximum limits provisions were made for the trading of old ICBMs deployed before 1964 (208 SS-7s and SS-8s for the Soviets and 54 TITANS for the U.S.) into modern SLBM launchers. Soviet missile-carrying diesel submarines were <u>not</u> covered by the agreements nor were over 100 Soviet test launchers included in the ceilings.

Verification of the terms of the Interim Offensive Agreement, as in the ABM Treaty, was to be by national means. Both sides agreed not to interfer with verification.

The interim agreement was to run for five years unless replaced by a more comprehensive permanent agreement which was to be the subject of further negotiations, or unless terminated by notification of withdrawal by either party on six months notice.

A noteworthy point in the limitations both nations agreed

to are the systems and programs that SALT did not limit. SALT I placed no limits on long range bombers, cruise missiles, or on intermediate range ballistic missiles (ICBMs). SALT I placed no limits on multiple independent re-entry vehicle(s) (MIRV) nor on modifications or improvements in warheads. No limitations were placed on research and development except for the development of certain kinds of ABMs. Consequently, research and development continued in areas of nuclear weapons, antisubmarine warfare weapons and methods, penetration aids for missiles and bombers, and stand-off weapons. Research and development pertaining to improved strategic offensive systems were not limited.

THE FOUR PART PACKAGE:

Several years after the signing of the SALT I agreements alleged Soviet violations became the focus of great debate. Opinions varied widely. Numerous newspaper and magazine articles charged the Soviets with violating the SALT I agreements while also claiming that loose wording and deficiencies in definition and drafting permit the Soviet Union to undertake actions that are not technically violations, but which in fact were not thought to be permissible according to the original agreement. While alleged Soviet SALT I violations are not to be assessed here, ambiguities within the agreement do exist. They stem partly from the loose wording and lack of definition in the agreements but principally because not all parts of the SALT I package are legally binding.

An analysis of the entire SALT I package helps to clarify the cause of much of the confusion and ambiguity that exists. The SALT I package consists of four parts. Part I; the ABM Treaty, the Interim Agreement and the Protocol to the Interim Agreement concerining modern ballistic missile submarines and submarine-launched ballistic missile launchers. This agreement was signed in Moscow by President Nixon and Secretary Brezhnev on 26 May 1972. Its provisions are legally binding to both parties within generally recognized practices of international law.

Part II consists of twelve "Agreed Interpretations" (lettered A through L) which were not signed by Nixon and Brezhnev but were agreed upon and initialed by the Heads of the Delegations -- Ambassador Smith and Minister Semenov -- on 26 May 1972. Seven of the Agreed Interpretations (A through G) pertain to the ABM Treaty and five (H through L) pertain to the Interim Agreement. These Agreed Interpretations clarify certain provisions and, in some cases, attempt to establish more precise meaning to clauses of the ABM Treaty and Interim Agreement. It may be arguable whether or not these statements are legally binding. Both Heads of Delegation agreed to these interpretations and indicated so by initialing them. But only initialed -- not signed. In other words, acknowledged but not agreed upon. Why the papers were not singed by Nixon and Brezhnev as part of the formal agreement is unknown. Their legality is questionable and they cannot be viewed as binding between Parties.

Part III consist of six "Common Understandings " (A through F) which were neither signed nor initialed by heads of state or delegation chiefs. Common Understandings were generally clarifying statements made by the U.S. Delegation to which the Soviet Delegation either appeared to agree or simply did not comment. Although the agreement says that these understandings were reached by both parties during the negotiations there is no evidence to indicate overall Soviet consent to U.S. statements. "No comment" cannot be assumed to imply consent. Being appended to the agreements does not make them a legally binding part of the agreement.

Part IV consist of eight Unilateral Statements -- seven by the U.S. Delegation and one by the Soviet Delegation. These statments deal with specific subjects which, it appears, the two parties could not agree. The United States may have used this as a platform to record a position in light of obvious Soviet disagreement. Obviously these statements are without legal foundation.

Only part I -- the ABM Treaty, the Interim Agreement, and the Protocol to the Interim Agreement on submarines -- is legally binding to both parties. Parts II, III, and IV are not. Confusion and ambigiuty results when discussions jump from what is legal and binding to what was implied as binding to what is clearly not binding as if it were legally binding.

SUMMARY:

SALT I did establish some ceilings in strategic arms

competition but it did not have a direct impact on many weapons improvement and deployment programs. While SALT I did little to limit strategic arms competition it may have provided that first step toward achieving a better understanding of the problems that have blocked progress for years. One final note: any future SALT accord must be void of the ambiguities, loose wording, and lack of definition that has clouded SALT I.

FOOTNOTES

[1]The 1,618 figure is a U.S. intelligence estimate. At no point in the SALT negotiations did the Soviet state their number of ICBM fixed land based missile launchers.

[2]The Soviet Union issued a unilateral declaration, rejected by the U.S., that it reserved the right to increase the number of its SLBM submarines if the U.S. and its NATO allies undertook to build more than a combined total of 50 such submarines with 800 SLBMs. See William R. Kintner and Robert L. Pfaltzgraff, Jr., "Assessing the Moscow SALT Agreements," ORBIS, (Summer 1972), p. 343.

CHAPTER 4: U.S. STRATEGIC GOALS AND OBJECTIVES IN STRATEGIC ARMS LIMITATIONS

To have meaningful arms limitations in terms of strategic goals does not mean that each party must adopt the same or similar goals and objectives. Strategic concepts are a product of each nation's objectives, geopolitical situation, opportunities, constraints, resources, technology, and institutional characteristics.[1] Different strategic goals - resulting from concepts formed from the above - are not likely to be reconciled in negotiations, especially between the Americans and the Soviets. Because strategic asymmetries exist and are not likely to change this does not discount the fact that there can be arms limitations. Robert R. Bowie is reported to have said,

> Given the differences in history, geography, and commitments, it is hardly likely that the U.S. and U.S.S.R. would be able to agree on strategic doctrine or even on relative importance of different weapons for stable deterrence. But it is not necessary that they should do so in order to agree to limit or regulate specific weapons systems or activities.[2]

The SALT I accords showed that in spite of asymmetries between the United States and Soviet Union, there should be agreement to limit specific weapons systems.

WHAT ARE U.S. STRATEGIC OBJECTIVES? U.S. strategic objectives are built on: A) confidence in the ability to deter an all out attack on the United States via assured destruction,[3] and B) confidence in the survivability of the retaliatory forces,

known as crisis stability.[4] U.S. strategic objectives, as set forth in the Annual Defense Department Report for FY 1975, by Secretary of Defense James R. Schlesinger, are:

1) to deter a nuclear attack on the U.S. and its Allies via strategic nuclear forces;
2) to deter a non-nuclear attack on the U.S. and its Allies primarily through U.S. and Allied theater forces; and
3) to "inhibit coercion" by other nuclear powers toward the U.S. and its Allies.[5]

It would be difficult to conduct meaningful strategic arms limitation talks based upon these strategic objectives. These objectives are too general and too broad to be used by the U.S. in arms limitation negotiations. Needed are clearly defined specific objectives which will allow proposals to be evaluated. The strategic objectives, as outlined, lack definitive direction and can easily lead to multiple interpretations. Senator Henry M. Jackson accused the administration back in 1973 of lacking defined strategic objectives. He said:

> We need a coherent strategic policy against which we can measure our proposals and Soviet proposals. At the moment we have no clearly defined set of strategic objectives -- let alone political objectives -- which allow us to fit SALT into some larger national purpose.[6]

In searching for a "clearly defined set of strategic objectives," aware of what the broad goals are and knowing that the backbone of these objectives are offensive and defensive strategic forces, one should ask: What do we want our strategic forces to do? In this respect strategic forces should deter a nuclear attack and be sufficient to defend in the event deterrence fails. (Deterrence is that confidence in our

strategic forces that would allow the United States to survive a hostile first strike with sufficient retaliatory forces to inflict unacceptable damage to the attacker in response. Unacceptable damage is generally viewed as the percent of destruction to enemy industry and population. To be reliable, deterrence requires the maintenance of the strategic retaliatory forces and appropriate defensive measures that will limit damage to U.S. forces and still complicate the enemy's attack. The Soviet Union is likely to be deterred from attacking the United States if, after a Soviet first-strike and U.S. response the military balance would be against them and the ratio of remaining population and industry would not be adverse to the United States.[7] Since U.S. strategic forces constitute the foundation for our nation's security it is essential to maintain them in sufficient size and character to offer a credible defense if deterrence should fail.)

In the annual statement on U.S. Foreign Policy in 1971 -- U.S. Foreign Policy for the 1970's: Building for Peace, President Richard Nixon stated that U.S. policy was to maintain strategic sufficiency. The President confirmed that the criteria for strategic sufficiency set forth in 1969 did represent national security policy. From the concept of sufficiency we should be able to determine specific strategic objectives.

1969 SUFFICIENCY CRITERIA:

The four criteria for strategic sufficiency as set forth in 1969 were:

(1) Maintaining an adequate second-strike capability to deter an all-out surprise attack on our strategic forces.

(2) Providing no incentive for the Soviet Union to strike the United States first in a crisis.

(3) Preventing the Soviet Union from gaining the ability to cause considerably greater urban-industrial destruction than the United States could inflict on the Soviets in a nuclear war.

(4) Defending against damage from small attacks or accidental launches.[8]

Analysis of the Nixon criteria for strategic sufficiency reveals that U.S. national security policy was 1) to maintain an assured destruction capability, 2) to insure crisis stability, 3) to maintain essential equivalence, and 4) to have a damage limiting capability.

Assured destruction, the ability to inflict unacceptable damage upon the enemy in terms of destruction to industry and population, was the first sufficiency criterion. The U.S. assured destruction capability rested on the confidence to deter an all out attack on the United States with the capability of retaliation via U.S. strategic forces if necessary. Maintaining the assured destruction capability became a major policy goal under the Nixon sufficiency criteria.

Crisis stability, the second sufficiency criterion, meant that the U.S. should expose no vulnerabilities that would cause the Soviets to strike first in the event of a crisis. Under crisis stability the survivability of U.S. retaliatory forces must be assured. The Soviets must not be tempted to

a pre-emptatory strike because of U.S. weakness. Survivability of U.S. forces could have been increased in a number of ways. For example, in 1969 the U.S. could have increased the number of offensive forces to insure that a sufficient number would survive a Soviet strike, it could have defended ICBM fields with an ABM system, it could harden existing missile silos, or even go to a mobile ICBM force.[9]

Essential equivalence, the third sufficiency criterion, aimed at preventing gross disparities between the two side's strategic forces. It has already been stated that asymmetries do exist between U.S. and Soviet forces. Under essential equivalence one side's advantage would have to be balanced by the other party's advantage or advantages.

The fourth sufficiency criterion was to have a damage limiting capability designed against small scale attacks or accidental launches. The 12-site Safeguard ABM program would originally have met this criterion. As a result of the SALT ABM Treaty the concept of defensive damage limitation was removed from contention as a major strategic goal.

The Nixon sufficiency criteria indicated that the United States would take the necessary steps to insure both the survivability of her strategic forces and an adequate mix of forces allowing for reaction to changing threats and technology. The sufficiency criteria reaffirmed the foundation of U.S. national security as resting on strategic forces. It therefore appears reasonable to derive U.S. strategic goals and objectives for arms limitations from the Nixon sufficiency

criteria.

It is meaningless to discuss whether or not the 1969 sufficiency criteria could have led to a meaningful SALT I agreement. It would appear that the SALT I agreements quite effectively negotiated away the third and fourth criteria of Nixon's sufficiency doctrine leaving assured destruction and crisis stability as the foundation for U.S. strategic objectives.

The concept of essential equivalence was sacrificed by the United States in terms of the gross disparities it granted to the Soviets. Soviet advantages going into SALT I were in ICBMs, deployed ABMs, deployed ABM radars, IR/MRBMs, SLBMs, medium bombers, SAMs, and new offensive weapons development and construction in progress.[10] U.S. advantages were in deployed SLBMs, heavy bombers, MIRV and the beginnings of the MIRVing program, and the Safeguard ABM program.[11] The SALT I agreement resulted in the following:

1. All Soviet advantages in offensive arms were preserved or enhanced by the Interim Offensive agreement.

   a. In all categories limited by the agreement the Soviets secured permitted levels higher than the U.S. and higher than then-existing Soviet operational levels.

   b. In area not limited by the agreement the Soviets possessed either an overwhelming numerical advantage (IR/MRBMs, SLBMs, medium bombers), an active buildings program (new ICBMs, MIRV, modern strategic bombers), a "free strategic weapon" (diesel propulsion SLBM submarines), or a protected interest (mobile ICBMs.)

c. In all categories where a U.S. advantage existed the Soviets were permitted to close the gap, and there remains no impediment to surpassing the U.S..[12]

The U.S. also traded away the 4th sufficiency criteria - that of a damage limiting capability through the ABM Treaty. What one should not neglect to note about that Treaty are the following facts:

a. The Moscow NCA (National Command Authority) defense contains numerous ICBM launchers within its protective footprint (in fact, potentially far more than the U.S. might defend at its one ICBM site.)

b. The Soviets large radar inventory far exceeds that of the U.S. (already exceeding that originally planned according to DDR&E testimony) allowing the possibility of rapid expansion in the event of cheating or abrogation.

c. The Soviet SAM defense is the most extensive the world has ever known, while the U.S. SAM installation, well less than onetenth the size of the Soviet deployments, continues to contract and will probably be phased out in the near future.

d. While the precise ABM capabilities of the Soviet SAM defense are subject to controversy, there is no question that it can have significant ABM capability against certain types of re-entry vehicles and that modernization of the system can substantially increase this capability.[13]

SCHLESINGER's SUFFICIENCY CRITERIA:

U.S. strategic objectives today are not the same as they were in the 1969-1972 time frame. As a result of the SALT I agreements in 1972 and Secretary of Defense Schlesinger's announced change in targeting doctrine in January 1974, a new sufficiency criteria emerged.

A brief explanation of the change in targeting doctrine is appropriate before continuing. In times past, the accuracy of our strategic systems did not allow the U.S. the precise targeting accuracies it currently possesses. As a result of new technology which increased our targeting accuracy, the U.S. was able to be more selective in its targeting options. Taking advantage of this new technology in view of holes left in 1969 sufficiency criteria, the defense department advanced a new concept of sufficiency.

CHANGE IN TARGETING:

On January 10, 1974, Secretary of Defense Schlesinger announced a change in strategic targeting. Past targeting doctrine consisted primarily of assured destruction with "some large-scale pre-planned options other than attacking cities." [14] The new targeting policy added options which in turn add more selectivity in targeting and allow for "relatively small-scale options" [15] in addition to those choices which had previously existed. Options are available for situations such as a counterforce strike by the Soviet Union, a counter-city strike on a small scale by any party, or even action in the European theater alone.[16] The key to the change in targeting doctrine seems to be added selectivity and increased flexibility through the new options.

Schlesinger made it clear that the targeting change was not placing emphasis on hard strategic targets. The options now available offer a choice in a crisis depending upon the

nature of the enemy attack and enemy objectives.[17] Types of targets which can, and presumably are, being pre-planned as options include cities, other targets of value, military installations of many different kinds, soft strategic targets as well as hard strategic targets.[18]

Schlesinger further stated that the principle reason for the change was due to a change in the threat. In order for the U.S. to cope with the growth in the Soviet systems and their increased capabilities - greater flexibility and selectivity in targeting was necessary.

The growth in the Soviet threat which led to the change in targeting doctrine, along with what was left of Nixon's sufficiency criteria, after half of it had been "bargained" away in SALT, generated a new concept for strategic sufficiency. The four points to the Schlesinger sufficiency criteria became,

1) a capability sufficiently large, diversified, and survivable so that it will provide us at all times with high confidence of riding out even a massive surprise attack and of penetrating enemy defenses, and with the ability to withhold an assured destruction reserve for an extended period of time.

2) the employment of the strategic forces in a controlled, selective, and restrained fashion.

3) the forces to execute a wide range of options in response to potential actions by an enemy, including a capability for precise attacks on both soft and hard targets, while at the same time minimizing unintended collateral damage.

4) an offensive capability of such size and composition that all will perceive it as in overall balance with the strategic forces of any potential opponent.[19]

An assessment of Schlesinger's sufficiency criteria shows that assured destruction continues to play a major role in U.S. strategic plans but with the added dimension of holding that power for an "extended period of time." From this statement evidence exists that assured destruction under the new targeting doctrine is an option the U.S. would choose to employ only as a last resort. Holding the option of assured destrution for an "extended period of time " acts as an escape from the genocidal implications often associated with assured destruction. The change also enhances the notion of realistic warfighting objectives using strategic forces. The argument has been advanced that the targeting change makes nuclear weapons more usable. To a degree this is what Schlesinger's first criteria is doing. However, one cannot overlook the logic that the introduction of a single or a few nuclear weapons may cause both sides to refrain from further use of nuclear weapons or possibly reduce one party's will to wage war. Furthermore, the fact that nuclear weapons policy now provides a credible response across the spectrum of risk, may act to deter a party from military action altogether.

Schlesinger's second criteria for sufficiency emphasizes the use of strategic forces in a controlled, selective, and restrained manner. Increased options under the new targeting change provides this new dimension.

The third criteria places emphasis on flexibility in both range of targets (soft to hard) as well as the options

for different sizes of strikes. Having options available promotes the concept of extended deterrence. (Extended deterrence means an extension of the use of U.S. strategic forces to defend our allies.) Europeans have strongly supported the U.S. change in targeting because they see it as producing credible options that include European defense.

The fourth of Schlesinger's sufficiency criteria is a resurrection of the essential equivalence criteria which the U.S. conceded at SALT I.

As opposed to the Nixon sufficiency criteria, Schlesinger appears to be giving greater recognition to our allies. The introduction of extended deterrence through the new targeting doctrine incorporates allied interest into U.S. strategic policy. This differs from the Nixon criteria which applied primarily to nuclear attacks upon the United States.

Noteworthy is that in spite of changes in Secretaries of Defense and Presidential administrations the annual defense department reports for FY 1978 (Defense Secretary Donald H. Rumsfeld) and FY 1979 (Defense Secretary Harold Brown) clearly show that the sufficiency criteria outlined by Defense Secretary Schlesinger remains essentially the same. For example, on the need for an assured destruction capability the following has been extracted from the Rumsfeld and Brown reports: [20]

RUMSFELD: ...at a minimum, the U.S. second-strike capability should be able to execute the mission of assured retaliation as the prime condition of deterrence.

BROWN: One of the responses that must surely be available to the President is what has been called assured destruction. It is essential that we retain the capability at all times to inflict an unacceptable level of damage on the Soviet Union, including destruction of a minimum of 200 major Soviet cities.

On the criteria involving increased options:

RUMSFELD: Less than full attack contingencies raise enormous uncertainties....even if the probability of nuclear escalation is high, it seems appropriate to have available for the President some options rather than only the full response of assured retaliation. Accordingly, the U.S. posture should include the ability both to implement some preplanned options and to improvise responses to events not anticipated in contingency planning.

BROWN: Assured destrution cannot be the only response available to the President.... we must have the flexibility to respond at a level appropriate to the type and scale of his attack.

On criteria for flexibility in both range of targets as well as the options for different sizes of strikes:

RUMSFELD: It should be evident that once the possibility of some options is admitted, the range of targets becomes wide. Many targets important to a society's economy and political system are separated to some degree from heavy concentration of people. That tends also to be the case with a number of military targets, including general purpose as well as strategic nuclear facilities. To attack relatively soft targets, and to minimize collateral damage, relatively low-yield weapons with high accuracies are required. In previous years, because of these considerations, it has been U.S. policy to seek improved command and control, higher accuracy, and an increased variety of warhead yields in order to implement an effective range of options.

BROWN: As part of that flexibility, we must be able to launch controlled counterattacks against a wide range of targets -- including theater nuclear and conventional forces, lines of communication, war supporting industry, and targets of increasing hardness: from aircraft runways and nuclear storage sites to command bunkers and ICBM silos.

On the need for essential equivalence:

RUMSFELD: EQUIVALENCE: ...we must make sure that the U.S. nuclear posture inspires the correct perception of strength. If allied and neutral nations see the military balance as favoring the Soviet Union rather than the United States, their independence and firmness may give way to adjustment, accommodation, and subordination. If potential enemies have a similar perception, they may misjudge the situation and make demands which could lead to confrontation, crisis, and unnecessary dangers. At present, the United States and the Soviet Union are seen as having roughly equivalent nuclear capabilities. Congress has underscored the importance of maintaining this posture by requiring that we not be inferior to the Soviet Union.

BROWN: ESSENTIAL EQUIVALENCE: By essential equivalence, I mean, a condition such that any advantages in force characteristics enjoyed by the Soviets are offset by other U.S. advantages. Although we must avoid a resort to one- for -one matching of individual indices of capability, our strategic nuclear posture must not be, and must not seem to be, inferior in performance to the capabilities of the Soviet Union.

The U.S. now looks toward SALT II with a new set of sufficiency criteria. Using the Schlesinger-Rumsfeld-Brown sufficiency criteria to represent U.S. objectives, can the U.S. expect to negotiate an arms limitation agreement that would be meaningful rather than promissory, cosmetic, or hazardous? Theoretically the answer shall always be positive. In

actuality there are reasons for serious doubt. The executive agreement reached at Vladivostok, between President Ford and Soviet Communist Party Chief Brezhnev points to one such doubt.

VLADIVOSTOK:

Hailed as a breakthrough in SALT negotiations by Secretary of State Kissinger, the Vladivostok agreement set a ceiling of 2,400 total strategic nuclear delivery vehicles (ICBM launchers, SLBM launchers, and long-range bombers) each side can deploy and limited MIRVing for both countries to 1,320 missiles.[21] Under the agreement the United States could add approximately 275 more missiles. [22] The agreement as it stands does not deny the United States flexibility to act. The U.S. is not restricted from introducing larger missiles into its arsenal nor to go to a heavier throw weight. It is also possible to add on to a MIRVed missile a greater number of individual warheads.

Even though the agreement at Vladivostok will not reduce the threat, neither will it limit the U.S. in coping with a changing Soviet threat. If the agreement is to last for a 10 year period it appears unlikely any consideration for actual arms reduction would be forthcoming. The agreement does not curtail or restrict technological improvements.

If the Vladivostok package is codified into a SALT II agreement it will bypass the criteria outlined for meanigful arms limitations. The one feature favoring such an agreement is the flexibility given to the U.S. for coping with the Soviet

threat - present and future.

The Vladivostok agreement tends to have a neutral impact on the Schlesinger sufficiency criteria. Viewed in terms of its affect on the U.S. assured destruction capability -- Vladivostok does not hinder or restrict the U.S. offensive retaliatory forces. By allowing the U.S. to construct more delivery vehicles and allowing her to MIRV more missiles than planned, Vladivostok appears to strengthen the assured destruction posture. One should note that an increase of approximately 140 delivery vehicles is not necessarily going to have a significant impact on America's deterrent posture.

Points two and three of Schlesinger's sufficiency criteria pertain primarily to the change in targeting doctrine and should have little, if any, impact on Vladivostok or SALT II negotiations.

Since it is Schlesinger's objective to attain essential equivalence - his fourth criteria for sufficiency - both actually and perceptually in size and composition of strategic forces, the Vladivostok terms are a step in the right direction. Asymmetries in strategic forces will continue to exist. Equivalence in total number of delivery vehicles and in number of MIRVable missiles will <u>not</u> equate to a state of essential equivalence. But, as stated above, Vladivostok does give the U.S. the flexibility, assuming it is willing to meet the cost and effort required, to close the gap in some asymmetrical areas.

There is an uncertain, even unsettling air, to the Vladivostok agreement. While the agreement allows almost unrestricted action on U.S. efforts the same applies to the Soviets. In appearance the agreement allows the Soviets to do just what they have wanted to do all along - and that may be hazardous!

Since the signing of the SALT I agreements in Moscow in 1972 through the summit meeting between Secretary Brezhnev and President Gerald R. Ford in Vladivostok in the latter part of November 1974, the second phase of SALT has been distinguished only by the lack of progress in negotiating a more comprehensive agreement on strategic offensive arms. It remains to be seen whether the apparent "breakthrough" reached during the Vladivostok summit can be translated into a formal agreement acceptable to the two governments. Although it may be wise to remain somewhat skeptical about the Vladivostok agreement, there is a basis for some optimism in that a follow-on SALT accord along these lines appear more equitable to the United States than the Interim Agreement. Nevertheless, a new SALT agreement should not be seen as the solution to all U.S. strategic problems. Although some greater measure of essential equivalence may occur through such an accord, major U.S. strategic programs will yet be required.

FOOTNOTES

[1]William R. Van Cleave, "Implications of Success or Failure of SALT," SALT - Implications for Arms Control in the 1970's, eds. W.R.Kintner and R.L. Pfaltzgraff Jr., (Pittsburgh: University of Pittsburgh Press, 1973), p. 321.

[2]Ibid., pp. 321-322.

[3]Melvin R. Laird, Annual Report FY 1973,(Washington, D.C.: U.S. Government Printing Office, February 15, 1972), p. 65.

[4]Ibid.

[5]James R. Schlesinger, Annual Defense Department Report FY 1975, (Washington, D.C.: U.S. Government Printing Office, March 4, 1974), p. 28.

[6]Henry M. Jackson, "International Negotiation and the Future of Arms Control" (February 28, 1973 - remarks at the University of North Carolina.)

[7]Harold Brown, "Security Through Limitations," Foreign Affairs, April 1973,

[8]Laird, Annual Report FY 1973, p. 65.

[9]Options available per President Nixon's Foreign Policy statement in 1971 - U.S. Foreign Policy for the 1970's: Building for Peace, A Report to the Congress, February 25, 1971, p. 58.

[10]Van Cleave, "Political and Negotiating Asymmetries: Insult in SALT I," Contrasting Approaches to Strategic Arms Control, ed. Robert L. Pfaltzgraff Jr., (Lexington, Mass: D.C. Heath and Company, 1974), p. 19.

[11]Ibid.

[12]Ibid., pp. 19-20.

[13]Ibid., p. 20.

[14]Schlesinger, Annual Defense Department Report FY 1975, p. 39.

[15]Ibid.

[16]Colin S. Gray, "Rethinking Nuclear Strategy," ORBIS, Winter (1974), p. 1147.

[17]Schlesinger, Annual Defense Department Report FY 1975, p. 39.

[18]Ibid.

[19]Ibid., p. 44.

[20]The following extracts have been taken from Donald H. Rumsfeld, Annual Defense Department Report FY 1978, (Washington, D.C. Government Printing Office, January 17, 1977), pp. 19-20, 68-73; and Harold Brown, Department of Defense Annual Report FY 1979, (Washington, D.C.: Government Printing Office, February 2, 1978), pp. 55-56.

[21]An apparently complete account of the results of the Vladivostok summit is contained in an article by Clarence A. Robinson, Jr., "SALT Proposals Facing Hurdles," Aviation Week and Space Technology, December 9, 1974, pp. 12-14.

[22]"Senate Disapproval of A-Arms Accord Reportedly Considered," Los Angeles Times, December 6, 1974.

CHAPTER 5: THE CHANGED STRATEGIC BALANCE AND PERCEPTIONS OF POWER

The quantitative freezes imposed in the SALT I interim offensive agreement and the common ceilings agreed on at Vladivostok have had no notable impact on the momentum of Soviet strategic nuclear force improvements. The rapid and continous growth of Soviet strategic nuclear force capabilities coupled with the fact that the number of U.S. strategic nuclear forces have been constant -- and are expected to remain the same for the forseeable future -- has naturally led some to question whether the United States has parity with the Soviet Union in strategic nuclear force capabilities; about future trends; about the feasible and desirable objectives/utility of strategic nuclear forces; and of the possibility of follow on strategic arms limitation agreements. Furthermore, it is frequently argued -- with increasing credibility -- that the Soviets may be seeking a strategic posture that calls for strategic superiority rather than rough parity. It is the purpose of this chapter to examine the scope and magnitude of the changing strategic nuclear balance and to discuss possible political/military ramifications in the exercise of future strategic arms limitation agreements.

SOVIET MILITARY GROWTH: QUEST FOR SUPERIORITY?

In the past twenty years there has been a methodical, awesome growth of Soviet military might in every field from intercontinental ballistic missiles (ICBMs) to mortars.

According to former Secretary of Defense Donald H. Rumsfeld in his Annual Defense Department Report, FY 1978:

> The Soviet Union, whatever its purpose, is without question engaged in a serious, steady, and sustained effort which, in the absence of a U.S. response, could make it the dominant military power in the world.[1]

Since SALT I, the Soivets have made substantial increases in their strategic offensive force capabilities. General George S. Brown, Chairman of the JCS, reported to Congress in February, 1975 that:

> The Soviet Union is pressing forward vigorously with massive programs for near-term deployments involving every facet of offensive strategic power. At the time, it is improving appreciably, at a more gradual rate, capabilities for strategic defense and pursuing with firm determination development of advanced technology appropriate to the entire strategic equation.[2]

Former Secretary of Defense Schlesinger stated in his Annual Defense Department Report, FY 1976 and FY 1977 that "...we are now beginning to witness in the Soviet Union the largest initial deployment of improved strategic capabilities in the history of the nuclear competition."[3] The most significant is the deployment or near deployment of four new ICBMs (SS-16, SS-17, SS-18, SS-19)[4] -- all of greater throw weight and accuracy than their predecessors, and all MIRVed or capable of being MIRVed.[5]

In addition, Schlesinger stated that the Soviets are outspending the United States by 20 to 60 percent in every significant category in defense programs, such as procurement, research and development, general purposes forces, and strategic

nuclear offensive forces.

The Soviet military establishment -- now over four and a half million men -- has, in recent years, produced four times as many submarines and surface combatants as has the United States and is producing 70 percent more tactical aircraft.[6]

Further, Malcolm R. Currie, Director of Defense Research and Engineering (DDR&E), informed the Senate in early February 1976, that the Soviet Union is developing another new series of intercontinental ballistic missiles, and an advanced submarine-launched ballistic missile, and a maneuvering reentry vehicle (MARV) for the new strategic systems.[7] The new Soviet ICBM family is a series beyond the SS-16, SS-17, SS-18, SS-19, now in various stages of deployment.[8] Currie stated, "We do not know what improvements or innovations will occur in the new systems nor why such programs would be initiated before deployment of the current generation is complete."[9] Currie went on to say that trends are more important that "a static snapshot at a point in time. Our ability to perceive trends and our ability to assess and project properly their underlying significance are fundamental to our future security and, indeed, our survival."[10]

The Soviets have further enhanced the capability of their offensive forces by achieving a "pop-up" launching capability--without violating the configuration reached in SALT. In the past, silo launching called for a missile lined with shielding and considerably smaller in diameter than the silo hole. This is to permit the exhaust of hot rocket gases when the missile

is ignited as it stands at the base of the silo hole. "Cold-launch" simply means expelling the missile from its launcher before the main engines are ignited. This technique allows the silo's heat shield to be removed, increasing silo volume producing greater missile throw weight while not changing the dimensions of the silo. This technique does not destroy launchers thereby allowing the same launcher to be quickly reloaded. This rapid reload and refire capability has covertly increased the force levels set by SALT since launchers -- not missiles -- were limited.

The Soviets have also developed an improved version of the DELTA-class modern submarine which is equipped to carry 16-4,000m stellar guided SLBMs. Further, Soviet missile production facilities have been modernized and extensive testing programs have been continued. The Soviets have also developed the SSN-19 anti-ship missile for use against surface ships -- to be specific, American aircraft carriers.

Another area involving enormous effort is Soviet war survival measures. The objective of Soviet civil defense programs is to limit damage substantially in order to preserve Soviet national power and to undercut the U.S. assured destruction strategy. Soviet civil defense efforts have included population survival measures, a long-run program of dispersal of industries, underground industrial sites, hardened facilities for protecting the political leadership and its command and control structure, and hardened facilities to

preserve command, control, and communications operations within varied elements of the armed forces.[11] According to Foy D. Kohler, former United States ambassador to the Soviet Union,

> Studies conducted in the government and outside in this country, including extensive modeling on the basis of known Soviet practices, indicates that with ongoing measures, Soviet population losses in a nuclear war could be held to the range of six to eight percent and that the Soviet 'political and economic machine' could essentially survive and be kept going.[12]

According to another recent study conducted by the Boeing Aerospace Company, the Soviet civil defense program could lead to effective protection of its industrial base and permit 98% of the population to survive in a general nuclear war.[13] Appraisals of Soviet war survival measures indicate that such efforts may be a decisive strategic factor in determining the outcome of a war. Thomas K. Jones, Boeing program and product evaluation manager, told the Joint Congressional Committee on Defense Production recently "that the Soviet civil defense effort, combined with the increasing power of Soviet strategic offensive weapons, has 'destabilized' the strategic relation between the U.S.S.R. and the U.S.."[14]

Major General George J. Keegan, Jr. argues that the Soviet Union presently has the capability "to initiate, wage, survive and emerge from a global conflict with far greater effectiveness than the United States and its allies."[15] In a March 1977 essay General Keegan stated:

> The United States today lacks the firepower, lacks the accuracy and lacks the yields to overcome the enormous advantages in terms of neutralizing our retaliatory punch which the Soviets have engineered for themselves at great cost. They have removed their civilian leadership from our ability to cripple it. They have removed their military command and control from our ability to destroy or cripple. The nuclear chain of command from the General Staff to the lowest regiment is now beyond the reach of American retaliatory weapons. There is no physical way that we can destroy underground installations which now exist in the tens of thousands, that are now 1,000-2,500 psi blast hardened - the hardest man-made structures in the world. They have put their strategic communications underground. They have put their nuclear weapons underground. They have hardened most of their fighting capabilities - particular in the defense area.
>
> The entire industrial population of the Soviet Union, it would seem from the evidence which we examined, and the human sources we spoke to, are now 100% protected. Every daytime working industrial shift in the Soviet Union has within a few feet a vast underground bunker hardened to 145 psi. Now unless you get a direct hit against one of these, the incumbents or the occupants are going to survive, and that's precisely what the Soviets have done. ...I say to you now, in my judgement, that the Soviets through their hardening, war survival and civil defense measures have neutralized the ability of our retaliatory forces to carry out their directed tasks. [10]

In response to a letter submitted to the Defense Department by Senator William Proxmire, the Joint Chiefs of Staff both supported and disagreed with aspects of General Keegan's claims. On the subject of Soviet civil defense the Joint Chiefs somewhat qualified their response by saying:

> It is believed that the Soviets have constructed blast shelters in some major manufacturing plants. Shelter building for the general population is also in progress, and there appear to be underground storage bunkers for grain....

> The Soviet (civil defense) program is more extensive and better developed than it appeared to be several years ago. Under optimum conditions, which include a period of warning prior to an unrestrained U.S. attack and successful evacuation and other preparations, Soviet civil defense measures could probably: (1) assure survival of a large percentage of the leadership necessary to maintain control, (2) reduce prompt casualties among the urban population to a small percentage, and (3) give the Soviets a good chance of being able to distibute at least a subsistence level of supplies to the surviving population, although the economy as a whole would experience serious difficulties.... [17]

The Joint Chiefs did disagree with General Keegan's assertion that the Soviet Union has achieved military superiority over the United States. The Joint Chiefs letter stated that "the available evidence suggests the U.S.S.R is engaged in a programme designed to achieve such superiority but that they have not attained this goal." Further, they noted that the United States has a strategic capability "sufficient to achieve U.S. objectives today" but the United States must continue to do what is necessary to maintain strategic nuclear equivalence.[18]

General Keegan further asserted that "by every criterion used to measure strategic balance - that is, damage expectancy, throw-weight, equivalent megatonnage or technology - I am unaware of a single important category in which the Soviets have not established a significant lead over the United States." [19] The Joint Chiefs letter to Senator Proxmire did not fully concur.

> ...we agree that the Soviets have established a lead over the United States in throw-weight and equivalent megatonnage, but they do not agree that the Soviets lead in technology, nor

> that these are the only criteria appropriate for measuring the strategic balance. Further, damage expectancy, as wargaming results indicate, is scenario-dependent. The Soviets are rapidly closing the technological gap, but they still lag in several important technological areas. Of additional criteria by which strategic balance can be measured, the United States has a substantial lead over the Soviet Union in bomber payload, missile accuracy, survivability, and numbers of warheads and bombers.[20]

In addition to Soviet passive defense measures, active defense consists of an ABM site with 64 operational missiles, 10-12,000 SAM launchers with an estimated 30,000 missiles, and 2,700 interceptor aircraft on combat alert.[21] (Compare this with no operational ABM in the U.S., a few SAM launchers at Key West, Florida and in Alaska, and relatively few interceptors on combat alert.)

Overall the emphasis of the Soviets appears to rest on the ability to fight, survive, and win a general nuclear war with the United States.

General Alexander M.Haig, Jr., NATO's military commander, has stated that a reported emphasis by the Soviet Union on civil defense means "the Soviet leadership has not abandoned the concept of victory" in a nuclear war.[22] Haig argues that Soviet civil defense efforts suggest that Soviet leaders have "not accepted the thesis popular in many Western circles that strategic systems serve only a political purpose" [23] and are not designed to be used in wartime. To the contrary at least one study argues that "Soviet leaders probably do not perceive that they could win a strategic nuclear war in the near term. Without assurance of national survival and ability to recover

from such a war, Soviet leaders are precluded from using strategic nuclear weapons except for retaliation in kind. Despite any quantitative or throw-weight advantage, Soviet strategic missiles have no present offensive utility." [24]

Nevertheless, it is clear that Soviet strategists approach the problem of war in the nuclear age from a fundamentally different perspective than do most U.S. military theoreticians, commentators, and government officials. Evidence suggests that Soviet strategists see nuclear weapons not only as a usable instrument to aid in their effort to achieve victory, but in addition they insist that nuclear weapons and war remain instruments of policy and politics as weapons of war always have. Western strategists, for the most part, do not necessarily reject the notion of winning as much as they tend to believe that no one can win in a strategic nuclear exchange. While the Soviets seek weapon systems and means to effectively prosecute and survive in it, the United States seems to direct its attention toward how to contain conflict while avoiding the introduction of weapon systems that could threaten the survivability of Soviet strategic forces (due to its perceived destabilizing impact as U.S. doctrine is attentive to stability.)

The Soviets appear to reject notions of parity, mutual assured destruction, and stability because they do not connote a war-winning strategy.[25] In "mutual assured destruction" both sides are seen as losers, while emphasis on superiority and war fighting capabilities is based on the premise that

one side can emerge meaningfully the victor. Consequently, the Soviet approach to resolving strategic problems is in the development of a war-fighting capability(counterforce, and a damage-limiting emphasis) and the general goal maximum military strength and superiority over the West. [26] This strategy is consistent not only in the current literature but likewise reflected in current Soviet strategic force programs.

Another difference between United States and Soviet approaches to strategic problems is in determining "How much is enough?" U.S. analysts are constantly assessing, measuring, and modeling whereas "Soviet strategic philosophy" as noted by Thomas Wolfe, "appears functionally incompatible with finding any clear stopping points.... Soviet doctrine represents a mandate for endless competition without defined standards of what constitutes enough." [27]

Over the past few years new interest in analyzing Soviet doctrine has emerged. William R. Van Cleave, in a recent article "Soviet Doctrine and Strategy: A Developing American View" has noted that this new interest may be the result of the gap that has developed between what many Americans expected to happen and what has actually happened.[28] An event that encouraged the realization of the gap between expectations and realities was SALT. After SALT it became difficult to ignore Soviet capabilities. The Soviets had achieved at least parity-- if not superiority-- and their continuing efforts since then

indicate a drive for superiority. With regard to Soviet strategic doctrine and objectives, it is no longer simply a matter of dealing with an assessment of possible intentions and capabilities. Now it is a matter of dealing with the realities of Soviet capabilities.

Both Paul H. Nitze in "Assuring Strategic Stability in an Era of Detente" and former Defense Secretary Schlesinger in an interview with U.S. News and World Report have urged taking positive steps to correct a growing imbalance. According to Nitze,

> ...it is urgent that the United States take positive steps to maintain strategic stability and high qualitative deterence. If the trends in Soviet thinking continue to evolve in the manner indicated by the internal statements of Soviet leaders, and if the trends in relative military capability continue to evolve in the fashion suggested by the prior analysis, the foundations for hope in the evolution of a true relaxation of tensions between the U.S.S.R. and much of the rest of the world will seriously be in doubt. [29]

But just as one senses unity in vision of the threat opposing viewpoints re-emerge. Brent Scowcroft, later director of the National Security Council, argued in 1969 that the U.S.-Soviet strategic relationship is irrelevant. Superiority is not the issue. The real issue, as Scowcroft saw it, was the unacceptability of anticipated damage in the event of a nuclear exchange. Scowcroft stated:

> By continuing to invest strategic superiority with many of the attributes of motherhood, we are in danger of engaging in a form of psychological repression. Strategic superiority is not and cannot be a panacea, and its loose employment as a cureall for all the

> problems of competition and conflicts of interest with the Soviet Union serves primarily to obfuscate, rather than to clarify, the real issues and factors on which our dynamically evolving strategic relationships with the U.S.S.R. are likely to hinge.[30]

Whatever Scowcroft believes about the disutility of strategic superiority evidence exist that the Soviets may not agree. The Soviet view of strategic is broader than that of the United States. In the Soviet view strategic relates to the global correlation of forces. The major strategic objective of the Soviet Union is the removal of the United States as a threat. All actions of the Soviet Union appear directed toward that end. While the United States considers nuclear war "unfeasible and suicidal for both" the Soviet Union on the other hand may see nuclear war as "feasible and winnable for himself."[31] A July 1977 essay by Richard Pipes, Professor of History at Harvard and the former director of the Russian Research Center there, describes the fundamental differences between United States and Soviet Union strategic thought in the following terms:

> The strategic doctrine adopted by the USSR over the past two decades calls for a policy diametrically opposite to that adopted in the United States by the predominant community of civilian strategists: not deterrence but victory, not sufficiency in weapons but superiority, not retaliation but offensive action. The doctrine has five related elements: (1) preemption (first strike), (2) quantitative superiority in arms, (3) counter-force targeting, (4) combined-arms operations, and (5) defense.[32]

Soviet strategic doctrine and programs are consistant in

direction toward the acquisition of strategic superiority over the United States. Soviet strategic doctrine and concepts reflect the need for war-fighting capabilities, counterforce, and war survivability in terms of both active and passive defense measures. Moreover, the most significant element in Soviet strategic thought is the notion that a nuclear missile war can be won and that the Soviets will be the victor in such a war. As the Central Intelligence Agency has noted:

> The Soviets are committed to the acquisition of warfighting capabilities, a decision which reflects a consensus on the need to assure the survival of the Soviet Union as a national entity in case deterrence fails. It also accords a nuclear war could be fought and won, and that counterforce capabilities should be emphasized in strategic forces. Mutual basis for a stable strategic nuclear relationship between superpowers has never been accepted in the U.S.S.R. But Soviet political and military leaders probably regard it as a reality that will be operative at least over the next decade.[33]

In summary, it would appear reasonable to conclude that Soviet strategic doctrine is based on how to fight, survive and win a nuclear war.

The SALT I agreements have generally been seen as being a "brake" on Soviet strategic momentum. However, on the basis of Soviet behavior -- in terms of a continuing strategic force modernization, buildup and improvement -- this salesmanship may be based upon an erroneous rational and simple wishful thinking. Furthermore, the momentum of the Soviet build up shows no signs of relaxation. The Soviet policy of preaching detente while substantially increasing military

strength demonstrates just the opposite approach taken by the United States. Post SALT I Soviet behavior appears to demonstrate a continuing drive for strategic nuclear superiority.

PERCEPTIONS OF POWER -- TWO VIEWS:

The impact and significance of the change in the American-Soviet strategic balance may be more profound than most people are prepared to admit. A changed balance carries both political and military ramifications which may be far reaching in scope.

Little attention has been given to how perceptions of strategic capabilities may effect political relationships or military decisions short of the impulse to use strategic nuclear forces. Perceptions of strength and weakness, either actual or perceived, in the elements of the strategic equation could tilt the balance of power. Current trends run the risk of Soviet nuclear adventurism with all the dangers that that entails.

SALT is not merely a technical and military fact but a political and psychological phenomenom. The effect of the changing strategic nuclear balance ("changed" to some) of power on the overall international influence and effectiveness attributed to the two nations, by themselves and by others, depends as much on how politically relevant groups and individuals perceive the strategic relationship as it depends on the comparative strength of their forces.

Two views of the strategic nuclear balance in terms of perception of power exist. One view could be described as follows:

> .... a substantial numerical superiority of weapons does not effectively translate into political control, or diplomatic leverage. While thermonuclear power is almost inconceivably awesome...it has proven to be a limited diplomatic instrument....it is at one and the same time, an all-powerful weapon-and a very inadequate weapon. [34]
>
> -- Secretary of Defense Robert S.McNamara (1968)

A second view could be summarized in the following terms:

> (Should) the U.S. fall into what is definitely second position, inferior position to the Soviet Union overall in its defense programs, this will be an open invitation for more instability in the world and an open invitation, in my opinion, for more potential aggression in the world, particularly in such potentially explosive areas as the Mideast. [35]
>
> -- President Richard M. Nixon (1972)

The majority arms control view in the United States seems to be that crude numerical superiority in strategic nuclear weapons yield no real extra-curricular political utility and that mere numbers of weapons beyond a certain calculated point are meaningless.[36] This lack of sensitivity to basic inventories is based on a targeting doctrine founded upon beliefs in the non-usability of nuclear weapons and the threat of the massacre of civilians, which provides the deterrent. Thus it is believed that strategic nuclear weapons are so destructive that their use cannot serve any rational purpose -- military or political.

In this view strategic stability rests on the maintenance of mutually vulnerable civilian populations and industry. SALT then was a U.S. attempt to formalize such a strategic doctrinal concept into the strategic nuclear balance.

In addition these theorists claim that different states of strategic arms imbalance have been largely irrelevant to the foreign policy behavior of the United States and Soviet Union. According to Walter Slocombe,

> Because of the immense destructiveness of nuclear weapons this factor of credibility tends to dominate discussion of the political role of nuclear as distinct from other forms of weapons. It has led many to the conclusion that their political usefulness, even for the super-powers, is limited in the great range of ordinary political events and conflicts. On the historical record, even nuclear monopoly, much less a first-strike superiority over a lesser nuclear power, does not give its possessor the dominating political influence which a comparison of strictly military capabilities would imply. The years of American nuclear monopoly and first-strike superiority strongly suggest that nuclear power alone, however great, is no talisman for diplomatic fortune. [37]

When confronted with the issue of numerical superiority in strategic nuclear forces they argue that it is for the most part irrelevant and in fact nothing is conceded. Simple numerical superiorities, they note, confer no indentifiable advantages while being costly to maintain, For example, Mc George Bundy has said: "Strategic nuclear weapons, certainly as between the super-Powers, are good for nothing but mutual deterrence." [38] It is further argued that as between the superpowers only the strategic nuclear forces that are required

to make retaliation highly reliable are of any use; numerical superiority is therefore meaningless.

Underlying this notion is the belief that nuclear war would be an unacceptable option to either superpower as long as each is able to retaliate in strength after absorbing a first strike. Consequently, "the threatened use of nuclear weapons is not a viable instrument of policy since only the ultimate threat, intended to avert a nuclear attack on super-Power homelands, would be believed; this being so, it is only a 'preclusive first-strike' capability that can secure any political or military advantage - and such capability is held to be unattainable as between the super-Powers." [39]

The opposing viewpoint holds that strategic superiority and the strategic nuclear balance -- derived generally from the qualitiy of a nation's military forces in being -- is not irrelevant in an age of strategic nuclear forces. Thus, strategic arms limitation agreements can have great impact on the peacetime diplomacy of the U.S. and its allies as well as on the ability of the U.S. to conduct strategic nuclear war-fighting operations should deterrence fail. Furthermore, the security of the U.S. as well as our allies depends "not necessarily on our ability to win a nuclear war (since the U.S. has chosen not to match the impressive Soviet civil defense program to provide high survivability of people and industry) but on our ability to deny the Soviet Union the opportunity to employ its strategic superiority (the result

of superior nuclear forces and impressive civil defense) as a vehicle for intimidation."[40]

More and more one sees in the analyses of war outcomes -- both strategic and general purpose force -- that unless military trends are reversed the United States may soon (if not already) be unable to secure its vital interests overseas, interests that include the survival of democratic allies -- Western Europe, Israel, and Japan. The credibility of U.S. strategic nuclear guarantees is increasingly in question. It has been and continues to be eroded by the momentum of ongoing Soviet nuclear offensive/defensive force programs. As a result of Soviet quantitative and qualitative improvements since SALT I, they may have already undercut the utility of the U.S. nuclear retaliatory capability to deter attack against NATO. From a defensive standpoint the U.S. strategic deterrent is further eroded by the growing Soviet civil defense system, which while continuing to go unchecked in the United States, leaves the U.S. even more vulnerable to an intercontinental nuclear exchange than the Soviet Union.

The above statement is plausable because influence is often a matter of appearance. Strategic superiority or inferiority can be seen and understood to be a part of the strategic balance measured in terms of numbers, accuracy, throw weight, and deliverable warheads. If influence -- political or otherwise -- were not a matter of political leverage -- why has the Soviet Union pursued a program of strategic force expansion at the expense

of possible greater growth in consumer products?

Consequently, the quality and quantity of strategic weapons may well affect the style and content of a nation's foreign policy. Changes in the strategic balance most certainly affect the confidence allies display in our ability to protect their interests. It further, may influence third world countries and could promote a degree of anxiety in potential enemies. Confidence in the adequacy of the U.S. strategic forces is important to a confident and effective international policy. The issue then remains: does the loss of strategic superiority --real or perceived-- undermine the basis for confidence in America's determination and firmness in conflicts with the Soviet Union? According to Colin S. Gray,

> However, remote the direct threat against which the American strategic nuclear force is maintained, a government unsure of the adequacy of its deterrent against the threat could hardly be sure of much else in its international policy and would lose both its self-confidence and its sense of perspective in international affairs.[41]

With an image of nuclear superiority the Soviet Union's role in international affairs could quite possibly take on new dimensions. One could expect the Soviet Union to accept greater risks in foreign policy leading, perhaps, to exploitation of the local conventional advantages along the East and West European border. As a result the United States may be less assertive in protecting its interest by lacking either the means or the will to counter the Soviet threat. The ultimate change in American foreign policy would be the loss

of a second pillar--that of the partnership with our allies. U.S. allies may see American foreign policy change to the extent that the U.S. repudiates its foreign commitments in favor of bilateral arrangements with the Soviet's. One might conjecture that the Soviet Union, as the number one power, would exploit its conventional superiority on a global scale, while the U.S. with weakened nuclear, conventional, and diplomatic shields could offer little resistance.

To the United States peaceful coexistence means that the world situation will remain as it is now. To the Soviets peaceful coexistence does not preclude a decisive shift in the global balance in favor of the Soviet Union. Nor does it exclude wars of national liberation or squeezing the U.S. out of Europe, the Middle East, and other parts of the world.

Today, one aspect of the Soviet effort may be seen in her ability to use client states to further political and military objectives--i.e., the use of Cuban armed forces throughout Africa. However, some view recent Soviet activity in Africa in conjunction with national liberation movements and not illustrative of aggressive behavior stemming from a changed strategic nuclear balance. The thrust of this view is that the conflict does not involve nuclear power but conventional weapons and client armies acting to achieve Soviet foreign policy objectives. The bottom line in this argument is that no proof of connection between strategic nuclear power and Soviet foreign policy objectives exists.

On the other hand scholars such as Colin S. Gray and

Richard Pipes argue that American strategic inferiority may give fresh impetus to Moscow to make use of opportunities which offer themselves as a result of American retreat. Soviet strategic superiority might well increase the gambling nature of the Soviet Union in international affairs. It may well be the duty of the Soviet leadership to exploit opportunities for political advantage. "Premature risk-taking, or adventurism is to be avoided but failure to gain from a favorable situation is a form of revisionism or unnecessary accommodation to the West."[42] As Soviet superiority becomes larger and more visible--"the greater the likelihood that Soviet leaders will be more vigorous in the assertion of what they regard as Soviet interest. They will be bolder in trying to advance them, more adamant in seeking to defend them and more intransigent in bargaining over them."[43]

A most serious consequence of the changing strategic balance is in possible adverse effects in any serious crisis that might develop. Presently, the relative power relationship is such that if the Soviets elected to place missiles in Cuba again it is questionable whether the U.S. could force their withdrawal as it did in 1962. Despite the inferior strategic position of the Soviets at that time they nevertheless took risks which were considered dangerous to the cause of peace and to U.S. national security. Would the U.S. have been as firm if the strategic balance in 1962 had been one of parity or Soviet superiority? Would the Soviets have been as likely to back down?

With the current strategic balance the U.S. may not be able to deter the S.U. at the strategic nuclear level. The Soviets may then be free to press whatever advantage it possesses at other levels of confrontation.

FOOTNOTES

[1]Donald H. Rumsfeld, Annual Defense Department Report, FY 1978 (Washington, D.C.: Government Printing Office, 17 January 1977.)

[2]U.S. Congress. Senate. Committee on Armed Services, Statement of General George S. Brown, Chairman of the Joint Chiefs of Staff, February 5, 1975, Part I Authorization, (Washington, D.C.: Government Printing Office, 1975) p. 207.

[3]James R. Schlesinger, Annual Defense Department Report, FY 1976 and 1977, (Washington, D.C.: Government Printing Office, February 5, 1975), pp. 1-5.

[4]Ibid., pp. 11-12.

[5]William R. Van Cleave, "Soviet Doctrine and Strategy: A Developing American View," in Lawrence L. Whetten, (editor) The Future of Soviet Military Power. (New York: Crane, Russak Company, Inc., 1976), p. 53.

[6]Schlesinger, Annual Defense Department Report, FY 1976 and 1977, p. 1-5.

[7]Aviation Week and Space Technology, February 9, 1976, p. 12.

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[9]Ibid.

[10]Ibid.

[11]See Leon Goure, War Survival in Soviet Strategy, (University of Miami: Center for Advanced International Studies, 1976.)

[12]Ibid., see the foreword by Foy D. Kohler.

[13]Aviation Week and Space Technology, November 22, 1976, p.17.

[14]Ibid.

[15]Major General George J. Keegan, Jr., "New Assessment Put on Soviet Threat," Aviation Week and Space Technology, March 28, 1977, p. 41.

[16] Ibid., pp. 42-43.

[17] See: "Soviet Strategic Forces: Letter from US Joint Chiefs-Of-Staff; 3 February 1977," Survival, (March/April 1977), pp. 76-78.

[18] Ibid.

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[23] Ibid.

[24] E.C. Black, "Achilles Heel of the Deterrence Triad," Military Review, (April 1978), p. 51.

[25] Roger W. Barnett, "Trans SALT: Soviet Strategic Doctrine," ORBIS, (Summer 1975), p. 554.

[26] This view of the Soviet approach to resolving strategic problems is found in multiple sources -- most recently in William R. Van Cleave's "Soviet Doctrine and Strategy: A Developing American View," pp. 46-47.

[27] Thomas W. Wolfe, Worldwide Soviet Military Strategy and Policy, (Santa Monica, California: RAND Corporation, 1970), p. 17.

[28] Van Cleave, "Soviet Doctrine and Strategy: A Developing American View," p. 43.

[29] Paul Nitze, "Assuming Strategic Stability in an Era of Detente," Foreign Affairs, January 1976, p. 232.

[30] Brent Scowcroft, "Deterrence and Strategic Superiority," ORBIS, (Summer 1969), pp. 442-443.

[31] Richard Pipes, "Why the Soviet Union Thinks It Could Fight and Win a Nuclear War," Commentary, July 1977, p. 34.

[32] Ibid.

[33] Hearings before the Subcommittee on Priorities and Economy in Government, Joint Economic Committee, Congress of the United States, Part 2, May 24, June 15, 1976, (Washington, D.C.: Government Printing Office, 1976), p. 68.

[34] Statement of Secretary of Defense Robert S. McNamara in "Scope, Magnitude, and Implications of the United States Anti-ballistic Missile Program" Hearings before the Subcommittee on Atomic Energy, 90th Congress, 1st Session, (Washington, D.C.: Government Printing Office, 1968), p. 108.

[35] President Richard M. Nixon's News Conference of June 22, 1972, Department of State Bulletin, July 17, 1972.

[36] See; Walter Slocombe, The Political Implications of Strategic Parity, Adelphi Papers, No 77, (Institute for Strategic Studies, London May 1971); Alton H. Quanbeck and Barry M. Blechman, Strategic Forces: Issues for the Mid-Seventies (The Brookings Institute, Washington, D.C. 1973), pp. 9-10; George W. Rathjens, The Future of the Strategic Arms Race: Options for the 1970's (Carnegie Endowment for International Peace: New York 1969); and Edward Luttwak, The Strategic Balance 1972, (Center for Strategic and International Studies, Georgetown University, Washington, D.C. 1972.)

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[38] "Prospects for the 1970's," text of Twentieth Stevenson Memorial lecture, reproduced in The World Today, February 1972, p. 52.

[39] Luttwak, The Strategic Balance 1972, p. 69.

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CHAPTER 6: PROSPECTS FOR A MEANINGFUL SALT II AGREEMENT

PART I: AN ASSESSMENT OF SALT I

This paper has suggested various criteria for evaluating arms control agreements. Placed in the context of strategic arms limitation negotiations, the United States and the Soviet Union consumated a series of agreements involving nuclear weapons deployment, testing, and communication procedures thought to reduce the risk of nuclear war. The degree to which these promissory and cosmetic agreements reduced tension between the two parties and establish an environment of trust and confidence in bilateral relations is subject to debate by optimists and skeptics alike. To what degree a series of tension reducing agreements and confidence building measures will foster progress aimed at meaningful strategic arms limitation agreements between the United States and Soviet Union is a matter of speculation. The conclusion reached here is that while promissory and cosmetic agreements may further better relations and may reduce tensions, they are really only atmospherics -- they do not change the nuclear threat to either party. Only meaningful arms limitation agreements -- as defined -- will bring about results to enhance strategic stability and U.S. national security.

Looking at the specific terms of the U.S./Soviet SALT I accords it appears reasonable to suggest that this was in fact a hazardous arms limitation agreement. In this respect,

the SALT I interim offensive agreement gave the Soviet Union the following advantages: (1) a 40% advantage in the number of ICBMs, (2) a 33% advantage in SLBMs (950-710), (3) the Soviet Union may have 62 modern ballistic missile submarines while the U.S. may have no more than 44, and (4) a 4 to 1 advantage in total missile throw weight.

The disparity in throw weight is unquestionably the most important item which characterizes the potential of Soviet dominance over U.S. strategic forces. Total throw weight ultimately determines the number and sizes of warheads possible. According to Dr. William R. Van Cleave, former SALT I negotiator,

> The throw weight (i.e. payload, which afford the Soviet Union far greater flexibility than the United States in terms of yields, numbers of warheads, and mission capability) of the Soviet strategic offensive missile force shows an even more striking differential. The probable throw weight of 300 SS-9s alone is approximately double that of the entire U.S. Minuteman and Polaris force combined.[1]

The Soviet throw weight advantage permits them the potential to develop a hard-target counterforce capability threatening the survivability of U.S. land-based strategic systems.

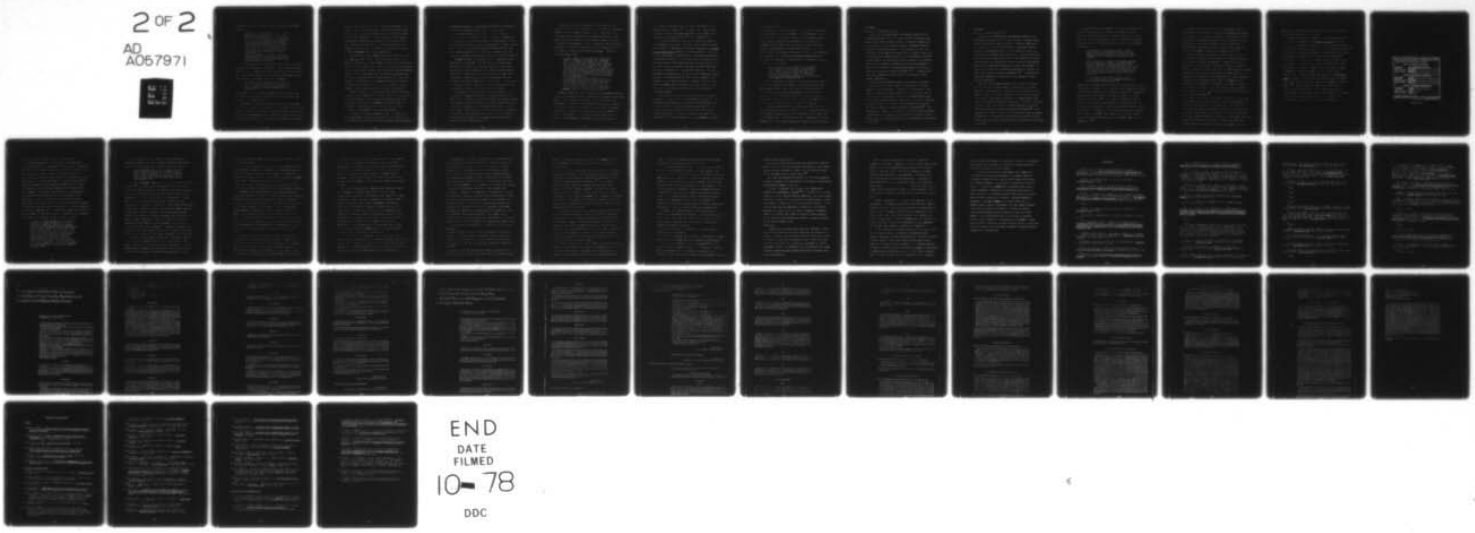
One should not overlook in this analysis that the Soviet Union has another 1,000 ICBMs in addition to its SS-9s, most of which are larger than our Minuteman missile.[2]

Concern over the Soviet throw weight advantage has also been expressed by former Secretary of Defense James R. Schlesinger. In testimony before the Committee on Foreign

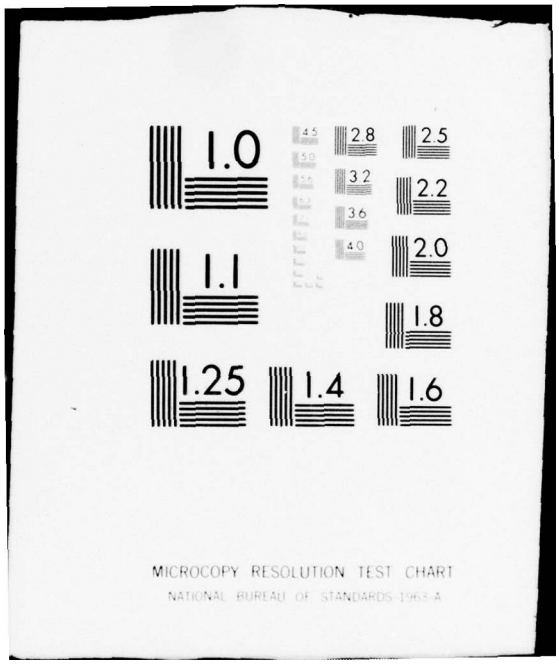
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Relations of the U.S. Senate on March 4, 1974, Schlesinger stated:

> The problem is that, even with the throw weight that the Soviets had under the agreement of May 1972 -- as represented by the SS-9, the SS-11 and other missiles - if they put 10 warheads equivalent to our Poseidon warheads on each missile, they could have something on the order of 23,000 warheads. With the additional throw weight which is embodied in the SS-x-9 and the SS-x-18 they could have something like 33,000 RVs (re-entry vehicles).....
> .....By contrast the United States has programed about 2,000 RVs for its ICBMs. We could MIRV the entire Minuteman force and have about 3,000RVs.[3]

The agreement, as signed in 1972, gave the U.S. a two or three to one advantage in warheads.[4] This, however, depends upon the time it takes the Soviet Union to MIRV its missiles. The Soviet Union could obtain a numerical advantage in warheads as well. According to Morton A. Kaplan,

> The large Russian SS-18s could be MIRVed to 10 or even 25 warheads per missile, and there is already evidence of at least 6 independently targetable warheads for that missile.[5]

Even while the U.S. has more warheads than the Soviets one must note that theirs are larger and more destructive than those of the United States.[6]

The terms of the SALT I agreements, while not reducing the threat, did limit the ability of the United States to cope with the threat. The agreement codified a Soviet Union 4 to 1 throw weight advantage with no offsetting compensation allowed for the United States. In this case additional U.S. defensive

measures could have offset the offensive advantage of the Soviets. The flexibility that the additional throw weight gives to the Soviet Union permits them to develop a clear counterforce capability.[7] The disparity in throw weight coupled with improved technologies for the Soviet Union and restricted options for U.S. force survivability and damage limitation (the ABM Treaty) could give the Soviets a clear disarming first strike capability.

Nevertheless to limit damage should war occur is a concept not agreeable to all. While some place trust in a military capability to limit damage through an anti-ballistic missile (ABM) system, others object to the high cost, question the ABM system effectiveness, and declare the system destabilizing. True - the treaty did reduce planned expenditures for fiscal years 1973-1978 by approximately $7.7 billion,[8] however, the elimination of Safeguard severely restricted the survivability options the U.S. had in which to limit damage to small scale attacks and accidential launches.

Liberal elements of the American arms control community endorsed the ABM Treaty in the belief that for the indefinite future deterrence through assured destruction would work. One should hope that this judgment is correct because if deterrence should fail, SALT I has left the U.S. with virtually no alternative to assured destruction.

In essence, the SALT agreements froze U.S. and Soviet fixed land-based ICBM and SLBM launchers in a condition of U.S. inferiority in numbers of launchers and, more important,

in payload capacity. The agreement was made at the peak of the Soviet strategic nuclear force buildup. While Dr. Kissinger argued -- as President Nixon's national security adviser -- that the Interim Agreement "perpetuates nothing which did not already exist in fact and which could only have gotten worse without an agreement," [9] Donald Brennan noted that the Soviet advantage was already real and "may well become greater as the Soviet Union deploys MIRVs and otherwise upgrades her permitted force in the coming years."[10]

Through the SALT I agreements the U.S. appears to have adopted the theory that the best route to nuclear peace and security resides in a strategic posture in which both countries maintain a capability to destroy a percentage of each other's population and cities while at the same time no attempt is made by either side to interfere with the "assured destruction capability" of the other. In other words -- missiles that kill missiles are bad while missiles that kill people, destroy cities and industry are good.

Furthermore, in subscribing to the ABM Treaty the U.S. has agreed to remain vulnerable to a retaliatory attack while the Soviet Union maintains a massive air defense system. This ignores a basic principle of strategic deterrence: the certain survivability of one's retaliatory force. Senator Henry Jackson has stated: "The fact that we will not have to contend with sophisticated ABM systems is not in itself a guarantee that enough of our nuclear force could survive attack to assume retaliation." [11]

Those that view SALT I favorably stress the MIRV imbalance in favor of the United States as an area of strategic competition not regulated by the treaty. They also note that megatonnage comparisons are meaningless as are throw weight and missile numbers. Furthermore, areas of accuracy (circular error probable -- CEP), reliability, and retargeting capability -- which are important to the strategic balance -- are areas of present United States advantage. Herbert F. York has argued that,

> ...SALT Phase I has not had any large direct impact on weapons deployment and programs, but it has fixed some important ceilings, and, it has thus been a step toward limiting the arms race. More important, the clearly implied understandings about the dynamics of the arms race, about the role and uses of ABM, about parity and mutual deterrence, and about the need for and legitimacy of certain forms of intelligence, all are necessary conditions for future progress.
>
> Achieving these understandings will not necessarily compel further progress, but has cleared away a number of notions that have been blocking progress for years. As a result, there is reason to hope that after 27 years of trying, some real nuclear disarmament may be in the offing at last. [12]

Overall, from SALT I the United States maintained advantages in MIRV and re-entry vehicle technology, in guidance technology, and in nuclear weapons technology. The Soviet Union with advantages in terms of greater numbers of launchers, greater throw weight, and an on-going missile development program,[13] needs only to develop the technological skill to exploit all U.S. advantages. "In two and one-half years of SALT, the U.S. has managed to trade away SAFEGUARD, and most of

the important options to assure force survivability for a doubling of the threat." [14] In short, SALT I may be described as "doing the wrong things well" (ABM Treaty) and "the right thing rather badly" [15] (Interim Agreement).

The fear generated by SALT is that under the terms of the agreements, the Soviet Union has been issued a license through which it may aquire a strategic capability to forceably or politically disarm the United States.[16] The Soviet Union by marrying its numerical and throw weight advantages in ballistic missiles to MIRV technology, can aquire a substantial counter force advantage over the United States. [17] In these terms SALT promotes instability rather than arms control or stability in international politics. The SALT I agreements certainly have little to do with meaningful arms control. The accords permit both sides to retrofit their missiles to the degree desired, to replace ICBMs and SLBMs with new models, and to exchange a limited number of ICBMs for SLBMs. As noted earlier, no limits were placed on strategic bombers.

Furthermore, it should be disturbing that no numbers appear in the text of the Interim Offensive Agreement. No bilateral understanding as to numbers was made because the Soviets refused to release any quantitative data.[18] All figures on Soviet numerical levels are derived from U.S. verification means. Needless to say this can lead only to "ambiguity" and "breed suspicion" in any meaningful attempt

at arms control.[19]

Proponents of the the agreement ignore concerns expressed above and view SALT as a benchmark in the warming of Soviet - U.S. relations. Those that view SALT I in a positive light believe that they will indeed promote future and better agreements or at least view the benefit of talks as aiding mutual understanding of concepts and objectives. In this context SALT I was seen as a building block to future meaningful negotiations. During congressional hearings on SALT, Dr. Henry A. Kissinger -- then President Nixon's chief national security advisor stated:

> It is clear that the agreement will enhance the security of both sides. No agreement which fails to do so could have been signed in the first place or stood any chance of lasting after it was signed. An attempt to gain a unilateral advantage in the strategic field must be self-defeating.[20]

On the other hand, critics of the agreement claim that the Soviets have gained both symbolic superiority and potential actual superiority. SALT I was seen to codify the end of U.S. strategic superiority and guarantee not just Soviet parity but Soviet strategic superiority to a potentially substantial degree.[21] Thus, SALT I could be interpreted by many as a U.S. declaration of strategic inferiority.

In terms described above, one could conclude that the SALT I agreements did not contribute to U.S. national security, to strategic stability, nor did it moderate future competition in strategic arms. Therefore, the SALT I agreements do indeed appear to be both destabilizing and a hazardous arms limitation

agreement.

PART II: CURRENT NEGOTIATIONS

Even with the Vladivostok understading reached by the Ford administration in 1974, Soviet-American strategic arms talks have failed to reach conclusive follow-on agreements. On 3 October 1977 the Interim Offensive Agreement expired without a replacement accord. The ceilings that have been in effect for the past five years are no longer binding and both sides could begin production of new strategic offensive systems beyond the established limits; however, both parties have issued unilateral statements in which they pledged "to abide by the terms of the expiring agreement as long as the other side exercises similar restraint."[22] Consequently, each party appears to be serious in its attempt to reach further agreements.

When the Carter administration took office in January 1977 it promised to work toward the abolution of nuclear weapons in all countries. In March 1977 Secretary of State Cyrus R. Vance, in Moscow, proposed to the Soviets a ban on the testing of new weapons along with a comprehensive arms limitation package requiring "deep cuts" in existing strategic nuclear forces. The Soviet's reacted negatively accusing the United States of seeking unilateral advantages.[23] When negotiations resumed in May 1977 in Geneva both parties agreed to work within the guidlines established by former President Gerald Ford and Soviet President Leonid Brezhnev at Vladivostok in 1974.[24]

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In September 1977, following a visit to the United States by Soviet Foreign Minister Andrei A. Gromyko, the State Department announced that the two parties were in the final stages of a new strategic arms treaty. According to various newspaper accounts the agreement will contain the following provisions:

- A reduction in strategic arsenals on each side from the 2,400 ceiling on missiles and bombers set at Vladivostok in 1974 to a level between 2,160 and 2,250, a reduction of 10% or less.

- A reduction in the number of missiles carrying multiple warheads (MIRVs) from Vladivostok's 1,320 on each side to approximately 1,200. Bombers carrying cruise missiles are not counted in this total up to a limit of about 120, but deployment of any cruise missile bomber above this number would require removal of a MIRV missile.

- A new limit on land based missiles with multiple warheads, which officials variously set at 800 or 850 or more. [25]

Reportedly, the treaty would be in effect until 1985 and omit significant restraints on two important Soviet weapons systems: the MIRV heavy missile and the Backfire bomber.[26] Apparently the Soviets will be held to 308 heavy missiles -- a limit established in SALT I.[27] The treaty is supposed to have a three - year protocol which imposes a 1,500 mile limit on the range of air-launched cruise missiles and forbides testing and deployment of ground or sea launched missiles at ranges of more than 350 miles.[28] News reports at this time indicate that "several crucial details of the protocol remain to be negotiated." [29]

By April 1978 the chief U.S. SALT negotiator, Paul C. Warnke, was able to announce that the two parties have agreed on 90 percent of the SALT II package. The package was noted as containing a treaty limiting offensive strategic missiles and bombers until 1985; a protocol putting restraints on controversial systems until 1980 pending further talks, and a set of principles to govern a subsequent treaty.[30]

Also in April 1978 Secretary of State Vance traveled to Moscow for talks with Soviet leaders on some of the major SALT issues that remain unresolved. During three days of meetings the United States tentatively decided to accept a Soviet proposal that limits each side to 2,250 strategic nuclear delivery vehicles (ICBMs, SLBMs and long range bombers). The Soviet Union, believed to have approximately 2,500 strategic nuclear delivery vehicles, would have to dismantel about 250 missiles or bombers. In addition, both parties agreed to a separate ceiling of 1,200 for multiple warhead missiles and a sublimit of 820 on land based intercontinental missiles with multiple warheads.[31]

In spite of the fact that certain major force issues have been resolved there are indications that several complex and difficult problems need to be worked out. Such problems have been speculated to include: a provision in the protocol limiting the deployment of new types of ballistic missiles; the Soviet Backfire bomber; the transfer of military technology to allied nations; and the types of planes that may carry airborne cruise missiles.[32] While it may appear that the

agreement is far from finalized there are indications that significant progress has been made.

Already sides are being taken on the utility/non-utility of a potential agreement. The Washington Post quoted an administration source as saying: "their (the Soviet) program is pinched more than ours - and pinched in significant ways." [33] Administration civilian advocates of nuclear arms control have in general been pleased with the latest step forward.[34] They contend that the U.S. is edging toward its goals slowly but surely. (SEE FIGURE 6-1) To the contrary Paul Nitze, former deputy secretary of defense has said that "the deal is looking less and less good" for the United States.[35] Senator John G. Tower of Texas was quoted in the New York Times as saying that current trends would produce "a treaty which would place the United States at a strategic disadvantage." [36] Senator Howard H. Baker, Jr., fears that the current negotiations would yield a treaty that would be unacceptable to him and most Senate Republicans.[37] In either case a formal SALT II treaty presented to Congress for ratification is likely to be highly controversial.

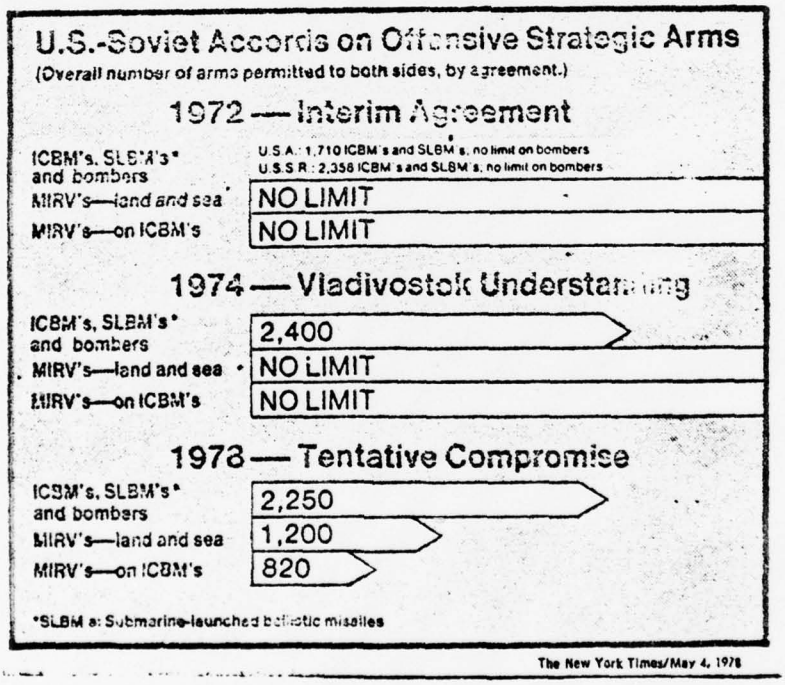

U.S.-Soviet Accords on Offensive Strategic Arms
(Overall number of arms permitted to both sides, by agreement.)
1972 — Interim Agreement
ICBM's, SLBM's* and bombers
U.S.A.: 1,710 ICBM's and SLBM's, no limit on bombers
U.S.S.R.: 2,358 ICBM's and SLBM's, no limit on bombers
MIRV's—land and sea
NO LIMIT
MIRV's—on ICBM's
NO LIMIT
1974 — Vladivostok Understanding
ICBM's, SLBM's* and bombers
2,400
MIRV's—land and sea
NO LIMIT
MIRV's—on ICBM's
NO LIMIT
1978 — Tentative Compromise
ICBM's, SLBM's* and bombers
2,250
MIRV's—land and sea
1,200
MIRV's—on ICBM's
820
*SLBM s: Submarine-launched ballistic missiles
The New York Times/May 4, 1978

FIGURE 6-1

PART III: POLITICAL AND STRATEGIC RAMIFICATIONS:

The expanding pattern of Soviet SALT inconsistencies (the core areas of U.S. suspicions of Soviet SALT I violations include: the development and testing of a Soviet mobile ICBM; the conversion of "light" ICBMs into "heavy" ICBMs; the construction of additional ICBM silos; ABM violations; interference with U.S. technical means of verification; a greater than 15% increase in authorized silo dimension) [38] coupled with ongoing Soviet military programs and the traditional Soviet passion for secrecy, may reveal the Soviet approach to strategic arms limitations and, in particular, their objectives in SALT. In general, the objectives of arms limitations, are: contribute to the national security; enhance strategic ability; and promote moderation of future competition in strategic armaments.[39] Evidence exists that these objectives are not shared by the Soviet Union. According to the analysis of a former U.S. delegate to SALT I, Paul H. Nitze,

> ...there is every prospect that under the terms of the SALT agreements the Soviet Union will continue to pursue a nuclear superiority that is not merely quantitative but designed to produce a theoretical war-winning capability. Further, there is a major risk that, if such a condition were achieved, the Soviet Union would adjust its policies and actions in ways that would undermine the present detente situation, with results that could only resurrect the danger of nuclear confrontation or alternatively, increase the prospect of Soviet expansion through other means of pressure. [40]

What is clear is that strategic nuclear power is an important component of Soviet military expansion and competition in international politics with the United States.

> The fundamental naivete of so many political perceptions in the West is ultimately due to lack of understanding, not just of the mechanisms of the Soviet political system, but of the mentality rooted in the political culture underlying it.[41]

In that "diplomacy, however brilliant, is no substitute for policy,"[42] U.S. SALT policy has produced little in terms of enhancing strategic stability or curbing Soviet arms expansion. The Soviets are likely to pursue their brand of detente and coordinate their SALT policy within that framework. (While detente to the United States has meant relaxed cold war tensions and the absence of conflict, from a Soviet perspective it has meant increased offensive and defensive weapon systems -- strategic nuclear, theater nuclear and general purpose forces, increasing civil defense programs, and the conduct of major military training programs. In view of SALT and the changed strategic balance, detente appears to be built on U.S. weakness and Soviet strength.) Overall, the Soviet SALT performance has been impressive and their reliance on military power as the equalizer in superpower relations is no mystery.

While the Soviets express political finesse and combativeness in the operationalization of their SALT policy, they remain interested in the contents of any agreement. They are keenly aware that arms control agreements are self enforcing on the Western side and therefore have pushed SALT to its

limits--if not beyond legal boundaries-- in an effort to test U.S. political will.

It is unlikely that the United States will abandon further efforts aimed at meaningful strategic arms limitation agreements even though Soviet activities appear to jeopardize U.S. national security interests. The number and nature of alleged Soviet SALT I violations do call into question the utility of future agreements. Consequently, one must question if the Soviets are genuinely interested in mutual and stable deterrence.

At present, the United States will probably maintain a political commitment to SALT. Of concern is that this political commitment may be causing the executive branch to suppress reports of Soviet SALT violations. Such may be the case due to the administration's embarrassment over the agreements already made, the realization that SALT cannot do much to solve U.S. strategic problems, or from fear of upsetting SALT II negotiations, detente, and/or other negotiations under way (i.e. MBFR). It may also be due to semantic problems that are a consequence of the ambiguities of language used in key provisions of the accord which the Soviets stretch to the limit.

Instead of enhancing strategic stability and promoting moderation of future competition in strategic armaments, the Soviets are acting in a manner which threatens U.S. national security. The nature of Soviet activities may lead to increased tension between the two parties as the Soviets show no indication of relaxing their strategic competitive efforts.

the Soviets just do not think the same as we do. They appear to be using SALT as a means of attaining clear strategic superiority in what may be the ultimate goal of international military dominance and political subversion. SALT has not caused the Soviets to freeze, curtail or abandon weapons programs. Showing no restraint, the Soviets continue to act as they wish. In summary, the Soviets may simply be mobilizing for war.

Can there be a meaningful strategic arms limitation agreements between the United States and the Soviet Union? Theoretically, there can be agreements that reduce the threat and reduce it more than one's capability for coping with the threat. There can be verifiable agreements that equally limit both sides without reducing the security interest of our allies. But, can the United States feel secure in reducing its strategic nuclear force posture, thereby reducing its capability to protect its national interest, in view of the advantages accruing to the Soviets from the SALT I agreements, Soviet violations of that agreement and finally the continuing growth and modernization of Soviet Strategic nuclear forces? The answer is obvious: no.

The United States should reject any action that fails to insure crisis stability, fails to enhance essential equivalence, limits the U.S. ability to cope with the Soviet threat, causes our allies to lose confidence in the U.S. deterrent and defense shield, or result in an agreement that is unverifiable.

Conceptually, the United States could not tolerate action that unequally restricted its ability to deter a nuclear or non-nuclear attack on the U.S. or her allies -- or unequal restrictions on defending in the event deterrence failed. Further defined this implies that an arms limitation agreement requiring unilateral actions that question the ultimate survivability and reliability of one's retaliatory strategic forces is unacceptable. In the past, U.S. strength has rested on superior technological advances through research and development programs. Any restrictions to qualitative growth and improvement would be hazardous and destabilizing in terms of Soviet efforts and ongoing programs in the research and development area. Discussions on negotiating positions and composition of packages for a SALT II agreement invariably entertain the possibility of qualitative restrictions. While this area was touched upon earlier in this paper, other ramifications on freezing qualitative improvements in existing weapons systems or on restricting new weapons are worth noting.

Some arguments for qualitative restrictions on strategic arms are:

1) Once a weapon system has been developed and tested any attempt to negotiate against deployment would be difficult. Therefore, the solution is to stop research and development before it gets that far by restricting qualitative improvements.[43]

2) Once one side has developed an improved capability the other side wants it also or at least desires a counter measure

against the original improvements.[44] This argument assumes an action-reaction relationship between the U.S. and the Soviet Union.

3) A third argument postulates that both sides have already developed a sufficient level of destructiveness in strategic forces so that any continued improvement, refinement or increase in capabilities are unnecessary.[45] It is commonly asserted that we live in a nuclear age where both sides possess sufficient nuclear firepower to destroy the enemy civilization two - three - or four times over -- OVERKILL. Strategic nuclear forces that exceed those estimated for assured destruction -- considered by the Kennedy administration to be 400 one megaton equivalents -- are believed to have no utility either political or military.

Nevertheless, the notion of overkill does not stand under close strategic scrutiny. Overkill endorses the strategic notion that it is necessary to threaten to destroy millions of civilian hostages. The overkill argument is built on the notion of an unfailing assured destruction strategy -- imposing a level of damage/destrution seen in terms of population and industrial capacity. In and of itself such thinking forgoes a counterforce warfighting doctrine and ignores the role of a deterent retaliatory policy.

Strategic nuclear forces that exceed the assured destruction level should be seen as instruments of foreign policy to be used as a threat and, if necessary, as a war-fighting instrument to be used in a controlled, flexible and discrete

manner in order to insure/enhance national security and/or re-establish deterrence once it has failed.

Furthermore, the size of one's strategic nuclear forces is not a topic subject to precise strategic debate. One should not assume that defense planners have made or even can make proper consideration for the various factors that could degrade the effectiveness of one's strategic nuclear forces. Assurances are at best questionable that all weapons in the inventory would be available to perform assigned missions in accordance with the SIOP (Single Integrated Operational Plan). If the enemy attacks first to what extent does it degrade the capability of one's force to respond? In essence, a need exists to hedge against unlikely threats and uncertainty to the U.S. assured destruction capability.

Arguments favoring qualitative restrictions seem to neglect the complication of adequate verification and further seem to place full trust and confidence in Soviet honesty. Reasons against qualitative restrictions in future arms limitation agreements include:

1) The risk involved in uncertain and complex means of verification are too great.

2) In view of the momentum of Soviet technological development, reflected in money spent on research and development, the U.S. lack of knowledge of Soviet programs,[46] and the results of recent programs such as the cold-launch technique and the development of a new family of missiles, a U.S. decision to slow down its own research and development efforts

becomes highly questionable.

3) As was mentioned above, curtailing qualitative improvements in defense can limit possible spin-offs to other areas, such as medical research or trade - all of which are vital to the prosperty of the United States.[47]

The risks and uncertainty evident in the above arguments outweigh arguments for qualitative restrictions in approaching a negotiable package in SALT II.

In order to maintain the initiative an "aggressive" research and development program[48] on the part of the United States is vital to protecting and improving the United States strategic deterrent and in preventing a breakthrough in Soviet technology for which the U.S. cannot quickly counter. In the context used here, an aggressive research and development program is designed to be one that is engaged in a greater number of projects than under the current R and D program. It is concerned with speeding up current strategic programs and to offset Soviet moves.

CONCLUSION:

A meaningful strategic arms limitation agreement between the United States and the Soviet Union may be impossible to obtain. It may be that strategic nuclear forces have become so central to each parties perceived need to meet national security objectives that a meaningful agreement is beyond negotiable limits. Furthermore, the very factors that prompt military prepardness may preclude meaningful strategic arms control agreements.

From an American standpoint, the United States must display the necessary strength and will to insist upon an arms accord free of the ambiguities and inequities that marred SALT I. This must occur even at the expense of a rapid conclusion to the SALT II negotiations. Furthermore, the United States must not allow negotiations to continue indefinitely while the U.S. gradually slides into strategic inferiority. The risk (cost) is not simply reduced national prestige or economic adversity but the ultimate survival of our free society and western civilization.

A second hazardous U.S. - Soviet arms agreement which legitimizes U.S. nuclear inferiority would be worse than no agreement at all. The Soviet Union can not be permitted the right to have strategic nuclear forces so superior to the United States that in a crisis situation U.S. options are either to back down or lose a strategic war. As long as the Soviets continue to press for advantages no SALT agreement can be more than cosmetic, promissory or hazardous.

In the interest of strategic stability the United States can no longer continue to negotiate promissory and/or cosmetic strategic nuclear arms agreements that are disguised as arms control. The United States cannot permit Soviet advances to continue without response. U.S. policy options on SALT are clear: Either the Soviets will agree to meaningful strategic arms limitations or the U.S. will have to abandon SALT. As long as SALT fails to contribute to U.S. national

security objectives there is no positive utility in continuing. SALT should not be allowed to continue to foster a sense of security that does not in fact exist.

In the quest for a SALT II agreement which began with the Vladivostok executive agreement, the agreed number of strategic nuclear delivery vehicles were higher than actual U.S. deployed forces. No reduction in force levels were to result. It has been reported that the agreed draft SALT II treaty includes a "commitment to negotiate later about reduced ceilings" on strategic nuclear forces which in essence means another promissory or cosmetic (perhaps hazardous) agreement. Failing to address the tough issues the U.S. appears headed toward an agreement that will again postpone reductions and allow the Soviets to fulfill its policy objective--strategic nuclear superiority over the United States. The United States must not continue to restrain defense efforts purely in anticipation of strategic nuclear arms agreements that will satisfy national security objectives while the Soviet Union continues to pursue a vigorous defense program while negotiating.

FOOTNOTES

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[2]Donald G. Brennan, "When The SALT Hit The Fan," in National Review, (1972).

[3]U.S. Congress. Senate. Foreign Relations Committee, U.S. and Soviet Strategic Doctrine and Military Policies, (Washington, D.C.: Government Printing Office 1974), p. 6.

[4]Morton A. Kaplan, "The Impact of SALT I (and Potentially SALT II) on the U.S. - Soviet Strategic Blance," in Contrasting Approaches To Strategic Arms Control, ed. Robert L. Pfaltzgraff, Jr., (Lexington Mass: D.C. Heath and Company, 1974), p. 77.

[5]Ibid.

[6]Donald G. Brennan, "When The SALT Hit The Fan," in National Review, (1972).

[7]Van Cleave, "Implications of Success or Failure of SALT," p. 321.

[8]U.S. Congress. Senate. Committee on Armed Services, Military Implications of the Treaty on the Limitations of ABM Systems and the Interim Agreement on Limitation of Strategic Offensive Arms, (Washington, D.C.: Government Printing Office, 1972), p. 39.

[9]Remarks by Dr. Henry A. Kissinger to Members of Congress on "Strategic Arms Limitation Agreements," Department of State Bulletin, (July 10, 1972), p. 48.

[10]Brennan, "Strategic Forum: The SALT Agreements," Survival, (September/October, 1972), p. 218.

[11]Henry M. Jackson, "Senator Reviews Lessons of SALT I," Aviation Week and Space Technology, (December 11, 1972), p. 53.

[12]Herbert F. York, Arms Control: Readings From Scientific American, (San Francisco: W.H. Freeman and Company), 1973, p. 279.

[13]U.S. Congress. Senate. Foreign Relations Committee. U.S. and Soviet Strategic Doctrineand Military Policies, (Washington, D.C.: Government Printing Office 1974), p. 2.

[14]U.S. Congress. Senate. Hearings Before the Committee on Armed Services, "Military Implications of the Treaty on the Limitations of Anti-Ballistic Missile Systems and the Interim Agreement on Limitaton of Strategic Offensive Arms," Testimony of William R. Van Cleave, (Washington, D.C.: Government Printing Office 1972), p. 574.

[15]Donald G. Brennan, "Arms Treaties with Moscow: Unequal Terms Unevenly Applied," New York: National Strategy Information Center, 1975. The characterization is from Brennan's testimony in "Strategic Arms Limitation Agreements," p. 186.

[16]Colin S. Gray, "Defense and Negotiation," Air Force Magazine, (January 1974), p. 35.

[17]Colin S. Gray, "Rethinking Nuclear Strategy," ORBIS, (Winter 1974), p. 1154.

[18]U.S. Congress. Senate. Committee on Armed Services. Military Implications of the Treaty on the Limitations on ABM Systems and the Interim Agreement on Limitation of Strategic Offensive Arms, (Washington, D.C.: Government Printing Office, 1974), p. 165.

[19]Ibid.

[20]Dr. Henry Kissinger, White House Congressional Briefing, June 13, 1972, in U.S. Congress. Senate. Committee on the Armed Services, "Military Implications of the Treaty on the Limitation of Antiballistic Missile Systems and the Interim Agreement on Limitation of Strategic Offensive Arms," Hearing 92nd Congress, 2nd Session, (Washington, D.C.: Government Printing Office, 1972), pp. 115-124.

[21]Colin S. Gray, "Strategic 'Superiority' in Superpower Relations," in Military Review, (December 1971), pp. 8-11.

[22]"Negotiating Atmosphere Improves as End of SALT I Threatens to Blow Lid on Arms," Kansas City Star, October 2, 1977, p. 16A.

[23]See Oswald Johnson, "U.S.., Soviet Near Arms Pact That Omits Major Cuts," Los Angeles Times, October 14, 1977, p. 1,8 and

Richard Burt, "U.S. Accepts Plan by Soviets To Limit Planes and Missiles," New York Times, May 4, 1978, pp. A1, A12.

[24]Norman Kempster, "'General Agreement' Reached With Russ on Strategic Arms Cuts, Carter Says," Los Angeles Times, October 28, 1977. and "Negotiating Atmosphere Improves as End of SALT I Threaten to Blow Lid on Arms," Kansas City Star, October 2, 1977, p. 16A.

[25]Oswald Johnson, U.S., Soviet Near Arms Pact That Omits Major Cuts," Los Angeles Times, October 14, 1977, pp. 1 & 8.

[26]Ibid.

[27]Ibid.

[28]Ibid.

[29]Ibid.

[30]Bernard Gwertzman, "Vance Is In Moscow To Confer On Arms and Improved Ties," New York Times, April 20, 1978, pp. 1, A10.

[31]Bernard Gwertzman, "Arms Pact Will Bolster Security Or U.S. Won't Sign, Vance Says," New York Times, April 11, 1978 p. 1, and Bernard Gwertzman, "Vance Is In Moscow To Confer On Arms and Improved Ties," New York Times, April 20, 1978, p. 1, A 10.

[32]Ibid.

[33]Murrey Marder, "Missile, Bomber Limit Accord Tentatively Reached," Washington Post, May 5, 1978, p. A17.

[34]Ibid., and Richard Burt, "U.S. Accepts Plan by Soviet To Limit Planes and Missiles," New York Times, May 4, 1978, p. A1.

[35]Murrey Marder, "Missile Bomber Limit Accord Tentatively Reached," Washington Post, May 5, 1978, p. A17.

[36]Richard Burt, "U.S. Accepts Plan By Soviet To Limit Planes and Missiles," New York Times, May 4, 1978, p. A1.

[37]Ibid.

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[39]William R. Van Cleave, "Implications fo Success or Failure of SALT," in SALT-Implications for Arms Control in the 1970's, eds. W. R. Kintner and R.L. Pfaltzgraff, Jr., (Pittsburgh: University of Pittsburgh Press, 1973), p. 315.

[40]Paul H. Nitze, "Assuring Strategic Stability in an Era of Detente," Foreign Affairs, January 1976, p. 207.

[41]U.S. Congress. Senate. Article Printed for the Use of the Subcommittee on Arms Control of the Committee on Armed Services, "Detente: An Evaluation," 93rd Congress, 2nd Session, Washington, D.C.: Government Printing Office, 1974, p. 7.

[42]Ibid., p. 21.

[43]Jacquelyn K. Davis, The Qualitative and Quantitative Dimension of Arms Control: Implications for Technological Innovation for SALT II," in Contrasting Approaches To Strategic Arms Control, ed. Robert L. Pfaltzgraff, Jr. (Lexington, Mass: D.C. Heath and Company), p. 304.

[44]Ibid.

[45]Ibid., p. 303.

[46]Technological Change and the Strategic Arms Race," in SALT -- Implications for Arms Control in the 1970's ed's W. R. Kintner and Robert L. Pfaltzgraff, Jr. (Pittsburgh: University of Pittsburgh Press, 1973), p. 119.

[47]Davis, "The Qualitative and Quantitative Dimension of Arms Control: Implications for Technological Innovation for SALT II, p. 300.

[48]Ibid., p. 301.

Treaty between the United States of America and the Union of Soviet Socialist Republics on the Limitation of Anti-Ballistic-Missile Systems

Text of treaty done at Moscow on May 26, 1972.
Not published in Scientific American.

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Proceeding from the premise that nuclear war would have devastating consequences for all mankind,

Considering that effective measures to limit anti-ballistic missile systems would be a substantial factor in curbing the race in strategic offensive arms and would lead to a decrease in the risk of outbreak of war involving nuclear weapons,

Proceeding from the premise that the limitation of anti-ballistic missile systems, as well as certain agreed measures with respect to the limitation of strategic offensive arms, would contribute to the creation of more favorable conditions for further negotiations on limiting strategic arms,

Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,

Declaring their intention to achieve at the earliest possible date the cessation of the nuclear arms race and to take effective measures toward reductions in strategic arms, nuclear disarmament, and general and complete disarmament,

Desiring to contribute to the relaxation of international tension and the strengthening of trust between States,

Have agreed as follows:

ARTICLE I

1. Each Party undertakes to limit anti-ballistic missile (ABM) systems and to adopt other measures in accordance with the provisions of this Treaty.

2. Each Party undertakes not to deploy ABM systems for a defense of the territory of its country and not to provide a base for such a defense, and not to deploy ABM systems for defense of an individual region except as provided for in Article III of this Treaty.

ARTICLE II

1. For the purposes of this Treaty an ABM system is a system to counter strategic ballistic missiles or their elements in flight trajectory, currently consisting of:

(a) ABM interceptor missiles, which are interceptor missiles constructed and deployed for an ABM role, or of a type tested in an ABM mode;

(b) ABM launchers, which are launchers constructed and deployed for launching ABM interceptor missiles; and

(c) ABM radars, which are radars constructed and deployed for an ABM role, or of a type tested in an ABM mode.

2. The ABM system components listed in paragraph 1 of this Article include those which are:

(a) operational;
(b) under construction;
(c) undergoing testing;
(d) undergoing overhaul, repair or conversion; or
(e) mothballed.

ARTICLE III

Each Party undertakes not to deploy ABM systems or their components except that:

(a) within one ABM system deployment area having a radius of one hundred and fifty kilometers and centered on the Party's national capital, a Party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, and (2) ABM radars within no more than six ABM radar complexes, the area of each complex being circular and have a diameter of no more than three kilometers; and

(b) within one ABM system deployment area having a radius of one hundred and fifty kilometers and containing ICBM silo launchers, a Party may deploy: (1) no more than one hundred ABM launchers and no more than one hundred ABM interceptor missiles at launch sites, (2) two large phased-array ABM radars comparable in potential to corresponding ABM radars operational or under construction on the date of signature of the Treaty in an ABM system deployment area containing ICBM silo launchers, and (3) no more than eighteen ABM radars each having a potential less than the potential of the smaller of the above-mentioned two large phased-array ABM radars.

ARTICLE IV

The limitations provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges. Each Party may have no more than a total of fifteen ABM launchers at test ranges.

ARTICLE V

1. Each Party undertakes not to develop, test, or deploy ABM systems or components which are sea-based, air-based, space-based, or mobile land-based.

2. Each Party undertakes not to develop, test, or deploy ABM launchers for launching more than one ABM interceptor missile at a time from each launcher, nor to modify deployed launchers to provide them with such a capability, nor to develop, test, or deploy automatic or semi-automatic or other similar systems for rapid reload or ABM launchers.

ARTICLE VI

To enhance assurance of the effectiveness of the limitations on ABM systems and their components provided by this Treaty, each Party undertakes:

(a) not to give missiles, launchers, or radars, other than ABM interceptor missiles, ABM launchers, or ABM radars, capabilities to counter strategic ballistic missiles or their elements in flight trajectory, and not to test them in an ABM mode; and

(b) not to deploy in the future radars for early warning of strategic ballistic missile attack except at locations along the periphery of its national territory and oriented outward.

ARTICLE VII

Subject to the provisions of this Treaty, modernization and replacement of ABM systems or their components may be carried out.

ARTICLE VIII

ABM systems or their components in excess of the numbers or outside the areas specified in this Treaty, as well as ABM systems or their components prohibited by this Treaty, shall be destroyed or dismantled under agreed procedures within the shortest possible agreed period of time.

ARTICLE IX

To assure the viability and effectiveness of this Treaty, each Party undertakes not to transfer to other States, and not to deploy outside its national territory, ABM systems or their components limited by this Treaty.

ARTICLE X

Each Party undertakes not to assume any international obligations which would conflict with this Treaty.

ARTICLE XI

The Parties undertake to continue active negotiations for limitations on strategic offensive arms.

ARTICLE XII

1. For the purpose of providing assurance of compliance with the provisions of this Treaty, each Party shall use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law.

2. Each Party undertakes not to interfere with the national technical means of verification of the other Party operating in accordance with paragraph 1 of this Article.

3. Each Party undertakes not to use deliberate concealment measures which impede verification by national technical means of compliance with the provisions of this Treaty. This obligation shall not require changes in current construction, assembly, conversion, or overhaul practices.

ARTICLE XIII

1. To promote the objectives and implementation of the provisions of this Treaty, the Parties shall establish promptly a Standing Consultative Commission, within the framework of which they will:

(a) consider questions concerning compliance with the obligations assumed and related situations which may be considered ambiguous;

(b) provide on a voluntary basis such information as either Party considers necessary to assure confidence in compliance with the obligations assumed;

(c) consider questions involving unintended interference with national technical means of verification;

(d) consider possible changes in the strategic situation which have a bearing on the provisions of this Treaty;

(e) agree upon procedures and dates for destruction or dismantling of ABM systems or their components in cases provided for by the provisions of this Treaty;

(f) consider, as appropriate, possible proposals for further increasing the viability of this Treaty, including proposals for amendments in accordance with the provisions of this Treaty;

(g) consider, as appropriate, proposals for further measures aimed at limiting strategic arms.

2. The Parties through consultation shall establish, and may amend as appropriate, Regulations for the Standing Consultative Commission Governing procedures, composition and other relevant matters.

ARTICLE XIV

1. Each Party may propose amendments to this Treaty. Agreed amendments shall enter into force in accordance with the procedures governing the entry into force of this Treaty.

2. Five years after entry into force of this Treaty, and at five year intervals thereafter, the Parties shall together conduct a review of this Treaty.

ARTICLE XV

1. This Treaty shall be of unlimited duration.

2. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Treaty if it decides that extraordinary events related to the subject matter of this Treaty have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawal from the Treaty. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

ARTICLE XVI

1. This Treaty shall be subject to ratification in accordance with the constitutional procedures of each Party. The Treaty shall enter into force on the day of the exchange of instruments of ratification.

2. This Treaty shall be registered pursuant to Article 102 of the Charter of the United Nations.

DONE at Moscow on May 26, 1972, in two copies, each in the English and Russian languages, both texts being equally authentic.

For the United States of America:

RICHARD NIXON,
President of the United States of America.

For the Union of Soviet Socialist Republics:

L. I. BREZHNEV,
General Secretary of the Central Committee of the CPSU.

Interim Agreement between the United States of America and the Union of Soviet Socialist Republics on Certain Measures with Respect to the Limitation of Strategic Offensive Arms

Text of interim agreement done at Moscow on May 26, 1972.
Not published in Scientific American.

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Convinced that the Treaty on the Limitation of Anti-Ballistic Missile Systems and this Interim Agreement on Certain Measures with Respect to the Limitation of Strategic Offensive Arms will contribute to the creation of more favorable conditions for active negotiations on limiting strategic arms as well as to the relaxation of international tension and the strengthening of trust between States,

Taking into account the relationship between strategic offensive and defensive arms,

Mindful of their obligations under Article VI of the Treaty on the Non-Proliferation of Nuclear Weapons,

Have agreed as follows:

ARTICLE I

The Parties undertake not to start construction of additional fixed land-based intercontinental ballistic missile (ICBM) launchers after July 1, 1972.

ARTICLE II

The Parties undertake not to convert land-based launchers for light ICBMs, or for ICBMs of older types deployed prior to 1964, into land-based launchers for heavy ICBMs of types deployed after that time.

ARTICLE III

The Parties undertake to limit submarine-launched ballistic missile (SLBM) launchers and modern ballistic missile submarines to the numbers operational and under construction on the date of signature of this Interim Agreement, and in addition to launchers and submarines constructed under procedures established by the Parties, replacements for an equal number of ICBM launchers of older types deployed prior to 1964 or for launchers on older submarines.

ARTICLE IV

Subject to the provisions of this Interim Agreement, modernization and replacement of strategic offensive ballistic missiles and launchers covered by this Interim Agreement may be undertaken.

ARTICLE V

1. For the purpose of providing assurance of compliance with the provisions of this Interim Agreement, each Party shall use national technical means of verification at its disposal in a manner consistent with generally recognized principles of international law.

2. Each Party undertakes not to interfere with the national technical means of verification of the other Party operating in accordance with paragraph 1 of this Article.

3. Each Party undertakes not to use deliberate concealment measures which impede verification by national technical means of compliance with the provisions of this Interim Agreement. This obligation shall not require changes in current construction, assembly, conversion, or overhaul practices.

ARTICLE VI

To promote the objectives and implementation of the provisions of this Interim Agreement, the Parties shall use the Standing Consultative Commission established under Article XIII of the Treaty on the Limitation of Anti-Ballistic Missile Systems in accordance with the provisions of that Article.

ARTICLE VII

The Parties undertake to continue active negotiations for limitations on strategic offensive arms. The obligations provided for in this Interim Agreement shall not prejudice the scope or terms of the limitations on strategic offensive arms which may be worked out in the course of further negotiations.

ARTICLE VIII

1. This Interim Agreement shall enter into force upon exchange of written notices of acceptance by each Party, which exchange shall take place simultaneously with the exchange of instruments of ratification of the Treaty on the Limitation of Anti-Ballistic Missile Systems.

2. This Interim Agreement shall remain in force for a period of five years unless replaced earlier by an agreement on more complete measures limiting strategic offensive arms. It is the objective of the Parties to conduct active follow-on negotiations with the aim of concluding such an agreement as soon as possible.

3. Each Party shall, in exercising its national sovereignty, have the right to withdraw from this Interim Agreement if it decides that extraordinary events related to the subject matter of this Interim Agreement have jeopardized its supreme interests. It shall give notice of its decision to the other Party six months prior to withdrawal from this Interim Agreement. Such notice shall include a statement of the extraordinary events the notifying Party regards as having jeopardized its supreme interests.

DONE at Moscow on May 26, 1972, in two copies, each in the English and Russian languages, both texts being equally authentic.

For the United States of America:

RICHARD NIXON,
President of the United States of America.

For the Union of Soviet Socialist Republics:

L. I. BREZHNEV,
General Secretary of the Central Committee of the CPSU.

Protocol to the Interim Agreement between the United States of America and the Union of Soviet Socialist Republics on Certain Measures with Respect to the Limitation of Strategic Offensive Arms.

Text of protocol done at Moscow on May 26, 1972.
Not published in Scientific American.

The United States of America and the Union of Soviet Socialist Republics, hereinafter referred to as the Parties,

Having agreed on certain limitations relating to submarine-launched ballistic missile launchers and modern ballistic missile submarines and to replacement procedures, in the Interim Agreement,

Have agreed as follows:

The Parties understand that, under Article III of the Interim Agreement, for the period during which that Agreement remains in force:

The U.S. may have no more than 710 ballistic missile launchers on submarines (SLBMs) and no more than 44 modern ballistic missile submarines. The Soviet Union may have no more than 950 ballistic missile launchers on submarines and no more than 62 modern ballistic missile submarines.

Additional ballistic missile launchers on submarines up to the above mentioned levels, in the U.S. – over 656 ballistic missile launchers on nuclear-powered submarines, and in the U.S.S.R. – over 740 ballistic missile launchers on nuclear-powered submarines, operational and under construction, may become operational as replacements for equal numbers of ballistic missile launchers of older types deployed prior to 1964 or of ballistic missile launchers on older submarines.

The deployment of modern SLBMs on any submarine, regardless of type, will be counted against the total level of SLBMs permitted for the U.S. and the U.S.S.R.

This Protocol shall be considered an integral part of the Interim Agreement.

DONE at Moscow this 26th day of May, 1972.

For the United States of America:

RICHARD NIXON,
President of the United States of America.

For the Union of Soviet Socialist Republics:

L. I. BREZHNEV,
General Secretary of the Central Committee of the CPSU.

Agreed Interpretations and Unilateral Statements

Text of interpretations and statements done at Moscow on May 26, 1972.
Not published in Scientific American.

1. AGREED INTERPRETATIONS

(a) Initialed Statements. – The texts of the statements set out below were agreed upon and initialed by the Heads of the Delegations on May 26, 1972.

ABM TREATY

[A]

The Parties understand that, in addition to the ABM radars which may be deployed in accordance with subparagraph (a) of Article III of the Treaty, those non-phased-array ABM radars operational on the date of signature of the Treaty within the ABM system deployment area for defense of the national capital may be retained.

[B]

The Parties understand that the potential (the product of mean emitted power in watts and antenna area in square meters) of the smaller of the two large phased-array ABM radars referred to in subparagraph (b) of Article III of the Treaty is considered for purposes of the Treaty to be three million.

[C]

The Parties understand that the center of the ABM system deployment area centered on the national capital and the center of the ABM system deployment area containing ICBM silo launchers for each Party shall be separated by no less than thirteen hundred kilometers.

[D]

The Parties agree not to deploy phased-array radars having a potential (the product of mean emitted power in watts and antenna area in square meters) exceeding three million, except as provided for in Articles III, IV and VI of the Treaty, or except for the purposes of tracking objects in outer space or for use as national technical means of verification.

[E]

In order to insure fulfillment of the obligation not to deploy ABM systems and their components except as provided in Article III of the Treaty, the Parties agree that in the event ABM systems based on other physical principles and including components capable of substituting for ABM interceptor missiles, ABM launchers, or ABM radars are created in the future, specific limitations on such systems and their components would be subject to discussion in accordance with Article XIII and agreement in accordance with Article XIV of the Treaty.

[F]

The Parties understand that Article V of the Treaty includes obligations not to develop, test or deploy ABM interceptor missiles for the delivery by each ABM interceptor missile of more than one independently guided warhead.

[G]

The Parties understand that Article IX of the Treaty includes the obligation of the US and the USSR not to provide to other States technical descriptions or blueprints specially worked out for the construction of ABM systems and their components limited by the Treaty.

INTERIM AGREEMENT

[H]

The Parties understand that land-based ICBM launchers referred to in the Interim Agreement are understood to be launchers for strategic ballistic missiles capable of ranges in excess of the shortest distance between the northwestern border of the continental U.S. and the northwestern border of the continental USSR.

[I]

The Parties understand that fixed land-based ICBM launchers under active construction as of the date of signature of the Interim Agreement may be completed.

[J]

The Parties understand that in the process of modernization and replacement the dimensions of land-based ICBM silo launchers will not be significantly increased.

[K]

The Parties understand that dismantling or destruction of ICBM launchers of older types deployed prior to 1964 and ballistic missile launchers on older submarines being replaced by new SLBM launchers on modern submarines will be initiated at the time of the beginning of sea trials of a replacement submarine, and will be completed in the shortest possible agreed period of time. Such dismantling or destruction and timely notification thereof, will be accomplished under procedures to be agreed in the Standing Consultative Commission.

[L]

The Parties understand that during the period of the Interim Agreement there shall be no significant increase in the number of ICBM or SLBM test and training launchers, or in the number of such launchers for modern land-based heavy ICBMs. The Parties further understand that construction or conversion of ICBM launchers at test ranges shall be undertaken only for purposes of testing and training.

(*b*) *Common Understandings.*—Common understanding of the Parties on the following matters was reached during the negotiations:

A. INCREASE IN ICBM SILO DIMENSIONS

Ambassador Smith made the following statement on May 26, 1972:

> The Parties agree that the term "significantly increased" means that an increase will not be greater than 10-15 percent of the present dimensions of land-based ICBM silo launchers.

Minister Semenov replied that this statement corresponded to the Soviet understanding.

B. LOCATION OF ICBM DEFENSES

The U.S. Delegation made the following statement on May 26, 1972:

> Article III of the ABM Treaty provides for each side one ABM system deployment area centered on its national capital and one ABM system deployment area containing ICBM silo launchers. The two sides have registered agreement on the following statement: "The Parties understand that the center of the ABM system deployment area centered on the national capital and the center of the ABM system deployment area containing ICBM silo launchers for each Party shall be separated by no less than thirteen hundred kilometers." In this connection, the U.S. side notes that its ABM

system deployment area for defense of ICBM silo launchers, located west of the Mississippi River, will be centered in the Grand Forks ICBM silo launcher deployment area. (See Initialed Statement [C].)

C. ABM TEST RANGES

The U.S. Delegation made the following statement on April 26, 1972:

Article IV of the ABM Treaty provides that "the limitations provided for in Article III shall not apply to ABM systems or their components used for development or testing, and located within current or additionally agreed test ranges." We believe it would be useful to assure that there is no misunderstanding as to current ABM test ranges. It is our understanding that ABM test ranges encompass the area within which ABM components are located for test purposes. The current U.S. ABM test ranges are at White Sands, New Mexico, and at Kwajalein Atoll, and the current Soviet ABM test range is near Sary Shagan in Kazakhstan. We consider that non-phased array radars of types used for range safety or instrumentation purposes may be located outside of ABM test ranges. We interpret the reference in Article IV to "additionally agreed test ranges" to mean that ABM components will not be located at any other test ranges without prior agreement between our Governments that there will be such additional ABM test ranges.

On May 5, 1972, the Soviet Delegation stated that there was a common understanding on what ABM test ranges were, that the use of the types of non-ABM radars for range safety or instrumentation was not limited under the Treaty, that the reference in Article IV to "additionally agreed" test ranges was sufficiently clear, and that national means permitted identifying current test ranges.

D. MOBILE ABM SYSTEMS

On January 28, 1972, the U.S. Delegation made the following statement:

Article V (1) of the Joint Draft Text of the ABM Treaty includes an undertaking not to develop, test, or deploy mobile land-based ABM systems and their components. On May 5, 1971, the U.S. side indicated that, in its view, a prohibition on deployment of mobile ABM systems and components would rule out the deployment of ABM launchers and radars which were not permanent fixed types. At that time, we asked for the Soviet view of this interpretation. Does the Soviet side agree with the U.S. side's interpretation put forward on May 5, 1971?

On April 13, 1972, the Soviet Delegation said there is a general common understanding on this matter.

E. STANDING CONSULTATIVE COMMISSION

Ambassador Smith made the following statement on May 22, 1972:

The United States proposes that the sides agree that, with regard to initial implementation of the ABM Treaty's Article XIII on the Standing Consultative Commission (SCC) and of the consultation Articles to the Interim Agreement on offensive arms and the Accidents Agreement,* agreement establishing the SCC will be worked out early in the follow-on SALT negotiations; until that is completed, the following arrangements will prevail: when SALT is in session, any consultation desired by either side under these Articles can be carried out by the two SALT Delegations, when

*See Article 7 of Agreement to Reduce the Risk of Outbreak of Nuclear War Between the United States of America and the Union of Soviet Socialist Republics, signed Sept. 30, 1971.

SALT is not in session, *ad hoc* arrangements for any desired consultations under these Articles may be made through diplomatic channels.

Minister Semenov replied that, on an *ad referendum* basis, he could agree that the U.S. statement corresponded to the Soviet understanding.

F. STANDSTILL

On May 6, 1972, Minister Semenov made the following statement:

> In an effort to accommodate the wishes of the U.S. side, the Soviet Delegation is prepared to proceed on the basis that the two sides will in fact observe the obligations of both the Interim Agreement and the ABM Treaty beginning from the date of signature of these two documents.

In reply, the U.S. Delegation made the following statement on May 20, 1972:

> The U.S. agrees in principle with the Soviet statement made on May 6 concerning observance of obligations beginning from date of signature but we would like to make clear our understanding that this means that, pending ratification and acceptance, neither side would take any action prohibited by the agreements after they had entered into force. This understanding would continue to apply in the absence of notification by either signatory of its intention not to proceed with ratification or approval.

The Soviet Delegation indicated agreement with the U.S. statement.

2. UNILATERAL STATEMENTS

(a) The following noteworthy unilateral statements were made during the negotiations by the United States Delegation:

A. WITHDRAWAL FROM THE ABM TREATY

On May 9, 1972, Ambassador Smith made the following statement:

> The U.S. Delegation has stressed the importance the U.S. Government attaches to achieving agreement on more complete limitations on strategic offensive arms, following agreement on an ABM Treaty and on an Interim Agreement on certain measures with respect to the limitation of strategic offensive arms. The U.S. Delegation believes that an objective of the follow-on negotiations should be to constrain and reduce on a long-term basis threats to the survivability of our respective strategic retaliatory forces. The USSR Delegation has also indicated that the objectives of SALT would remain unfulfilled without the achievement of an agreement providing for more complete limitations on strategic offensive arms. Both sides recognize that initial agreements would be steps toward the achievement of more complete limitations on strategic arms. If an agreement providing for more complete strategic offensive arms limitations were not achieved within five years, U.S. supreme interests could be jeopardized. Should that occur, it would constitute a basis for withdrawal from the ABM Treaty. The U.S. does not wish to see such a situation occur, nor do we believe that the USSR does. It is because we wish to prevent such a situation that we emphasize the importance the U.S. Government attaches to achievement of more complete limitations on strategic offensive arms. The U.S. Executive will inform the Congress, in connection with Congressional consideration of the ABM Treaty and the Interim Agreement, of this statement of the U.S. position.

B. LAND-MOBILE ICBM LAUNCHERS

The U.S. Delegation made the following statement on May 20, 1972:

In connection with the important subject of land-mobile ICBM launchers, in the interest of concluding the Interim Agreement the U.S. Delegation now withdraws its proposal that Article I or an agreed statement explicitly prohibit the deployment of mobile land-based ICBM launchers. I have been instructed to inform you that, while agreeing to defer the question of limitation of operational land-mobile ICBM launchers to the subsequent negotiations on more complete limitations on strategic offensive arms, the U.S. would consider the deployment of operational land-mobile ICBM launchers during the period of the Interim Agreement as inconsistent with the objectives of that Agreement.

C. COVERED FACILITIES

The U.S. Delegation made the following statement on May 20, 1972:

I wish to emphasize the importance that the United States attaches to the provisions of Article V, including in particular their application to fitting out or berthing submarines.

D. "HEAVY" ICBM'S

The U.S. Delegation made the following statement on May 26, 1972:

The U.S. Delegation regrets that the Soviet Delegation has not been willing to agree on a common definition of a heavy missile. Under these circumstances, the U.S. Delegation believes it necessary to state the following: The United States would consider any ICBM having a volume significantly greater than that of the largest light ICBM now operational on either side to be a heavy ICBM. The U.S. proceeds on the premise that the Soviet side will give due account to this consideration.

E. TESTED IN ABM MODE

On April 7, 1972, the U.S. Delegation made the following statement:

Article II of the Joint Text Draft uses the term "tested in an ABM mode," in defining ABM components, and Article VI includes certain obligations concerning such testing. We believe that the sides should have a common understanding of this phrase. First, we would note that the testing provisions of the ABM Treaty are intended to apply to testing which occurs after the date of signature of the Treaty, and not to any testing which may have occurred in the past. Next, we would amplify the remarks we have made on this subject during the previous Helsinki phase by setting forth the objectives which govern the U.S. view on the subject, namely, while prohibiting testing of non-ABM components for ABM purposes: not to prevent testing of ABM components, and not to prevent testing of non-ABM components for non-ABM purposes. To clarify our interpretation of "tested in an ABM mode," we note that we would consider a launcher, missile or radar to be "tested in an ABM mode" if, for example, any of the following events occur: (1) a launcher is used to launch an ABM interceptor missile, (2) an interceptor missile is flight tested against a target vehicle which has a flight trajectory with characteristics of a strategic ballistic missile flight trajectory, or is flight tested in conjunction with the test of an ABM interceptor missile or an ABM radar at the same test range, or is flight tested to an extent that is significantly greater than that required for deployment, in order to perfect an ABM system, or (3) an ABM radar is used to track a ballistic missile which is not part of the ABM system being tested in that radar's test range, or to track a missile to an extent significantly exceeding the tracking requirements associated with interception of targets against which

air defenses are deployed, (3) a radar makes measurements on a ballistic target vehicle of the kind referred to in item (2) above during the reentry portion of its trajectory or makes measurements in conjunction with the test of an ABM interceptor missile or an ABM radar at the same test range. Radars used for purposes such as range safety or instrumentation would be exempt from application of these criteria.

F. NO-TRANSFER ARTICLE OF ABM TREATY

On April 18, 1972, the U.S. Delegation made the following statement:

In regard to this Article [IX], I have a brief and I believe self-explanatory statement to make. The U.S. side wishes to make clear that the provisions of this Article do not set a precedent for whatever provision may be considered for a Treaty on Limiting Strategic Offensive Arms. The question of transfer of strategic offensive arms is a far more complex issue, which may require a different solution.

G. NO INCREASE IN DEFENSE OF EARLY WARNING RADARS

On July 28, 1970, the U.S. Delegation made the following statement:

Since Hen House radars [Soviet ballistic missile early warning radars] can detect and track ballistic missile warheads at great distances, they have a significant ABM potential. Accordingly, the U.S. would regard any increase in the defenses of such radars by surface-to-air missiles as inconsistent with an agreement.

° ° ° ° ° ° °

(b) The following noteworthy unilateral statement was made by the Delegation of the U.S.S.R. and is shown here with the U.S. reply:

On May 17, 1972, Minister Semenov made the following unilateral "Statement of the Soviet Side":

Taking into account that modern ballistic missile submarines are presently in the possession of not only the U.S., but also of its NATO allies, the Soviet Union agrees that for the period of effectiveness of the Interim 'Freeze' Agreement the U.S. and its NATO allies have up to 50 such submarines with a total of up to 800 ballistic missile launchers thereon (including 41 U.S. submarines with 656 ballistic missile launchers). However, if during the period of effectiveness of the Agreement U.S. allies in NATO should increase the number of their modern submarines to exceed the numbers of submarines they would have operational or under construction on the date of signature of the Agreement, the Soviet Union will have the right to a corresponding increase in the number of its submarines. In the opinion of the Soviet side, the solution of the question of modern ballistic missile submarines provided for in the Interim Agreement only partially compensates for the strategic imbalance in the deployment of the nuclear-powered missile submarines of the USSR and the U.S. Therefore, the Soviet side believes that this whole question, and above all the question of liquidating the American missile submarine bases outside the U.S., will be appropriately resolved in the course of follow-on negotiations.

On May 24, Ambassador Smith made the following reply to Minister Semenov:

The United States side has studied the "statement made by the Soviet side" of May 17 concerning compensation for submarine basing and SLBM submarines belonging to third countries. The United States does not accept the validity of the considerations in that statement.

On May 26 Minister Semenov repeated the unilateral statement made on May 24. Ambassador Smith also repeated the U.S. rejection on May 26.

Text adopted by the U.S. Senate
on September 14, 1972 as an amendment to the
resolution approving the interim agreement.
Proposed by Senator Henry M. Jackson and known as
the Jackson Amendment.
Not published in Scientific American.

The Government and the people of the United States ardently desire a stable international strategic balance that maintains peace and deters aggression. The Congress supports the stated policy of the United States that, were a more complete strategic offensive arms agreement not achieved within the five years of the interim agreement, and were the survivability of the strategic deterrent forces of the United States to be threatened as a result of such failure, this could jeopardize the supreme national interests of the United States; the Congress recognizes the difficulty of maintaining a stable strategic balance in a period of rapidly developing technology; the Congress recognizes the principle of United States-Soviet Union equality reflected in the anti-ballistic missile treaty, and urges and requests the President to seek a future treaty that, inter alia, would not limit the United States to levels of intercontinental strategic forces inferior to the limits provided for the Soviet Union; and the Congress considers that the success of these agreements and the attainment of more permanent and comprehensive agreements are dependent upon the maintenance under present world conditions of a vigorous research and development and modernization program as required by a prudent strategic posture.*

*As adopted—see *Congressional Record—Senate*, September 14, 1972, pp. 14870, 14885–14886, and 14893.

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