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SALT II: BASIS FOR BOTH FREEZE AND REDUCTIONS?

While the Administration tries to decide whether to continue to observe the SALT II Treaty, FAS is unearthing and promoting unrecognized virtues of the treaty. The long and short of this Report is that the SALT II Treaty can be used to achieve, quickly and easily, most of the reduction constraints President Reagan asked for on May 9th and 13th, and much of the freeze Leonid Brezhnev suggested on May 18th.

These two extraordinary facts underscore the great importance of the struggle to maintain SALT II. Will the Administration's determination to remain consistent in denouncing SALT II shape its future policies? Or will the world public pressures for arms control lead it to seize these newly announced opportunities? Only time will tell. But the reader should examine the possibilities within with care. The advantages of using SALT II as a basis for future arms control are far in excess of the value of the Treaty *per se!*

For example, as FAS members know, in late 1978 and early 1979, the Federation pioneered in advancing the notion of shrinking the limits and sublimits of the SALT II Treaty by a fixed small percentage each year. Our testimony to the General Advisory Committee of the Arms Control and Disarmament Agency and open letter of December 13, 1978 to the President were followed up by detailed briefings of highly placed military officials on the effects of these reductions.

On May 6 of this year, President Carter revealed in a Stockholm interview that he had made our proposal to

Mr. Brezhnev in Vienna when SALT was completed in June, 1979: 5% a year shrinkage of the limits and sublimits of SALT II for each year of the SALT II Treaty. And President Carter said "we both believed that we might conclude a 50% reduction in nuclear arsenals on both sides even below the SALT II levels."

In the light of this history, it was natural for FAS to ask, after President Reagan's reduction plan unfolded, how well his plan could be encompassed by "shrinking SALT II" limits. The answer, described in our supplemental testimony of May 13 to the Foreign Relations Committee, is startling. A 50% cut in SALT II limits will force both sides to approximately 850 launchers, as President Reagan asks, and it will lead the Soviet Union to stay below the 5,000 missile warheads indicated, which is President Reagan's desire for both sides.

Moreover, it reduces Soviet land-based missile warheads most of the way toward the President's desire to have land-based missile warheads under 2,500. In sum, it produces most of what the President has asked, and does it in an established context that will save years of negotiation.

Because of that same context, shrinking SALT II may vitiate many of the objections that underlie Leonid Brezhnev's rejection of it. The FAS observation has already been adopted as a recommendation by former Secretary of State Edmund Muskie. (See page 12)

This successful and provocative analysis led us to ask,
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HOW MUCH FURTHER TO A REAL FREEZE?

The purpose of this Report is to catalyze thinking in both superpowers about the simplest way of moving toward their avowed goals; with that in mind, we have not sought broad agreement "approving" the above plan. While it is derivative of ideas we have championed in the past, and none would object were it achieved, it most certainly is not the general halt to the arms race which we also seek. How far indeed is it from such a halt?

The SALT II limits permit each side, within those limits, to shift its force-mix; thus each side can, for example, buy cruise-missiles on bombers at the expense of land- and sea-based MIRVed missiles and can move its land-based force to sea. Thus the first and most important addition to agreements of the above kind would be to radically reduce the number of bombers permitted to carry the cruise missiles allowed under the SALT II treaty. There appears to be no immediate technical problem in doing so since the

Treaty contains agreed methods for monitoring the number of bombers that would be permitted to have cruise missiles and the average number of cruise missiles on each such bomber (28).

The main difficulty would be the argument that, in the absence of cruise missiles in large numbers, Soviet air defenses would grow to undermine the effectiveness of U.S. bombers. In fact, these arguments can be countered in two quite fundamental ways.

In the first place, no one can be sure that Soviet air defenses will work against our bomber penetration tactics and, accordingly, the deterrent effect of our bombers is assured.

Second, calculations concerning themselves with these matters normally overlook the fact that U.S. retaliatory missiles will pave the way for the later-arriving U.S. bombers; the notion that Soviet air defenses will be working effectively in a nuclear war environment is pretty far-fetched.

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after Brezhnev's call for an interim freeze, whether the SALT II Treaty could be used not only as a base for reductions but also as a base for the freeze. The answer is startlingly simple: if the SALT II limits and sublimits are reduced to the level in being of each side's forces, this would not only produce a quite workable interim freeze, with established limits, definitions, and rules for replacement, but it seems also to provide every bit as much freeze as can be adopted without negotiation, viz., "the day the talks begin" in Mr. Brezhnev's terminology. Thus SALT II can be used to get about as much "instant" freeze as the two sides are able to define and agree upon with detailed talks. (For example, readers will recall that the popular Kennedy-Hatfield freeze resolution calls for immediate discussion of "when and how" to secure a comprehensive freeze on production, testing and deployment, but makes no provision for an interim freeze while talks are in progress.)

There is still more to be said! And it could cut the Gordian knot. The Administration's given reason for refusing a freeze is that any freeze would undermine Soviet interest in those particular reductions which the Administration seeks. If, therefore, agreement in principle could be reached on both sides on the shrinkage of SALT II—both as the means of reduction and with the goals such reduction involves—then the Administration could forego its weapons buildup and accept the interim freeze while details are worked out. The freeze should include the elimination of each side's option for a new light ICBM. But this loss of MX would be balanced by the elimination also of 150 Soviet heavy missiles—victims of the 50% cut in sublimits.

Accordingly, we urge both sides to consider reaching agreement in principle, simultaneously, on a SALT II-based interim freeze and on a SALT II-based 50% reduction. The Reagan reductions, and the Brezhnev freeze, can both be encompassed through simple adjustment of the SALT II limits and sublimits. As all negotiators know, future agreements are invariably more easily attained when based on past ones. SALT II is the ever-more-obvious fulcrum for both an interim freeze and sharp reductions. SALT II was criticized during the 1979 SALT debate as scaffolding built around the arms race so as to have only nominal effects on ongoing programs. But if SALT II limits are reduced to force levels in being, so as to provide an interim freeze, and if these limits are shrunk, so as to provide reductions, this scaffolding will begin to quickly cut the building down to size and prove its real worth.

Needless to say, even the above combination of proposals will only begin the process we need and, indeed, they will constitute, together, *much* less than a real freeze. For example, bombers with cruise missiles will open a new arm of the arms race and submarine missile modernization will be a problem. But from this new base of agreement on reduction and rudimentary freeze both sides could begin, at least, to negotiate still further collateral constraints. This is one easy way to begin again.

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SHRINK SALT II BY 50% TO GET THE REAGAN PLAN

What follows is supplemental testimony to the Senate Foreign Relations Committee by Jeremy J. Stone with inserts from his main testimony so as to summarize the case for a 50% cut in SALT II limits as a good approximation to the Reagan disarmament plan with, of course, the enormous advantage of doing it within a context and, moreover, an already negotiated context. Shrinking SALT II by 50% would get the Administration most of the way to its plan in a fraction of the time required for negotiation.

Mr. Chairman and Members of the Committee: On May 13, the day I testified to the Committee, the President enlarged upon his proposed arms control plan to include reductions of missile launchers on both sides to 850—a 50% cut of our levels—in addition to previously announced goals of cutting ballistic missile warheads “to equal ceilings at least a *third* below current levels.”*

Accordingly, we submit this supplemental testimony amending and perfecting the suggestion that shrinkage of the SALT II limits is a plausible and desirable method of achieving the President’s objectives.

...We recognize that, two days ago, Secretary of State Alexander Haig advised the Committee that we have “passed beyond” SALT II, that “we consider SALT II to be dead,” and that we have “so advised the Soviet Union.” On the other hand, it is evident that the Administration intends to abide by the SALT II limits, and that this position has strong, even consensus, support in the Congress and may even shortly be formally endorsed by the Congress!

Under these circumstances, it is obviously relevant to investigate how the SALT II structure, being thus maintained, would lend itself to reductions since if nothing else works, this might. Moreover, the use of the SALT II structure as a context for disarmament does not, in any way, shape or form, require the Administration to abandon any further conditions, or negotiating objectives, which it might have. Indeed, this investigation is an effort to *facilitate* the Administration’s goals by means of the SALT II context.

Finally, this method of reducing the SALT II limits is so obvious and natural that it might be taken up by a subse-

*On May 9th, at Eureka College, the President said:

“At the end of the first phase of the START reductions I expect ballistic missile warheads—the most serious threat we face—to be reduced to equal ceilings at least a third below current levels. To enhance stability, I would ask that no more than half of those warheads be land-based. I hope that these warhead reductions, as well as *significant* reductions in missiles themselves, could be achieved as rapidly as possible.” (Background briefings had interpreted “significant” (sic!) as meaning about 15%.)

However on May 13, at the White House, he said:

“Today, the United States and the Soviet Union each have about 7,500 nuclear warheads poised on missiles that can reach their targets in a matter of minutes. In the first phase of negotiations, we want to focus on lessening this imminent threat. We seek to reduce the number of ballistic missile warheads to about 5,000—one-third less than today’s levels; limit the number of warheads on land-based missiles to half that number and cut the total number of all ballistic missiles to an equal level—about *one-half* that of the current U.S. level.”

quent Administration, if not by this one, if, as is entirely possible, this Administration is still negotiating its agreement when its term of office ends.

The Committee will recall that, in addition to its endorsement of the SALT II Treaty, it unanimously approved, on November 1, 1979, the McGovern-Chafee resolution urging the President:

“At the earliest possible moment during the SALT III negotiations, on the basis of mutuality, to pursue continuous year-by-year reductions in the ceilings and subceilings under the Treaty so as to take advantage of the Treaty already negotiated and to begin a sustainable and effective process of reductions in strategic arms which promotes strategic equivalence under conditions of strategic stability.”

The underlying notion was to have the two sides agree to a simple percentage, e.g., 5%, and to reduce each of the levels and sublevels of SALT II (including the limits on heavy missiles) by 5% each year.

Indeed, just last week, former President Jimmy Carter revealed at Stockholm that he had proposed to Mr. Brezhnev at Vienna, in June 1979, that “we have through the five year period in which SALT III would be effective, ending in 1985, a 5% reduction in limits each year...” (*New York Times*, May 7, 1982, pg. A12). The May 8-9 issue of the *International Herald Tribune* shows that the President even said that he and Mr. Brezhnev “both believed that we might conclude a 50% reduction in the nuclear arsenals on both sides even below the SALT II levels.” In sum, the notion of a 50% reduction in these levels seems to have been well understood on both sides even three years ago.

As a consequence, we know, in particular, that the previous Administration had staffed out the proposal of 5% cuts on the limits and sublimits of SALT II and that it, like the Committee, saw this method of percentage reductions as feasible. (Indeed, many Committee members will remember that, during its debate in the fall of 1979, chairman of the Joint Chiefs of Staff, General David Jones, wrote Senator McGovern a letter endorsing such a method and even the particular percentage, 5%.)

We do not know, of course, why Mr. Brezhnev did not take President Carter up on his proposal of 5% reduction. For all we know, he considered it premature until SALT II was ratified and, in any case, conditions have changed.

Accordingly, we propose that the Committee review this method—which it has already proposed for linking SALT II to reductions—with an eye to seeing whether this combination of a negotiated treaty and a reduction method can fill the President’s desires.

In light of this new announcement, this testimony investigates the utility of a 50% cut in SALT II limits as the indicated degree of SALT II shrinkage. With some further collateral restraints to prevent warhead buildup under some SALT II permitted scenarios, the suggestion to shrink SALT II still seems a good one.

Consider, first of all, the rough outline of a 50% cut in SALT II limits.

Using the form indicated earlier, we have:

	Heavy Missiles	Land- Based MIRVed Missiles	Land- & Sea- Based MIRVed Missiles	Land- & Sea- Based MIRVed missiles & bombers with cruise Missiles	Total Strategic Delivery Vehicles
Existing Limits	308	820	1200	1320	2250
Approx. 50% cut	150	410	600	660	1125

Clearly there is no sublimit mandating equal ballistic missile ceilings of 850 but, equally clearly, the reduction is roughly appropriate, leaving room on each side for 275 strategic bombers. (The U.S. presently counts about 320 such bombers and the Soviet Union 150 such bombers.) Therefore our first observation is:

I. A 50% reduction in SALT II limits would nicely accommodate equal levels of missile launchers at the level of 850, as desired by the President. Indeed, such a cut would, *in any case*, leave the two sides with numbers of missile launchers that were quite close, and whose differences were compensated for by differences in numbers of strategic bombers maintained.

Even assuming that the Soviet Union did not procure a new strategic bomber and kept only its 150 strategic bombers, it would maintain, under this 50% cut, only 975 ballistic missile launchers. This is only a 15% increase over the 850 desired by the President and would be, in any case, compensated for by the greater number of U.S. bombers that could fit under the 1125 limit (on bombers plus missiles combined). It should be easy to negotiate any greater parallelism of forces than this, if necessary, and it is quite unclear why it should be necessary! At worst, the U.S. could build up to 975 strategic missiles and cut down our bomber force to 150 if we felt so strongly that the forces had to be equal.

Next, consider the question of the one-third cut in missile *warheads* desired by the President. In a footnote below, we calculate the number of warheads, using SALT II counting rules, that might be eliminated from current levels if this reduction took place tomorrow. These include 1,000 warheads from heavy missiles, 840 warheads from SS-19s (40) and SS-17s (150) and 935 warheads from single-warheaded missiles. This totals 3,275 warheads and exceeds one-third of current Soviet ballistic missile warheads, which the Administration describes as being 7,500 in number according to estimates and 9,000 in number according to SALT counting rules.

Needless to say, Soviet missile warhead numbers are growing and can grow further under SALT II limits. Under some abstract but totally implausible situations, they could grow to more than 12,000 warheads (e.g., if all land-based missiles were turned in for sea-based missiles and given the top warhead-per-missile limit permitted of 14).

Accordingly, the two sides would need to negotiate certain side conditions to ensure that, under SALT II reduced limits, these reductions from current numbers were not offset by permitted improvements. What would these conditions look like on the Soviet side?

The Soviet Union has the right, under SALT II, to build a single new (light) ICBM, which is to say, an ICBM smaller or equal in throw-weight and launch-weight to that of the SS-19; this missile can have up to 10 warheads. It has often been both rumored and presumed that the Soviet Union would use this option to produce a new *single-warheaded* ICBM to replace the SS-11. If this rumor were correct—or if this decision not to use the option for a MIRVed missile were mandated—then the reduced Soviet force would turn out to be below the 5,000-warhead limit desired by President Reagan, assuming that the Soviet submarine MIRVed missiles averaged less than 8 warheads each, as seems wholly likely.

In sum, in that case, the Soviet force would look like this:

Launchers	Missile Warheads
150 heavy missiles with 10 warheads each	= 1,500
260 SS-19s with 6 warheads each	= 1,560
190 submarine-launched missiles with up to 8 warheads each*	= 1,520
375 SS-11s or other single-warheaded missiles	= 375
150 bombers	= 0
1125 missile and bomber launchers satisfying all of the SALT II reduced limits	4,955

The Soviet agreement to limit its option for a new light ICBM to an unMIRVed one could come about in these ways:

- 1) It could be planning to do so anyway;
- 2) It could be willing to do so for other general reasons;
- 3) It could agree to give up any new missile if the U.S. gave up its option for a new missile (MX), which the U.S. might well do since it is unsure how to base the MX! (Option 3 was proposed by SALT II negotiator Paul C. Warnke in his April 14, 1982 National Press Club speech.)

Other alternatives which would permit the Soviet force to stay below the 5,000-warhead required limit include:

- 1) The new ICBM would be MIRVed but, as a replacement for the SS-19, might have no more than the six warheads of that missile—not using the full 10-warhead quota available, a quota designed to cover the original U.S. MX design.
- 2) The two sides could agree to reduce the 10-warhead quota to, for example, eight; indeed, the U.S. is planning on eight, rather than ten, warheads on its new light missile (MX) according to recent reports. In this case, Soviet submarine-launched MIRVed missiles could still average five to six warheads while maintaining a Soviet force of approximately 5,000 warheads.

*It is unlikely that the Soviet submarine-launched force would utilize the 14-warhead limit negotiated in SALT (the limit was set at 14 to accommodate our Poseidon) since no submarine-launched missile tests have been announced thus far with more than seven warheads.

Therefore, we reach this conclusion:

II. A 50% reduction in SALT II limits would be wholly consistent with a 5,000-warhead total on Soviet ballistic missile launchers and could be secured with side conditions that might be easily and variously achieved. Of these restrictions, the most important turn on the Soviet option for a new 10-warheaded ICBM. If the negotiated limit is 6,000 warheads, even this side condition is unnecessary.

Finally, there is the question of the side condition limiting land-based ballistic missile warheads to 2500. This condition does not require any reductions whatsoever on the U.S. side and hence cannot be expected to be completely negotiated on the Soviet side. However, the above table shows that the Soviet force would be moved two-thirds of the way toward the 2500 limit from the 5500 total of today by the 50% reduction—with the above understandings. This is probably as much success as one can expect.

Now why should the two sides prefer to have the reductions go forward in the context of SALT II, and of percentage reductions, rather than in some much less structured fashion, as in the President's original proposal?

Consider the American side first:

- The Administration is probably *assuming* anyway that the SALT II limits will continue to be maintained even if ratification does not take place; unfortunately, without ratification, no one can be sure.

- SALT II prevents the Soviet Union from building several new missiles and limits them to one which, as above, may be eliminated as part of the agreement.

- SALT II prevents the Soviet Union from building large numbers of single-warheaded missiles (with a view to meeting the one-third cut requirement in warheads) while expanding its lead in numbers of ballistic missiles (2,400 to 1,700).

- Percentage reduction gives the U.S. considerable predictability concerning the shape the Soviet force will take after the reductions. In particular, it ensures that the Soviets' overall force structure is basically shrunk, with heavy missiles sure to be reduced significantly and overall numbers of missiles being reduced.

In sum, using SALT II as the base for percentage reductions virtually achieves the President's main goals of 50% cuts in missiles and one-third cut in warheads, and much of his secondary goal, while precluding any unpleasant surprises.

For the Soviet Union, there is reason to prefer SALT II plus percentage reductions because:

- SALT II includes limits on U.S. cruise missiles on bombers, weapons the Administration has simply left out of its proposal.

- SALT II includes limits on numbers of bombers, and limits the U.S. to one new light ICBM, which, as above, may be eliminated as part of the agreement.

- Percentage reductions gives the Soviets, as with ourselves, greater predictability over what the reductions will include.

In sum, the Soviet Union might well prefer the President's program if it were part of the President's recom-

ending the SALT II Treaty to Congress, with a 50% cut in all its limits.

Finally, for both sides, percentage reductions has the still further advantage that the percentage reductions of whatever percent a year could be extrapolated well beyond the 50% cut without much further negotiation; in short, if the method were working well, it could be continued.

TRUNCATE SALT II TO GET THE INTERIM FREEZE

"...it is necessary to preserve everything positive that has been achieved earlier. The talks do not start from scratch but a good deal of far from useless work has been done. This should not be overlooked.

We would be prepared to reach agreement that the strategic armaments of the USSR and the U.S. be frozen now as soon as the talks begin—frozen quantitatively—and that their modernization be limited to the utmost."

Leonid Brezhnev, May 18, 1982.

What Brezhnev had in mind, we do not know. But just as SALT II can be shrunk in its limits and sublimits to produce a close approximation of the Reagan Plan, so also can SALT II limits and sublimits be truncated to produce a working interim freeze.

This not only would "preserve everything positive" that had already been achieved but would likely lead to the most far-reaching freeze that can be negotiated without negotiation, i.e., so as to start on the day the "talks begin."

The easiest way to understand the nature of a SALT II-based interim freeze is to examine, in fact, what would happen if the SALT II limits were reduced to the level of the forces in being. The limits are, in order, as follows:

(a)	(b)	(c)	(d)	(e)
Heavy Missiles	MIRVed Land Missiles	MIRVed Land & Sea Missiles	(c) + Bombers with Cruise Missiles	Strategic Delivery Vehicles
308	820	1200	1320	2250

Within these limits, there is a defined freedom to modernize forces, and to replace them, so long as the number of warheads per missile is not increased beyond certain limits ("14" on sub-based missiles, "previously tested numbers" on specific land-based missiles, and "10" on the one new light ICBM permitted on each side).

Presently, the two sides are not filling out these overall limits in all cases. Accordingly, under SALT II they can, in principle at least, *build up* to the limits involved. But what if each limit were shrunk to the level at which each side presently found itself? For the U.S., for example, the levels would become:

0	550	1100	1115	2020
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Thus, under the freeze, the U.S.: could not build any heavy missiles (it has no plans to anyway); could not build any new land-based MIRVed missiles (unless it dismantled some of the 550 Minuteman III); could not have a combination of more than 1100 land- and sea-based MIRVed missiles now deployed (unless it wanted to reduce land- or sea-based MIRVed missiles); and could not increase its

overall number of strategic delivery vehicles above the present 2020.

Under the SALT II-based freeze, the Soviet Union's situation would look something like this:

308 760-820 1000 1000 2500

In short, the Soviet Union: could not increase its heavy missiles; could not increase its MIRVed ICBMs by much more than completing the construction of those started (it is already near the 820 ceiling); could not continue MIRV-ing its sub-launched force *unless* it dismantled some land-based MIRVed missiles; could not begin to put air-launched cruise missiles on bombers (it is not ready to do this); and would have to make reductions in its overall strategic delivery vehicles to get it down to the SALT limit of 2250 (unless it negotiated this freeze-in-being to permit it to halt at that level, 2400-2500, where it is presently—this could turn on whether the U.S. ratified SALT II!)

The SALT II-based freeze should be defined to prevent each side from building the one new ICBM permitted under SALT II. For the U.S., this is the MX missile. MX would not be deployed, in any case, for the period of the freeze if that freeze were a two- to three-year interim freeze. And the U.S. is quite unsure where to base it and may have to forego it anyway. The precluding of the new light Soviet ICBM would also simplify the subsequent negotiations for reductions. In principle, a freeze should not permit new missiles except, at best, as replacements and these are not mere replacements, on either side.

INTERACTIONS BETWEEN THE INTERIM FREEZE AND SUBSEQUENT REDUCTIONS

The annual reductions in SALT II limits would, presumably, be from the original common limits of the SALT II Treaty (308, 820, 1200, 1320, 2250)—rather than as percentage reductions from those truncated SALT-category limits-in-being that define the interim freeze. Each side would anticipate these reductions as they would occur over time and factor them into its planning. In particular, it would recognize that certain missiles were necessarily going to be dismantled and it could, if it wanted, dismantle them earlier so as to accommodate earlier procurement in those categories which it was not ready to discontinue.

For example, 50% cuts in the MIRVed land-based missile quota to 410 would mean only *eventual* reductions in the 550-missile Minuteman III force. (There would be no *immediate* necessity to reduce land-based MIRVed missiles until the 820 limit was reduced by a third to the 550 level and below which would take a few years.) But the Administration could reduce Minuteman III missiles *now* so as to continue putting air-launched cruise missiles on bombers.

What this shows is the synergism for force planning that results from having the freeze limits, and the eventual reduction limits, based on the same categories. Even though the freeze limits and the SALT II limits would be different, they are based on the same *categories* (heavy missiles, MIRVed land-based missiles, MIRVed land- and sea-based missiles, etc.). As a result the freedom-to-mix

rights under the freeze, and the freedom-to-mix rights under the ever-shrinking SALT II limits, would be highly compatible. This will immensely encourage agreement in the two defense ministries.

EFFECTS OF THE COMBINATION OF SALT II-BASED FREEZE AND REDUCTION

PROPOSAL: *U.S. and Soviet Union agree to freeze their SALT II category force levels at the SALT II levels already achieved when the talks begin and to proceed, thereafter, to reduce the original SALT II limits by 50% over a period of 7 years. As part of the freeze, each agrees to forego its option for a new light ICBM and to limit future submarine-based MIRV warheads to 8 rather than 14.*

As indicated on page 4, the Soviet force under these conditions would include 975 missiles and 150 bombers for a total of 1125 launchers. It would have about 3,500 warheads on land arising from 150 heavy missiles with ten warheads each, 260 SS-19s with six warheads each, and 375 SS-11s with one warhead each. It would have 190 submarine-launched missiles on some dozen submarines with 1520 warheads.

The Soviet force would continue to be much more than twice as large on land as it was on sea. But under the SALT limits—since land-based MIRVed missiles are within *each* of the larger categories—land-based MIRVed missiles can be phased out in favor of sea-based MIRV. Thus the Soviet Union could build more submarines and reduce its missiles on land.

The U.S. would have, at the end of the agreement, a force that could take various forms. The 50% reduced SALT II limits would be, again:

150 410 600 660 1125

Very likely, the U.S. would continue to press for about 120 strategic bombers with cruise missiles; these would carry an average of 28 cruise missiles each for 3,360 warheads. Having given up MX, the U.S. would maximize its warhead quota by using its MIRVed missile limit of 600 land- and sea-based MIRV on submarines (where 8 warheads are permitted rather than the 3 warheads on the most heavily MIRVed Minuteman III land-based missile). Accordingly, it would probably end up with 540 sea-based missiles, all of which were MIRVed, and no MIRVed missiles on land. But this does not have to be followed religiously.

	Missile Warheads	Warheads or Bombs
0 heavy missiles	0	0
0 MIRVED land-based missiles	0	0
540 sea-based MIRV with 8 warheads	4320	4320
120 bombers with 28 cruise missiles	0	3360
310 Minuteman II missiles with one warhead	310	310
155 bombers with bombs	0	?
1125 strategic delivery vehicles (Satisfying all SALT II limits 50% reduced)	4630	9000+

Thus, the new "50% reduced" force would meet the President's limit of 5,000 *missile* warheads and his cut to

850 missile launchers (and meets the limit of 2,500 missile warheads on land). As a consequence of the buildup of cruise missiles, however, the total number of U.S. deliverable warheads and bombs would probably stay at the level of 9,000 where it is today. By contrast, the Soviet force would have been reduced in warheads substantially. As a consequence, the Soviet Union would have only been encouraged to develop its own air-to-ground cruise missiles and to mount these on existing or new bombers. Thus the U.S. advantage would be short-lived and the arms race would simply have moved on from ballistic missile warheads to cruise missile warheads.

Accordingly, if only to make agreement possible, the two sides should tighten up their restraints on cruise missiles on bombers. In light of Soviet air defenses, against which these cruise missiles are designed, this may, in turn, require restraints on Soviet air defenses. But inasmuch as both sides have already agreed to build ballistic missile defenses, it should be possible, in principle, to persuade them to limit their defenses against bombers, which have become, after all, the lesser part of the threat.

As an additional problem the two sides would have, in theory, vulnerable land-based forces. The U.S. would have "only" 300 land-based missiles. However, these are more than enough, even if threatened by 95% destruction, since the ten or fifteen remaining such missiles can destroy ten or fifteen cities and, of course, because several thousand warheads would remain on submarines and bombers. The fact is that the U.S. has no solution to land-based missile vulnerability that seems workable and hence this vulnerability is becoming a simple fact of life with or without arms control.

The Soviet Union would have 785 land-based missiles. These would be, in principle also, vulnerable to the thousands of accurate sea-based warheads on Trident missiles. Each side would just have to accommodate itself to the fact that this particular leg of the triad was vulnerable to attack. But each could, if it wished, move more of its land-based forces to sea and so retain either more or less of this component as it wished. (In addition, if restraints were added on missile flight tests, it might be possible to slow the growth in accuracy or to restrain confidence in it.)

What would happen after this? The limits might be further reduced year by year. The fractionation limits (numbers of MIRVs per missile) might be also. Agreement might be reached not to build follow-on bombers. Elements of freeze would be conjoined to new elements of reductions. We would have started the arms race into reverse using the "prefabricated" agreement at hand: SALT II.

added in press: on the basis of initial briefings, the notions in this Report of using truncated and shrinking SALT II limits as the "core" for ever-more-comprehensive freeze regimes seem persuasive both to SALT II supporters and freeze specialists. Members are encouraged to send suggestions and reactions.

OTHER PROPOSALS

A number of proposals are circulating for structuring at least part of the process of freeze and/or reductions; some are described below.

Senator Alan Cranston and Admiral Noel Gaylor: Cut Off Fissionable Material and Dismantle Warheads

The superpowers would "close their facilities producing material for nuclear warheads" and would "immediately freeze the growth of nuclear weapons stockpiles" while permitting the two sides to undertake "selective modernization" by recycling needed new warheads "from a dismantled system." Together with a comprehensive test ban and this ban on production of fissionable material, the two sides would agree to "phased reductions in stockpiles of highly enriched uranium and plutonium" by making contributions of such materials to IAEA. In effect, the two sides would turn in nuclear warheads on a quota basis—choosing whatever warheads each wished—and IAEA would denature the fissionable material so that it would not be weapons-usable.

In brief, this proposal accepts the feasibility of having IAEA monitor production of fissionable material but gives up on fabrication of new warheads from *existing* fissionable material. But by introducing the notion of destroying agreed quotas of nuclear warheads, it would diminish stockpiles. Since both sides have approximately 25,000 nuclear warheads each, this process would have to be far-reaching indeed before the central strategic systems—of land-based missiles, bombs on strategic bombers and warheads on sea-based strategic submarines—would be touched.

Sidney Drell's Limits On L + RV:

This proposal would limit the number of launchers (L) and re-entry vehicles (RV) to some upper limit less than, for example, 8,000, and that overall limit could be steadily reduced with time. Bombs on bombers (or on air-launcher cruise missiles) would be counted as re-entry vehicles just as would multiple warheads on sea- or land-based missiles. The bomber itself would be counted as a single launcher and the 16 or 24 missiles on each missile-firing submarine would be counted as 16 or 24 "launchers." In effect, where SALT limits launchers and controls re-entry vehicles with limits on "fractionation" (at the level of MIRVing already attained), the Drell proposal would permit changes in numbers of launchers and/or numbers of re-entry vehicles so long as the new modernized total stayed below the limit agreed. Thus it is, in no way, a limit on modernization.

A comprehensive form of this proposal would limit "L + RV" to 9,000 while including all nuclear systems of range greater than 1,000 miles; hence this form would include tactical nuclear weapon systems and eliminate such grey area systems as the Backfire bomber from being a source of contention.

*Alton Frye: Permit Modernization at the
Price of Reductions*

Under the Frye Plan, "for each new, more survivable strategic weapon deployed by either side, it should eliminate two older, less stabilizing weapons. In short, *the price of modernization would be reductions.*" Each side would be free to eliminate what it wished. The process "should aim broadly for agreed, equal levels; an interim target of about 6,000 warheads on a side would be reasonable." Put forward as a "lurking consensus" between the Kennedy-Hatfield desire to freeze now, and reduce subsequently, and the Jackson-Warner proposal to "reduce to equal levels" first, it has not yet spelled out how the reduction rule and the goal of "agreed equal levels" are meshed or what would happen when the interim target was reached.

*The Gore Proposal: Counterforce Freeze, De-MIRV
and Reduce*

Congressman Albert Gore's proposal would begin with a "negotiator's pause" or selective freeze on any additions to the counterforce inventory of either side, or to improvements to counterforce weapons currently deployed. This would be followed by negotiations for reductions in the remaining counterforce weapons on both sides. In return for the substantially larger reductions on the Soviet side, the U.S. would forego deploying the MX or the Trident II (D-5) missile. As the MIRVed land-based missiles were eliminated, a new ICBM carrying just one warhead would be substituted.

In sum, the Gore proposal is really a proposal to repeal the advent of MIRV on land-based missiles and to return to the pre-MIRV period with a single-warheaded missile replacing all land-based MIRVed ones. In the process large reductions in warheads would occur, though not in missiles. Subsequent reductions, it is argued, could take place in an atmosphere improved by the elimination of counterforce threats.

*Kennedy-Hatfield Joint Resolution On
Nuclear Weapons Freeze and Reductions*

That (1) as an immediate strategic arms control objective, the United States and the Soviet Union should—

- (a) pursue a complete halt to the nuclear arms race;
- (b) decide when and how to achieve a mutual and verifiable freeze on the testing, production, and further deployment of nuclear warheads, missiles, and other delivery systems; and
- (c) give special attention to destabilizing weapons whose deployment would make such a freeze more difficult to achieve.

(2) Proceeding from this freeze, the United States and the Soviet Union should pursue major, mutual, and verifiable reductions in nuclear warheads, missiles, and other delivery systems, through annual percentages or equally effective means, in a manner that enhances stability.

WILL START STOP THE NUCLEAR ARMS RACE?

In the absence of some kind of context for the Reagan Plan, START will do little to stop the nuclear arms race. In support of this proposition, one may observe the following:

(1) The proposal concerns only a one-third reduction in *long-range ballistic missile warheads*, and 850 as a common ceiling for both sides has been suggested for missile launchers. It does not address, and thus will not constrain, *types* of ballistic missiles or warheads, bombers, and long-range air-launched cruise missiles. START would thus allow this and future administrations to recoup any reductions in ballistic missile warheads by proceeding with the deployment of up to 5000 cruise missiles on 240 B-52G/H bombers and 100 B-1 bombers (the proposal will also allow the continued development and eventual deployment of the "Stealth" bomber). Since long-range nuclear-armed cruise missiles are not mentioned in the President's START proposal, it would appear that he intends to use the threat of their unconstrained deployment as a lever to induce the Soviets to accept the less-than-equitable reductions in land-based ICBM warheads which he contends are essential for "stability." In return, the U.S. will offer as-yet-undisclosed restraints on cruise missiles. This is similar to the strategy pursued by President Carter in March 1977 when he tried to squeeze the Soviets with the Hobson's choice of either the Vladivostok Agreement *without* cruise limitations or heavy missile "Deep Cuts" with cruise constraints. Predictably, the Soviets rejected both and are likely to do the same this time around. At the very least, such pressure tactics will complicate and protract the negotiations. Although considerably behind the U.S. in cruise missile technology, the Soviets ultimately can be expected similarly to exploit this loophole in the START proposal if it is allowed to remain open.

(2) The proposal does not address nuclear-armed sea-launched cruise missiles (SLCMs), nor does it address the modernization or reduction of some 17,000 nuclear weapons which can be deployed on a wide variety of shorter-range torpedoes, air defense missiles, depth charges, anti-submarine rockets, battlefield missiles, artillery, and gravity bombs. The proliferation of warheads for this "tactical" dimension of the arms race would be allowed to continue, and indeed might be given increased impetus, under the President's narrowly construed "reductions" program.

(3) The reduction in *land-based* ICBM warheads to no more than 2500 poses no problem for the United States, as the 25% of its nuclear deterrent force carried by ICBMs is already 450 warheads *below* the proposed ceiling. The Soviet Union, on the other hand, is some 3000 warheads *above* it, the consequence of deploying some 70% of its nuclear deterrent on ICBMs, and thus will have to scrap some 300 to 1100 missiles. Reagan's START proposal will easily accommodate the planned modernization of the U.S. ICBM force by allowing the replacement of 2150 existing warheads with up to 2500 even-more-accurate high-yield "silo-killing" warheads such as the 600-kiloton Ad-

vanced Ballistic Reentry Vehicle (ABRV).

(4) Likewise, reductions from the current level of 5300 sea-launched ballistic missile (SLBM) warheads to levels consistent with the combined land/sea limit of 5000 warheads could be made through the already-planned retirement of some 3000 40-kiloton Poseidon missile warheads deployed in 19 Lafayette-class submarines which are not selected for modernization with the Trident I missile, and which are now awaiting retirement pending the phase-in of the new large Ohio-class submarine. There would be room under the proposed ceiling for the retention of B-12 Lafayette-class submarines recently retrofitted with the 8-MIRV Trident I missile *and* the deployment of the ten already-authorized Ohio-class subs with the (possibly) 6-warhead Trident II silo-killing missile. In fact, a *three-fold expansion* in the megatonnage of the SLBM force is entirely consistent with Reagan's START proposal.

The following chart indicates the extent to which START is wrapped around Reagan's strategic modernization program:

(5) By failing to constrain deployments of more-accurate and higher-yield weapons, the Reagan START proposal fails to close the window of vulnerability, purportedly one of its major objectives. In fact it would appear to open it wider on both sides, but especially on the Soviet side, by reducing the number of Soviet ICBMs while allowing new deployments (MX and Trident II) aimed at increasing U.S. capabilities to destroy Soviet silos. Similarly, U.S. nuclear and non-nuclear capabilities for destroying Soviet ballistic missile submarines would not be constrained by the President's proposal. Since the Soviet position with respect to both the offensive and defensive aspects of submarine warfare is weaker technologically and geographically than that of the United States, the increased reliance on sea-based systems in Reagan's proposal, coupled with its lack of restraints on U.S. ASW and counterforce weapons programs, may cause the Soviets to reject the proposal on purely military grounds alone.

As for the administration's assertion that its proposal would lead to greater "stability" in a crisis, this is far from an assured outcome of the proposal. Currently, the ratio of Soviet ICBM warheads to U.S. silos is about five-to-one. Assuming deployment of an 8-MIRV MX in fixed silos or some other readily targetable land-based mode, this ratio would *remain* at something close to five-to-one or, worse, shift to ten-to-one, even after reductions are implemented. The pressure for some kind of multiple aim-point scheme would persist under a START regime, but the Soviet potential for deploying large numbers of additional warheads to overwhelm the system *would* be limited under START. However, the the ratio of U.S. ICBM warheads to Soviet ICBM targets would be *improved* from about 1.5-to-one to about five-to-one. Simultaneously, significant additional counterforce capability could be deployed via the Trident II, boosting the U.S. warhead-to-silo ratio to about eight-to-one.

Ratios considerably less than this one, when they favor the Soviet Union, as they have in recent years, are said to be terribly destabilizing.

Current ICBM Force

52 Titan II x one 9-megaton warhead = 52 warheads (slated for retirement)
450 Minuteman II x one 1.2-megaton warhead = 450 warheads
300 Minuteman III x three 335-kiloton warheads = 900 warheads
250 Minuteman III x three 175-kiloton warheads = 750 warheads
<hr/>
1052 ICBMs x avg. 2 warheads per missile = 2104 warheads
<hr/>

Current SLBM Force

19 Lafayette-class subs x 16 tubes = 304 Poseidon C-3 x avg. ten 40kt. warheads = 3040 warheads
12 Lafayette-class subs x 16 tubes = 192 Trident I C-4 x avg. eight 100kt. warheads = 1,536 warheads
1 Ohio-class sub x 24 tubes = 24 Trident I C-4 x avg. eight 100kt. warheads = 192 warheads
<hr/>
520 SLBMs x avg. 9 warheads per missile = 4680 warheads (300 megatons)
<hr/>

Modernized START Force Structure

Example #1: 50/50 split

200 MX x eight 600kt. ABRV's = 1600 warheads
300 Minuteman III x three 335kt. RV's = 900 warheads
<hr/>
500 ICBMs x avg. 5 silo-killing warheads = 2500 warheads
<hr/>
8 Lafayette-class subs x 16 tubes = 128 Trident I x eight 100kt RV's = 1024 warheads
10 Ohio-class x 24 tubes = 240 Trident II x six 500kt. warheads = 1440 warheads
<hr/>
18 subs carrying 369 missiles x avg. 7 warheads per missile = 2583 warheads
<hr/>

Example #2: Sea-based emphasis (60/40 split)

250 MX x eight 600kt. ABRV's = 2000 warheads
<hr/>
250 ICBMs in MPS or Densepack mode possibly defended by ABM system = 2000 warheads
<hr/>
12 Lafayette-class x 16 Trident I x eight 100kt. warheads = 1536 warheads (current number)
10 Ohio-class x 24 Trident II x six 500kt. warheads = 1440 warheads (already authorized)
<hr/>
22 subs carrying 432 missiles with 2976 warheads (874 megatons)
<hr/>

CUTTING OFF THE PRODUCTION OF FISSILE MATERIAL FOR NUCLEAR WEAPONS

Harold A. Feiveson and Frank von Hippel
Center for Energy and Environmental Studies
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...the United States would be prepared to work out, with other nations, suitable and safeguarded arrangements so that future production of fissionable materials anywhere in the world would no longer be used to increase the stockpiles of explosive weapons.

—President Eisenhower in letter to Premier Bulganin, March 1, 1956

Current Stockpiles and Production Rates

In 1956, when Eisenhower first proposed a freeze in the production by the superpowers of fissile materials for nuclear weapons (plutonium and highly enriched uranium), U.S. stockpiles of these materials and of nuclear warheads were on the order of one-tenth their current size. Today, based on the statements of government officials, one can estimate that the U.S. has approximately 25,000 nuclear warheads. And, based on the history of AEC uranium purchases, enrichment capacity and radioactive waste generation, one can estimate that the U.S. inventory of weapon-grade fissile material—both inside and outside of nuclear warheads—is several hundred metric tonnes of highly enriched uranium and about one hundred tonnes of plutonium. As far as we know, *the order of magnitude* of the corresponding inventories in the Soviet Union is comparable.

These are enormous inventories of fissile material—even without the amplification of the explosive power of nuclear weapons which was introduced with the development of thermonuclear weapons. The 20-kiloton Nagasaki bomb contained only 6 kilotons of plutonium. The U.S. stockpile of weapon-grade plutonium is therefore sufficient for the production of about 15,000 Nagasaki-type bombs—equal to more than half the number of nuclear weapons in the U.S. stockpile. If one adds 500 tonnes of highly enriched uranium and assumes that all this heavy metal could be fissioned with 30 percent efficiency (the efficiency of the Nagasaki bomb was 20 percent) the total fission yield would be about 3000 megatons—equal to about one-third the total estimated yield of the U.S. stockpile.

The U.S. stockpile of nuclear warheads reached its peak in 1967. Since that time obsolete warheads have been retired about as fast as new ones have been produced (on the order of 1000 per year), and their fissile material has been recycled. As a result the demand for the production of new fissile material fell dramatically in the mid-1960's. The U.S., therefore, stopped production of highly enriched uranium for nuclear weapons purposes in 1964 and shut down between 1964 and 1971 ten of the fourteen plutonium production reactors located at the Department of Energy's facilities at Savannah River, South Carolina and at Richland, Washington. Of the four operating production reactors, only the three at Savannah River have been producing "weapon-grade"* plutonium in recent years—

and those not at full capacity. Their combined average production rate has been only about 1.5 tonnes of plutonium per year. The Department of Energy (DOE) is currently undertaking a program to almost triple this rate of weapon-grade plutonium production by the mid-1980's.

Rationale for a Production Cutoff

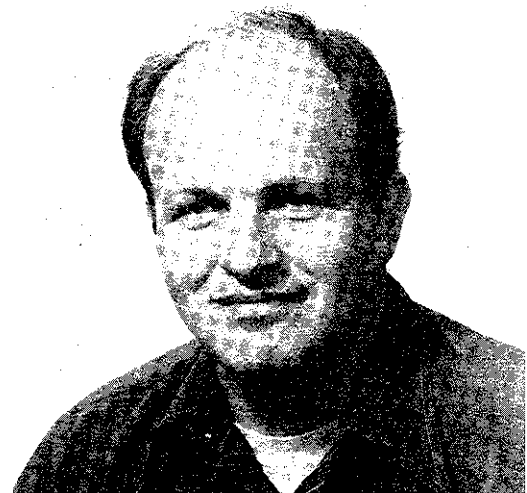
Although a complete cutoff in the production of fissile materials for weapons would not by itself stop the production of higher-yield, and even a somewhat increased number of, nuclear warheads, it would at least put an upper limit on the total number of warheads which the superpowers could produce. It would certainly be an essential part of any wider agreement to freeze nuclear weapons production. By undertaking to halt fissile material production for weapons and to accept the necessary safeguards on their peaceful nuclear programs, the superpowers would also be removing one of the long-standing inequities between the nuclear weapons and non-nuclear weapons signatories of the Non-proliferation Treaty; and they would place pressure on critical "threshold" states such as Argentina, Brazil, India, Israel, Pakistan, and South Africa to accept such restrictions as well.

Verification of a Cutoff

It appears likely that, while verification of a fissile material production cutoff could not be perfect, the uncertainties involved could be reduced to levels which are small relative to the sizes of the already existing stockpiles.

There are four principal areas of concern:

- The safeguarding of the huge amounts of weapons-usable materials which would continue to build up in the civilian nuclear energy systems of the superpowers;
- The assurance that shut-down military production facilities really were shut down;
- The assurance that no clandestine production facilities of significant sizes were in operation; and
- The assurance that plants producing highly enriched uranium for naval nuclear reactors and producing replacement tritium required for the maintenance of existing



Frank von Hippel

*Any mixture of plutonium isotopes can be used to make a nuclear explosive. Weapons designers, however, prefer relatively pure plutonium-239 with an admixture of less than 7 percent plutonium-240.

nuclear weapons were not used to produce large amounts of new fissile material for weapons purposes.

Civilian Nuclear Energy Systems: Safeguards would be needed on the nuclear energy activities of the superpowers because of the huge quantities of nuclear weapons-usable materials involved in these civilian programs. At present, for example, approximately 50 tonnes of fissile plutonium are in spent fuel at U.S. nuclear power plants. Fortunately, international machinery already exists for implementing safeguards on such material, and these safeguards, which are administered by the International Atomic Energy Agency (IAEA), have been accepted by the non-nuclear weapons states which have signed the Treaty on the Non-proliferation of Nuclear Weapons. Although there is some question as to whether IAEA safeguards can guarantee the detection under all circumstances of the diversion of enough fissile material to make a few nuclear weapons, they could certainly detect diversions on a scale sufficient to have a significant effect on the nuclear weapons balance between the superpowers.

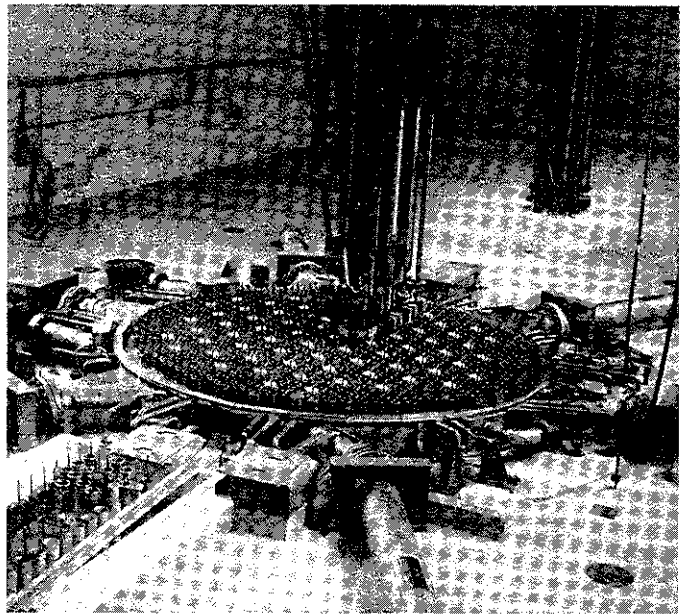
Shut-down Military Production Facilities: Monitoring shut-down military plutonium production reactors and uranium enrichment plants would be even easier than safeguarding the material being processed by an operating civilian plant and could conceivably even be done remotely—by using infrared sensors on satellites, for example, to detect the waste heat discharges associated with the operations of these facilities.

Clandestine Facilities: For the foreseeable future, there would appear to be no realistic alternative to the use of “national technical means”—satellites in particular—to confirm that no fissile material production facilities of significant scale were being constructed or operated clandestinely. The detailed information published by the U.S. government on the numbers and locations of Soviet missiles and weapons subassembly plants suggests that the observation technologies are equal to the task. In its most recent (1969) proposal concerning a fissile production cutoff, the U.S. expressed no concern about the danger of undetected clandestine production facilities.

Naval Reactor Fuel: In U.S. nuclear powered ships, the uranium in the reactor fuel is highly enriched. Therefore, since there is no intention in a freeze to stop the refueling of these warships, either they would have to be fueled from stockpiled highly enriched uranium or special arrangements would have to be made to allow a continued supply of highly enriched uranium for this purpose.

For some years, the easiest option, for the U.S. at least, might be to use stockpiled highly enriched uranium. The current annual requirements of weapon-grade uranium for U.S. naval propulsion are on the order of 5 tonnes. This is only approximately one percent of the existing U.S. stockpile of this material and is about one-tenth of the 60 tonnes of weapon-grade uranium which the U.S. offered as recently as 1969 to transfer to “peaceful purposes” provided that the Soviet Union similarly transferred 40 tonnes.

Tritium: In many U.S. nuclear warheads the heavy radioactive isotope of hydrogen, tritium, is present as an



Fuel and target assemblies being loaded into a production reactor at the Savannah River Plant, Aiken, South Carolina.

active ingredient. The primary purpose of this tritium is to provide extra neutrons via a fusion reaction with deuterium. These neutrons are then used either to “boost” the efficiency of fission explosions, to simplify the design of variable-yield warheads, or to contribute the enhanced radiation effects of low-yield (“neutron”) warheads designed for battlefield use.

Because the radioactive half-life of tritium is about 12 years, a cutoff of tritium production would severely limit not only the number but also the lifetime of enhanced radiation weapons. It would also, after a number of years, result in a reduction in the peak yields of the boosted- and variable-yield fission weapons.

If, in light of (or despite) these consequences, a replenishment of tritium reservoirs were deemed essential, production could be allowed without creating large new opportunities for the circumvention of a fissile material cutoff. It is true that nuclear reactors designated to produce tritium might be used to produce plutonium instead, but according to an estimate published by Thomas B. Cochran et al (*Science*, May 12, 1982), U.S. tritium production has averaged only about 3 kilograms per year over the past decade. This is well within the capabilities of a single production reactor which, even if diverted fully to plutonium production, could produce annually the equivalent of less than a percent of the current U.S. inventory of weapon-grade plutonium.*

Acknowledgment

We would like to thank Thomas B. Cochran and William M. Arkin for sharing with us some of their findings prior to the publication of their *Nuclear Weapons Databook* (Ballinger, 1983).

*Since it takes the capture of one neutron to produce either one atom of tritium or one of plutonium, which weighs 80 times as much as a tritium atom, a reactor producing 3 kilograms of tritium per year could alternatively produce one quarter of a tonne of plutonium per year.

(Continued from page 1)

Nevertheless, to deal with this argument, we shall need creative ideas about how to limit certain features of Soviet bomber defenses.

The second most important loophole in the SALT II provisions was the absence of any limitation on submarine-launched missiles except for the (fractionation) limit on numbers of warheads (14). Thus these sub-launched missiles can be modernized and increased in size without limit. The U.S. Trident II missile will use this freedom and achieve silo-killing accuracy. Soviet missiles will be moving in this direction also. The SALT II Treaty does, however, evidence the fact that the U.S. monitors the test-firing of missiles. Thus there is probably no verification reason why an agreement could not be reached to preclude the testing of any new submarine-launched missile. This would control the counterforce capability of the sea-based force but, at the same time, might limit such improvements in its survivability as longer-range on those missiles. Accordingly, the two sides might want to have a flat ban on new sea-based missiles for a limited period of years while they discussed the longer run.

In the context of even the kind of agreement sketched in the editorial, deployment of cruise missiles and Pershings would probably be halted. In that context, Soviet willingness to halt and reduce SS-20s somewhat would probably lead Western Europeans to reject buildups of cruise and Pershing missiles.

For the freeze rubric, this leaves such issues as production of warheads (for sea-launched cruise missiles, tactical nuclear weapons, etc.) to be controlled by cutoffs of fissionable material and, less likely, by limits on fabrication of warheads. It leaves out production of strategic missiles (not to speak of even-harder-to-control tactical missiles) since it limits only *deployment*. Also dual capable aircraft, sometimes listed in freeze regimes, would not be touched by the above.—JJS.

SHRINK SALT II BY 50% ESPOUSED BY MUSKIE

"I believe there is a way to realize the President's "phase one" goals for warhead and missile reductions in the span of a three-year negotiation, rather than a negotiation stretching over many years. This approach requires not starting from scratch, but reducing within the framework provided by SALT II.

The "Joint Statement of Principles and Basic Guidelines for Subsequent Negotiations on the Limitations of Strategic Arms"—which accompanied SALT II and was agreed to by both the United States and the Soviet Union—called for a prompt third round of talks to bring about a "significant and substantial reduction in the number of strategic arms" on both sides.

My idea, in general terms, is to pursue in annual reductions, over 5-10 years, an overall reduction of 50 percent in the SALT II limits and sublimits. This will lead the Soviet Union, with such additional constraints as may be required, to make *both* the one-third cut in ballistic missile warheads and the approximate 50 percent cut in ballistic missiles which the President has advocated.

It is true that the SALT II treaty does not directly constrain either warheads or ballistic missiles per se, but instead restricts such things as MIRVED missiles, strategic launchers, and heavy missiles. But, in my considered judgment, a 50 percent cut in the limits and sublimits of SALT II would, indeed, move the Soviet Union into the ballpark of the Reagan plan—albeit with some collateral restraints (for example, either no new light missile or a limit on warheads on a new missile)."

*Former Secretary of State Edmund S. Muskie
Marquette University, Milwaukee, Wisconsin, May 21, 1982*

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