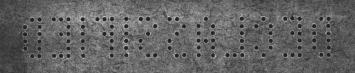
THE BACKFIRE BOMBER AND STRATEGIO ARMS TINITATION TALKS AN ASSESSMENT

TWENTY SECOND SESSION

EXECUTIVE SEMINAR IN NATIONAL AND INTERNATIONAL AFFAIRS

DEPARTMENT OF STATE





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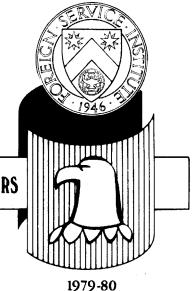
A Case Study

COLONEL STEPHEN B. CROKER, USAF

TWENTY-SECOND SESSION

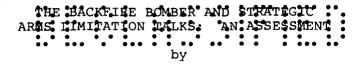
EXECUTIVE SEMINAR IN NATIONAL AND INTERNATIONAL AFFAIRS

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Stephen B. Croker

SUMMARY

Unlike earlier works on the history of SALT I and SALT II which deal with the negotiations as a whole, this study traces the development of a single issue—the controversy over the Soviet TU-22M (Backfire) bomber. This weapons system has been a continuing source of disagreement between the United States and the Soviet Union from the Vladivostok Accord of 1974 until the Vienna Summit of 1979. It has also been the source of considerable disagreement within official United States Government circles during the same period.

The Backfire problem is not the major issue in SALT II. It is not even one of the major issues. However, it is among the most long-standing and rancorous, and mirrors in many ways the broader themes and controversies which surround the talks. Initially, Backfire may have presented only a military problem; it has now become a political problem. In fact, it is one of the most popular issues used by treaty opponents to flay SALT II.

To date SALT has focused on efforts to control the central strategic systems, offensive and defensive, of the two super-powers. However, weapons on the periphery have emerged which are not so easily integrated into SALT. Attempts to deal with this new class of multimission "gray area" weapons have been neither simple nor successful.

This study reviews Backfire's technical history and the negotiations (within and without the government) involving the airplane, treating both military and political arguments. It concludes that for all practical purposes, since the United States has already conceded that Backfire is not to be treated as a heavy bomber and thus not within the aggregate of SALT's central systems, it will be very difficult to reverse the position in subsequent negotiations. Given its present threat to Europe and the interest there in theater nuclear arms limitation, Backfire will most probably be negotiated in its theater context.

Executive Seminar in National and International Affairs



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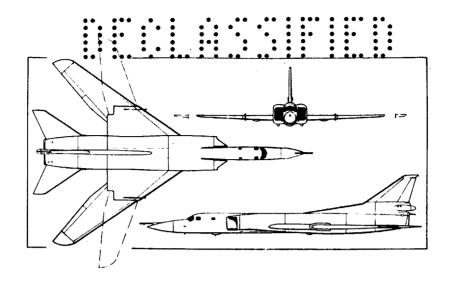




If SALT...is agitated by tenacious internal controversy, it is also beset by ambiguity....As with questions of dogma, there is no way by which either side can be fully vindicated. The technicians, alas, can prove or disprove anything.

John Newhouse
Cold Dawn: The
Story of SALT





Technical Data on Backfire "B"*

Crew	3	
Dimensions	J	
Length	133 feet	
Height	33 feet	
Wing Span (max/min)	113/86 feet	
Wing Sweep (max/min)	20*/55*	
Weight	20 / 33	
Empty	114,790 pounds	
Fuel	150,110 pounds	
Max Payload	22,075 pounds	
Max Takeoff Weight	270,000 pounds	
Powerplant		
(number and type): 2 NK 144	turbofan w/44,000 lb static thrust each	
navigation poppler,	inertial, satellite assisted	
Armament	1 37mm tail cannon	
Compat Radius (unrefueled)		
High-High-High Performance	2500+ nautical miles	
Takeoff Distance (at 260,000 11	os.) 7870 feet	
Service Ceiling	59,040 feet	
Max Speed at Low Altitude	above Mach 1	
Cruise Speed at High Altitude	Mach 0.82	
Max speed at High Altitude	Mach 2.25 - 2.50	

*Sources: <u>International</u> <u>Defence</u> <u>Review</u>, May 1975, p. 640.

Jane's All The World's Aircraft, 1978-1979, pp. 201-202.

American and Soviet Military Trends Since the Cuban Missile Crisis, 1978, p. 19

I. A Technical History of the TU-22M (Backfire) Bomber

US sources acknowledged the existence of a new Soviet variable geometry (or swing-wing) aircraft in the fail of 1969. Its appearance had been anticipated by Western intelligence agencies who were aware that the most recent Soviet medium bomber, the TU-22 (NATO code name: Blinder), had not lived up to its design potential.

A prototype of the Backfire was first seen on the ground at Kazan in Central Asia in July 1970 near the Tupolev factory, one of the major Soviet design and production complexes. It was a twin engined bomber from which two prototypes were developed. Twelve preproduction models followed for use in performance testing and weapons trials in early 1973. Preliminary analysis suggested that the Backfire was designed to be capable of a high altitude, supersonic dash above Mach 2.25 and to possess a maximum range at subsonic speeds of 4775-5200 nautical miles--a clear intercontinental capability at high altitude.

The initial version--Backfire "A"--fell short of designed ranges, however. Its large, extruding wheel housings at the wing's midpoint caused considerable form drag and limited the sweep to the outer half of the wing (unlike the US FB-lll with full wing movement). The redesigned "B" model, which appeared soon afterward, eliminated the large wheel fairings, increased the wing span nearly twelve feet, and improved performance.²

On both models, the engines were built into the body and had complex engine inlet ducts (similar to the US F-106 interceptor, also capable of high altitude speeds in excess of Mach 2). The engines themselves were modifications of the Kuznetsov turbofan jet engines on the new TU-144 supersonic transport observed at the Paris Air Show in 1973. The plane also had an air refueling probe.³

Backfire was credited with the ability to carry a complete complex of nuclear gravity bombs and short range air-to-surface missiles under each wing. Interceptors also photographed Backfire with removable multiple ejector weapons racks under the inlets, suggesting the capability to carry a full complement of conventional weapons.⁴

The aircraft's estimated gross weight of 270,000 pounds is more than twice that of the US FB-lll and nearly two-thirds that of the now cancelled B-l bomber. It has an estimated 20,000 pound bomb load capacity plus electronic countermeasures to confuse enemy interceptors and inertial, doppler, and satellite-assisted navigation equipment to facilitate overwater, intercontinental missions.⁵

It was also the only Soviet aircraft capable of flying at high subsonic speed on a two-way (radius) low altitude mission anywhere in NATO Europe from bases in the western USSR. Thus, by all estimates, it was the premier low level, theater/naval strike aircraft in the Soviet inventory. "In early 1975, an Aviatsia Dalnyaya Deistvya (Long Range Aviation or LRA) squadron based in southwest USSR received 18 Backfire Bs, while in the same year, a unit of the Soviet Aviatsia Voyenno-Morskava Flotta (Soviet Naval Aviation or AV-MF) based in the Black Sea area began operating the aircraft on long-range reconnaissance flights. Since 1976, Backfires based on the Kola Peninsula-mainly in Murmansk-have been observed on reconnaissance missions. Similar missions have also been reported from the northern part of Carelia (cast of the White Sea), and from the base at Anadyr on the Bering Sea. This deployment pattern has continued in

approximately equal numbers to both the LRA and and AV-MF and "by mid-September 1979, the Saviets had produced about 200 Backfires" according to Detense Department testimony.

The Defense Department also judged that the potential for upgrade of the Backfire B model was considerable and could be incorporated relatively quickly and easily by adding external or weapons bay tanks, or in a more elaborate process by improving the engines and aerodynamic features or by lengthening the fuselage.⁸

II. Backfire as an Issue in Strategic Arms Limitation Talks

Early History of SALT I. The earliest attempts on the part of the US Government to limit strategic armaments came in 1964 with President Johnson's January letter to Khrushchev and in a March proposal at the Eighteen Nation Disarmament Conference for a "bomber bonfire" scheme. Both proposals were rejected by the Soviets.

In January of 1967, President Johnson returned US Ambassador Llewellyn Thompson to Moscow carrying an arms limitation proposal which included bomber as well as air defense limitations, plus other offensive and defensive strategic weapons curbs. The Soviet Union responded favorably in March, but had definite objections to considering any limits on air defense. 10 President Johnson then countered with a broad proposal for intercontinental ballistic missile (ICBM) and submarine-launched ballistic missile (SLBM) limitations, linking them to antiballistic missile (ABM) talks. Until 1968, the talks at the ministerial level were inconclusive, but, in June 1968, Gromyko indicated the Soviets were ready to begin talks on nuclear weapons limits, both offensive and defensive. Johnson responded favorably but each side agreed to bypass bombers, the Soviets to avoid the air defense issue, and the US because it too acknowledged the difficulty of separating strategic and tactical aircraft and because the Joint Chiefs of Staff (JCS) felt bomber limits were irrelevant in an age when both sides were already reducing their strategic bomber forces. Then, the Czechoslovakian invasion and Nixon's election forced the lame duck President to drop the talks. 11

In late spring 1969, Nixon signalled his willingness to begin similar talks and, by November, formal talks between the two newly formed delegations had begun. During the first SALT session the favored US position included a freeze on bombers and missiles, an ABM limit, a mobile ICBM ban, and freedom to develop the new multiple independently targeted reentry vehicles (MIRV). The Soviets responded by insisting that the US forward based systems (FBS) in Europe and Asia be included and that MIRVs be banned. They also had a radically different definition for "strategic" which dealt, not with intercontinental capability, but included any weapons system that could attack the homeland of the opposing party.

The second session of SALT I again featured the US proposing to freeze bombers at existing levels and the Soviets refusing to include air defense without US FBS aircraft in the aggregate. Throughout the third session that impasse continued while the US delegates tried to find an acceptable definition of "heavy bombers." By the fourth session, an agreement on ABM limits was reached, and the US appeared willing to drop its demand for equal aggregates in return for Soviet willingness to relinquish the FBS issue. Later: in July 1971, at the insistence of interagency representatives in Washington, the SLBM issue was also raised again, although Dr. Kissinger feared it would repren the FBS issue, which he considered settled. By May 27, 1972, a SALT I agreement had been signed, but it only included a permanent ABM Treaty and a separate Interim Agreement to freeze

offensive missile launchers (ICBM and SDBM). The Soviets were allowed higher total numbers for their force levels to compensate for the US MIRV (total warhead), FBS, and heavy bomber advantages, but no agreement on bombers per se was reached, and the issue was deferred to SALT II.13

SALT II: The Nixon/Ford Period. In November 1972, the first session of SALT II began with the Americans hoping to codify parity, to reduce the Soviet arsenal and growing threat to the American Minuteman missile, and to replace the Interim Agreement of SALT I with a new treaty of unlimited duration. 14

At the second session in Geneva in 1973 under the newly appointed US Delegation Chairman, Ambassador U. Alexis Johnson, the Office of the Secretary of Defense (OSD) representative, Paul Nitze, attempted to get the new Soviet Backfire bomber included in discussions of "heavy bombers." Ambassador Johnson queried Dr. Kissinger, who directed the team to drop the issue. 16

After Nixon's resignation, interagency groups were asked to prepare background papers for President Ford's upcoming visit to Vladivostok in November 1974. The papers included force structures under each of four or five options and, at the working level, there was strong OSD and JCS interest in footnoting Backfire as a heavy bomber. However, this proposal was never elevated to the Verification Panel level. 17

The Vladivostok Accord was a significant breakthrough and its agreement to a 2400 numerical limit on total offensive weapons was the point of departure for all subsequent SALT II negotiations. "Although the total of [Strategic Delivery Vehicles] SDVs for each side was understood to include not only ICBMs and SLBMs, but also bombers, nowhere were bombers specifically mentioned in the published agreement [technically, a joint statement]."18

Immediately following the Conference, Secretary Kissinger held a deep backgrounder for accompanying journalists, and, in reply to a specific question on Backfire, he stated that the Backfire and the FB-11 would not fall in the heavy bomber category, which did include the B-52 and B-1. 19

When Secretary Kissinger returned to Washington he briefed the Senate Foreign Relations Committee on the Accord and, at a press conference following the session, expressed surprise at the criticism already prevalent in the capitol. The New York Times, noting that Senator Jackson was a presidential aspirant, focused on his criticism. "Concern has been raised by Senator Jackson's office about whether the two-engine Soviet bomber known as the Backfire would be included in the total ceiling of 2400."

To brief key administration officials after President Ford's return to Washington, Kissinger called for a Verification Panel meeting. During this session Secretary Kissinger gave his approval for the Delegation to

include Backfire in the heavy bomber class type discussions in Geneva. 21 Therefore, prior to his departure for Geneva, Ambacsador Johnson talked to Secretary of Defense Schlesinger about Backfire. Schlesinger told him "he thought it could not be counted. Nothing will come of it, but try it anyway."22 Also, apparently to avoid embarrassing President Ford and to assure himself, Secretary Schlesinger held a seven-hour session in the Pentagon with General Rowny and "a whole stable of experts to determine if the Backfire was a heavy bomber. At the end, Schlesinger could not knock them off the beam on Backfire's classification as a heavy bomber." 23

In February 1975 when the delegation returned to the sessions in Geneva, the Soviets tabled a Joint Draft Text (JDT) which excluded Backfire. By March the US delegation was prepared to table its own version of the JDT and it did include Backfire among Soviet heavy bombers. Thus was the issue joined, not to be resolved until the final days prior to the 1979 summit in Vienna.

Prior to allowing discussion of the Backfire, however, Ambassador Johnson asked General Rowny for intelligence data to support the US contention. The intelligence estimates received were in general agreement that Backfire had some marginal intercontinental capability and that deployments were split equally between LRA and AV-MF for peripheral/naval strike activity. These initial estimates also consisted of unrefueled performance characteristics because Washington (concerned that discussions of refueling, on which our strategic aircraft heavily depended, were not in our best interests) wanted the US airborne tanker fleet kept outside SALT. Disagreements between the Central Intelligence Agency (CIA) and the Defense Intelligence Agency (DIA) soon surfaced, however, and convinced Ambassador Johnson that the US had a weak argument. In spite of the fact that the Arms Control and Disarmament Agency (ACDA) and State Department representatives believed that the Soviets would not agree to Backfire's inclusion in the aggregate, it was allowed to remain on the negotiating table because of the previously mentioned decision in Washington.²⁴

As part of the delegation's efforts, a working group under General Rowny was set up to discuss definitions. This group was strongly influenced by Congressional criticism of SALT I and the Interim Agreement. Therefore, they worked toward defining: ICBM, SLBM, launchers, heavy bombers, air-to-surface ballistic missiles and heavy missiles. By May the debate in this working group was so acrimonious that the Ambassador ordered his delegation to cease attempts to define "heavy bomber." His own position, however, had solidified. "It was clearly nonnegotiable within the 2400 ceiling because the Soviets would have been required to stand down additional offsetting systems. There was no expectation they would change. Insisting on counting Backfire would frustrate the Vladivostok agreement and there were better ways to do that if that was one's objective."²⁵

In the spring of 1975 the debate sharpened within Intelligence circles. DIA and Air Force Intelligence footnoted all interagency references to Backfire as a peripheral strike weapon (rather than as a strategic bomber). Thus, the lineup was OSD and JCS against State, ACDA, and CIA, with the National Security Council (NSC) staff in Washington indicating it would favor Backfire's exclusion with possible collateral assurances to restrict the bomber's use against the US. Apparently to help resolve the dispute, a number of collateral studies were also performed by the Air Force's Foreign Technology Division, General Dynamics, McDonnell Douglas at St. Louis, Naval Scientific Intelligence Center, and agencies in Canada and the United Kingdom. DIA also asked McDonnell Douglas in California to study Backfire. At the completion of these

studies, lasting several years, the data indicated that marginal intercontinental unrefueled range on a one-way, high altitude mission over the US with recovery in a neutral third country was possible. Range estimates continued to differ with 1000+ nautical miles as the mean. 26

At Helsinki in July 1975, Brezhnev gave President Ford his personal verbal assurance that Backfire could not be used against the United States, but verbal assurances were insufficient and the two leaders were unable to break the impasse on Backfire and the cruise missile. Therefore, Secretary Kissinger was directed to return to Moscow to resolve the twin issues. 27 After several intensive NSC meetings, Kissinger departed for Moscow and his 20 January 1976 meeting with Brezhnev carrying two proposals.

In the first proposal, the 120 Backfires already produced would be outside the aggregate, but all future Backfires were to be counted as heavy bombers within the 2400 aggregate. Further, all cruise missile launcher platforms (bombers, surface ships, and submarines) would count within the aggregate, but only if the Backfire proposal were accepted. Although they were interested in counting MIRV bombers (armed with cruise missiles) within the separate and more restrictive MIRV ceiling, the Soviets rejected the overall proposal. So, Secretary Kissinger then offered a proposal which limited the Soviets to 275 Backfires until 1982, after which time there would be no further limits on the bombers. In trade, the US was to have a limited number of ships equipped with long-range cruise missiles and submarine-launched cruise missiles unrestricted in number, but limited in range.28 The Soviets repeated their previous position: Backfire was not a strategic bomber. For this and other reasons Kissinger was unable to reach agreement.

"But when Henry [Kissinger] returned to Washington, Rumsf leld and the Joint Chiefs had growing reservations. Most of their objections were highly technical, and I [President Ford] hoped that with some give from the Soviets, we could allay the Pentagon's concerns. Brezhnev wouldn't budge, however, and our Defense officials maintained their doubts, so we came up with a plan that I thought would satisfy everyone." 29

This new plan was developed leaving the definitional ambiguities unresolved, falling back on Vladivostok, and treating the Backfire and cruise missiles in a separate package for three years. This package included a proposed production freeze on Backfire. The Soviets, however, angrily rejected the package abruptly because they still favored an agreement along the lines of the earlier January proposal.³⁰ Ford, increasingly concerned about Reagan, and in no mood to compromise with the Soviets, reluctantly concluded that SALT was not possible in the volatile election year of 1976.³¹

SALT II: The Carter Administration. In September 1976, after his nomination, but prior to the election, candidate Carter authorized Averell Harriman, during a trip to Moscow, to tell Brezhnev that Carter favored signing SALT II on the basis of Vladivostok "with a compromise on unresolved issues." 32

Shortly after the Inauguration, on 8 February 1977, President Carter held his first formal press conference and publicly said much the same thing. 33 During February, the new administration had begun to review its SALT II options. The Department of State backed a "basic Vladivostok" with Backfire not included in the aggregate. The Pentagon wanted a "Vladivostok plus" with a separate accommodation on Backfire while OSD supported this option only if Backfire were traded for a new, long-range

ground-launched cruise missile (GLCM) exclusion. The third option was a Vladivostok minus option excluding Backfire and cruise missiles as the President had suggested in his press conference. After a review, Carter and his key advisors rejected all three working level proposals, looking instead for more imaginative cuts along the lines Carter had suggested in his campaign. 34 The President presumably was influenced by a breakfast with Senator Jackson, who expressed concern about the existing Vladivostok proposal. When asked for his views in writing, he supplied the White House with a memo which suggested that Backfire count "pure and simple." Jackson's memo also rejected summarily the "Vladivostok plus" and "basic Vladivostok" positions.35

At a highly secret "principals only" Special Coordinating Committee (SCC) meeting on 12 March 1977, President Carter and Vice-President Mondale stressed the need for a bold new approach. Based on the discussion, William Hyland of the NSC was directed to produce a set of comprehensive proposals -- instructions for Secretary of State Vance to take to Moscow at the end of March. "The proposal would not have counted Backfire as a strategic bomber, as long as the Soviets adhered to a list of measures that would inhibit its range."36 Vance himself insisted on a fallback proposal, the "Vladivostok minus" package, because he reasoned that, though the Soviets might reject this new, comprehensive proposal with its deep reductions in Soviet heavy missiles and land-based MIRV missiles, they might still accept a quick fix to Vladivostok deferring Backfire and cruise missiles till future rounds.37

The pretrip briefing Vance gave to Dobrynin was conducted with little notice, unlike the lead time given the Soviet Ambassador under Secretary Kissinger. Also, although the proposal was extremely closely held in Washington, Carter undercut his own efforts by publicly revealing the details and seemingly going over the heads of the Soviet bureaucracy directly to Brezhnev. 38

Under the new administration, positions began to harden. The new Secretary of Defense, Harold Brown, told his OSD support staff and the JCS that cruise missile was far more important than Backfire and that he clearly favored increasing the distance between the two. Further, he was aware that Brezhnev's prestige was on the line because of personal commitments to two previous administrations and Brown doubted the Soviets would fall off Backfire. (Duncan, however, his principal deputy, was more skeptical about ruling out the political impact of Backfire's intercontinental capability and particularly about the reaction in Congress "where people understood airplanes.") Increasingly, therefore, JCS became isolated as the only agency to take a hard line on Backfire. OSD emerged neutral on the subject under Secretary Brown, and State and ACDA reasoned that Backfire was nonnegotiable and not worth holding up a possible SALT treaty. 39 In the view of the NSC staff, the key question was now what form and in what forum the Backfire assurances would surface.

The Soviets, almost predictably, reacted harshly to the first (March 1977 Comprehensive) proposal and the fallback, most probably because of the manner in which they were surfaced -- short notice for Dobrynin and pre- and post-meeting press conferences by the Administration. 40 Therefore, in April, the Administration had to return to the drawing board, and under Hyland and Les Gelb, who headed the State Department's Politico-Military Bureau, a new three-tiered approach was crafted.41 This new proposal excluded Backfire for Sowiet assurances, the form and content of which were still uncertain 42

By May 1977 the Geneva talks had resumed with negotiators themselves

deliberately left in the dark about the new administration initiative until

48 hours prior to Secretary Vance's arrival there to meet Gromyko. At their meeting the US offered to include the Backfire and the cruise missile in a separate protocol as an executive agreement for three years—content still undecided—but Gromyko turned down the offer, partly because he was disturbed by another post-meeting press conference by Vance.43 Significantly, however, after this May meeting Vance and Gromyko did agree to extend the agenda of the Geneva delegations to cover all outstanding issues except one—the Backfire bomber.

"Brezhnev considered it a matter of personal honor that Backfire not be negotiated as a part of SALT. He had given his word to two American administrations that the plane was not a heavy bomber, and therefore not within the jurisdiction of SALT. If the US was so brazenly mistrustful to doubt his word and to demand collateral constraints on production and deployment of the bomber, then these restraints would have to be negotiated outside regular SALT channels. For that reason, throughout the long summer of 1977, Backfire was exclusively a topic for Vance to discuss with Anatoly Dobrynin..."44

On 27 July, Paul Warnke, appearing before the House Armed Services Committee, briefed the Congressmen on the latest SALT developments. He testified that Backfire would not be counted within the aggregate but instead limited within a three-year protocol with collateral constraints on the Soviet bomber that proscribed Arctic deployment and collaterally deployed tankers. He also issued an invitation for Congress to participate in the delegation process, to attend intra-US delegation meetings discussing policy and tactics and to meet privately with Chiefs and senior members of both delegations.

By September 1977, at the ministerial level, Gromyko and Vance were continuing to work on Backfire. For the first time, Gromyko proposed a Soviet letter of assurances, giving Backfire specifications and some measures for its non-use for intercontinental missions. 47 Twelve desired US assurances were formulated but Secretary Vance reportedly felt that they were "so ridiculous that he refused to discuss them personally," and gave them to his deputy Les Gelb to work out with Gromyko's subordinate Bessmertnykh. 48

In November, Secretary Vance and Director Warnke testified again about SALT proposals before the Senate Foreign Relations Committee and stated they were confident that the tanker/Backfire mating, necessary to enhance the bomber's strategic capability, could be detected (by national technical means), but that the assurances issue was still not resolved. 49

In his 20-22 April 1978 meeting in Moscow with Brezhnev and Gromyko, Vance proposed that the Soviets include in their letter of assurances pledges on a constant production rate, a prohibition on forward basing, and training restrictions. Gromyko rejected parts of the proposal.⁵⁰ The Secretary's position did not go farther because, while a production limit was clearly desirable, in fact critical, he was uncertain if a range/payload upgrade prohibition now under consideration could be verified.⁵¹

The new Chairman of the JCS, General David Jones, held a press conference on 25 July 1978 in which he outlined his differences with those in favor of assurances. ⁵² In the interagency arena, General Jones had already come up with a new idea for dealing with Backfire. "The US should confront the Russians with an American intention to 'count or counter' the Backfire: either the bomber would count against the SALT ceiling—as the JCS preferred—or the US would dramatically upgrade its defenses....It was a hugely expensive proposition [7-4 billions of dollars]. Instead, David Aaron, Brzezinski's deputy, suggested 'countering' the controversial

Soviet bomber with what he called 'our own Backfire,' which would not count [in the aggregate] as a strategic weapon but might be subject to restraints on production and refueling... Braezinski brought the idea to the President...and Carter seized on the idea as a good one." But General Jones was not happy with a US Backfire, and at this previously mentioned press conference, rejected the idea with some firmness. 54

In spite of the Chairman's objections, at the September 1978 meeting with Gromyko in Washington, President Carter indicated that the US had decided to reserve the right to build a comparable aircraft. ⁵⁵ In October 1978, Vance returned to Moscow and found the Soviets unwilling to put in writing the assurances "the US considered necessary to keep Backfire from becoming politically damaging to the ratification of a SALT II agreement. One other apparent problem from the American side was that although Gromyko had earlier agreed that the Soviets would not increase the current production rate of the Backfire, the Soviet side subsequently declined to confirm what the rate was, leaving an obvious loophole." ⁵⁶

In November after Vance's return from Moscow, another new concern was expressed by Brzezinski: Could a Backfire armed with conventional cruise missiles "run free"? The US could have little confidence the Backfire cruise missiles were really conventional and not nuclear. Therefore, the President was persuaded to drop his earlier opposition to including US conventional cruise missiles in the ban, in order to avoid the loophole. 57

Between 1 January and 25 May 1979, Vance and Dobrynin met some 25 times to discuss these final issues which the Soviets had earlier insisted be resolved prior to the summit. In these meetings the assurances and formats were worked out, and, in the weeks before Vienna, the Joint Draft Text was finally altered to reflect new agreement on Backfire.

When the formal summit talks began in Vienna in mid-June, almost every item was resolved as detailed by the careful advance work. there was one unpleasant surprise. It concerned the Backfire bomber and the form of Soviet assurances restricting its range and rate of production."58 Brezhnev read aloud his proposed statement on the Soviet intention to deny the Backfire an intercontinental capability and followed with his intention to freeze production "at the present rate." President Carter responded with his own prepared statement, then asked for confirmation that the subject rate was indeed thirty per year. Gromyko refused to answer. "The wrangle continued until the next day, when Carter delivered a table-pounding lecture, saying he had come to Vienna 'in good faith' believing that the Backfire issue had been resolved in advance and that for the Soviets to renege now would be to jeopardize the summit. Vance and Gromyko got into a sharp exchange....Finally Brezhnev intervened. Throwing up his hands in a gesture meant to convey both impatience and magnaminity, he stated, for the record, that, yes, the reference in the Soviet letter to the 'present rate' of production meant thirty. 'There,' concluded Brezhnev, 'another Soviet concession!'"59

But that was not to be the final word on Backfire. In a 15 August letter to the Senate Foreign Relations Committee, the White House noted that "President Carter made clear at the Vienna Summit that any significant upgrade in range/payload capability of the Backfire would be inconsistent with Soviet Backfire assurances. The Soviets responded that they would not be bound by US unilateral interpretations of their statement."60

III. Interagency Positions on Backfire

By early 1975 each of the agencies involved in the SALT process was familiar with Backfire. Intelligence judgments showed divergence, but there was common agreement that the new bomber had at least marginal, unrefueled intercontinental range, was a premier peripheral attack weapon, and was being assigned in nearly equal numbers to LRA and AV-MF units. Beyond this agreement about technical data, however, strong differences of opinion existed. The first was over capabilities of the aircraft versus how the Soviets intended to use it. The second general disagreement revolved around the criticality of the Backfire to American security and political interests. These fairly fundamental divergences continue to exist.

Arms Control and Disarmament Agency (ACDA). ACDA's position began to emerge quickly. The actual deployment patterns were a clear validation of the 1975 estimate that gave Backfire a principal peripheral mission. The Soviets would have to destroy additional central systems were Backfire in the aggregate, so they will never agree to count it. Look at its negotiability and ask how critical it is. SALT II should not be delayed for Backfire and it is not cause for rejecting the treaty. However, the bomber cannot have a free run, so collateral restraints are warranted. The important issues to protect are cruise missile, since the B-l cancellation, and FBS. In summary, it is a political judgment, not a substantive issue. 61

Department of State. State's position is similar to ACDA's. An undisputed, though marginal, intercontinental capability does not mean it was designed as a strategic weapon. It is primarily an extremely capable medium bomber and is optimized for that mission. Besides, it is not any more effective than our more numerous aircraft in Europe, and if we reopened the FBS issue we'd lose far more than we would gain. Since Brezhnev's personal prestige is involved, the Soviets would never agree to count it. The production contraints are meaningful, significant concessions, and besides, there are no limits on a US Backfire. We do not need Soviet agreement that a production violation is cause for abrogation. We have made a stand on thirty, and if they violate it, we abrogate. Therefore the approach was to find a way to fall off Backfire with the least trouble within the administration. 62

Central Intelligence Agency (CIA). CIA has no policy role in the SALT process. Its functions are to assess: characteristics and capabilities of Soviet weapons systems and forces; the capability to monitor the treaty; and protect sources and methods during negotiations. This treaty is designed to take verification into account. All intelligence inputs to the interagency process are community inputs with all differences of basic fact clearly surfaced. Backfire has a marginal, intercontinental capability with our range estimate substantially lower than DIA's. Backfire is clearly their principal theater/naval strike weapon and from the Soviet viewpoint it would not fit in SALT II. The deployments are to theater units: over that there is no dispute. The argument is over their intention to use it as a strategic weapon if the need arises. 63

National Security Council (NSC). NSC has a similar position. "There are no sweetheart deals in this business." The logic of counting Backfire just because it is a big bomber, with some intercontinental capability, is not sound in view of our considerable FBS aircraft. After Yladivostok, a lot of effort had to be expended to regain cruise missile protection for the US, which is more important to us than Backfire is to the Soviets.

The Soviets clearly demonstrated their intention to deploy Backfire in a theater role. The production limit is useful for glanning, but other limits were not worth pursuing 64

Office of the Secretary of Defense (OSD). Secretaries Schlesinger and Rumsfeld considered Backfire a heavy bomber, but OSD has since taken a middle position between the above agencies and the Joint Chiefs. Secretary Brown changed the emphasis because he strongly favored the cruise missile. He was also more sensitive to Brezhnev's personal commitment, realized the Russians would never agree to Backfire in the aggregate, and believed that if we wanted a SALT II Treaty we could not attach too much importance to Backfire. Under Brown, the OSD SALT Task Force considered the Backfire itself the world's best medium bomber or the worst heavy bomber. In a strategic role Backfire could only make the rubble [caused by the numerous Soviet ICBMs] bounce. We also decided quite early to carve out FBS and favored counting Backfire only if the Soviets agreed without reopening the FBS issue. That would be in our interest, but the huge geographic asymmetry forces the Soviets to insist on FBS within the aggregate if Backfire counts, and we do not want that.65

Joint Chiefs of Staff (JCS). "While we are well aware of its [Backfire's] employment capabilities in peripheral and maritime roles, the Joint Chiefs of Staff consistently recommended that the Backfire be included in the aggregate because it has an intercontinental range capability. Nevertheless, the United States did obtain some constraints on the Backfire, the most important of which is a production limit not to exceed 30 per year. Furthermore, the United States retains the right to build and deploy an aircraft of equivalent capabilities. "66 "The primary air threat to the continental United States is from the Bear/Bison force... Backfire, the only LRA aircraft in production, can carry gravity bombs internally or externally mounted AS-4 Kitchen ASMs. Backfires based in the western Soviet Union can strike all NATO countries on unrefueled missions. Inflight refueling, an option for which all Backfires are believed capable, would enhance intercontinental operations. The Backfire's primary functions have been assessed as peripheral attack and naval missions. However, detailed technical analysis indicates that the aircraft has intercontinental strike capabilities."67

IV. The Ratification Process

Carter Administration Efforts with the Congress. The Carter White House moved to consolidate support for SALT II by applying the lessons of the Panama Canal Treaty debate. "It began consulting legislators earlier....It augmented its liaison specialists with a team of substantive experts. Finally it sent a clear message that the President would negotiate with the Senate leadership, but not with the rank and file." 68 The record was mixed, however, because the major target, Senator Jackson, found his advice ignored.

As Chairman of the Arms Control Subcommittee of Armed Services, Jackson was at the center of the SALT debate. But his positions on cruise missiles, Backfire, and warhead limits were at odds with the forthcoming treaty and the Administration became frustrated with the Jackson courtship. Then in October 1977 an article in the New York Times, by revealing much secret information which the Committee did not have, angered not only Senator Jackson but a number of other Senators as well. "From that time on, the Administration and Jackson appear to have written each other off. ... It was the Administration's most serious misstep. "69 To compensate, the White House shifted at a effects to other critical

Senate leaders; supported Senator Byrd's new 23-member Senate SALT group under the Majority Whip, Senator Cranston; and offered them an intensive series of briefings by key executive branch SALT experts. By early 1979, all control for SALT subjects of interest to Congress was centralized under Vice-President Mondale, and he took great pains to "avoid the serious mistake made during the previous Panama Canal Treaty campaign when negotiators with Congress got separated from negotiators with Panama." 70

The White House, focused now on Byrd, Baker, Stennis, Nunn, and Muskie, was willing to accept that reservations and understandings would be added to the text but expected Baker and Byrd to lead the rank and file away from killer amendments which would cause the Russians to reject the treaty or require the US to make new concessions in compensation."71 The administration also made it clear that it expected no premature commitment from any Senator, and thus avoided another pitfall experienced during the Panama debate. So, by June 1979, while the delegation in Geneva finished up the Joint Draft Text, the executive branch was polishing its efforts in Washington.

Everyone involved with the Senate relations program realized the treaty was a technical nightmare, but they gave no indication that they expected the Backfire bomber to emerge as an easily understood issue about which treaty opponents could rally. Senators, eager to explain a negative vote publicly, discovered in Backfire an issue that could be grasped by laymen who might find the more arcane arguments beyond them. Thus, even though Backfire was far from the most important strategic issue, the Soviet bomber became a symbol of opposition to SALT.⁷²

Senate Foreign Relations Committee. "Under [Senate] Rule xxv.l.j. all treaties are referred to the Committee on Foreign Relations, which has exclusive jurisdiction over them. That is not to say that other standing committees cannot, and have not, held parallel hearings on the subject matter of a treaty (i.e., the Nuclear Test Ban and Nonproliferation Treaties) but there has never been a formal referral—either sequentially or concurrently—of a treaty to any committee other than Foreign Relations. The Committee, nonetheless, has on occasion invited other members to participate in its deliberations, without, however, the right to vote.... The Senate Rules do not require that hearings be held or a written report filed, but this has become customary."73

"Regardless of the fact that the labeling of the Senate's expression is relatively unimportant in determining its legal effect, there is a general belief that the most significant actions in order of their effect are: amendment; reservation; understanding; interpretation....Used correctly an Amendment would make actual changes in the language of the treaty.... A Reservation modifies or limits the substantive effect of one or more of the treaty provisions.... An Understanding is not intended to modify or limit any provisions of the treaty in its international operation, but is intended merely to clarify or explain.... Interpretations have similar effect.... Under existing practice, however, the Executive would communicate such understandings or interpretations to other parties."74 During SALT II hearings, the Committee altered these traditional categories slightly. Category I provisions would not directly involve formal notice to, or agreement by, the Soviet Union; Category II provisions would be formally communicated to the Soviet Union as official statements of the United States Government in ratifying the Treaty, but would not require their agreement, and Lategory III provisions would require the explicit agreement of the Soviet Union for the treaty to come into force. "All such conditions to advise and consent would be equally binding upon the

President in accordance with their terms, regardless of the category in which they appear. The difference in category would be a function of the desired involvement of the Soviet Union, as determined by the purpose of the proposal."75

Even before the Treaty was referred to Senator Church's Foreign Relations Committee, efforts were underway to prepare for the ratification hearing. Church enhanced the permanent staff by hiring arms specialists from the State Department's Politico-Military Bureau and from the National Security Council. He also retained one full-time consultant (who had previously served on the OSD SALT Task Force), three additional part-time professionals, and a new staff director who had previously worked with verification problems in the Defense Department. ⁷⁶

It is possible to criticize Senator Church for being too deliberate and thorough with his preparations, but there were excellent reasons for his caution. 1979 was Senator Church's first year as Chairman of the Committee and he wanted to alter the Committee's nonactivist image under Senator Sparkman. The Committee as a group smarted from criticism of its handling of the Panama Canal Treaty and did not want a repeat performance. Therefore, Church planned for extensive hearings on SALT II and stressed more daily staff activity and higher quality staff work. 77 Church also wanted the Committee and staff to get into SALT as a process and to go beneath the surface of the agreement. He asked for all unilateral US statements made in the course of the negotiations which he knew were critical to the treaty, yet might otherwise go undiscovered. Because the Soviets took advantage of unilateral statements by the US in SALT I, this feature of the negotiations assumed added importance.

It also became apparent that there were several major issues simple enough to discuss in isolation, yet linked to the broader, comprehensive features of the treaty. Although the treaty had too many complexities to integrate well, five to eight issues emerged as the debate progressed which seemed to be representative and central to understanding the treaty. Backfire was one of the issues.

The Committee chose two Backfire issues on which to concentrate: the legal status of the Soviet Backfire statement and the military and technical controversy over whether or not to include it in the aggregate. Senators were more comfortable with the first issue because their training was legal, not technical or military. To many, the Backfire statement, signed by our Secretary of State, was devoid of practical meaning in legal terms and worse than no commitment at all. As it was attached to the treaty, the Committee saw only an English text, no Russian signature, and only a US interpretation of what the Russians had said. There was no formal acknowledgement, and, in fact, in Vienna Gromyko had insisted that the USSR was not bound by unilateral interpretations of its statements.

Further, in legal parlance, the Soviet Backfire statement appeared to be contrary to material fact. The statement said, first, that the Soviets did not intend to give Backfire the capability to operate at intercontinental range, but the aircraft clearly already possessed that capability. It further noted that the Soviet side did not intend to increase its radius of action (round trip range) through in-flight refueling. Yet, from its first production version, the airplane had been equipped with an in-flight refueling probe; 78 While the State Department expressed the legal opinion that the statement was a valid contract and binding on the Soviet Union, Senators were not so sure: Neither were they blind to the political merits of the opposition's criticism.

As their second issue in the Backfire diestion, the Committee considered several military and technical questions: current potential for Backfire striking the US; its upgrade potential in terms of range and cruise missile carrying capacity; estimated primary mission; whether Backfire should have been counted in the aggregate; how SALT II would have differed in other ways if Backfire had been treated as a heavy bomber; and the ability to verify compliance with Backfire assurances. This second set of problems beyond the legal questions had to be resolved because there remained the nagging problem of treaty circumvention with Backfire outside the aggregate.

In its report, issued 19 November 1979, the Committee adopted one Category III "Reservation on the Soviet Backfire Statement"; one Category II "Understanding on Range/Payload Upgrade of the Backfire Bomber" (which had been rejected as a Category III Reservation); and one Category I "Understanding Concerning Theater Nuclear Systems and SALT III." It also rejected one killer amendment which would have counted the Backfire bomber within SALT II as three-fourths of a strategic nuclear delivery vehicle (SNDV) and the FB-111 as one-half an SNDV.80

In their Category III Reservation on Backfire, the Committee wished to "clarify the legal effect of the Brezhnev statement. It is not intended in any way to affect the terms or substance of the statement. US ratification of the SALT II Treaty will be conditioned upon explicit agreement...that the Brezhnev statements are legally binding upon them."81 The Category II Understanding put the Soviet Union on formal notice that significant increases in the range/payload capabilities of Backfire would be inconsistent with Brezhnev's statement and that any such action would justify US withdrawal from the SALT II Treaty. This was added because of Gromyko's contention at Vienna that the Soviets were not bound by US unilateral statements. The Category I Understanding reinforced an Administration policy statement not to accept any SALT III limitations on our theater nuclear systems unless the Soviets agreed to appropriate limitations on their theater nuclear systems. This was adopted to counter the Allied fear that systems on which their deterrence and defense depended would be cut without their approval.

In its summary report, the Committee recognized that Backfire, while principally a peripheral attack airplane, had sufficient intercontinental strategic capability to consider it in the aggregate as a heavy bomber. However, the Committee concluded that the Soviets would firmly reject a proposal to include all or part of the Backfire force in SALT II or to place additional constraints on it beyond those in the oral and written assurances. They also cautioned against any Backfire exchange for American FBS aircraft which the US had long pledged to the Allies would not be included in SALT II. They further stated that reopening the FBS issue would not be in the best interests of the US or the Allies. 84 "However, the Committee was concerned by testimony that the Backfire poses at least a marginal threat to the US, which could be substantially increased by modifications to the bomber. The Committee therefore recommended adoption of an understanding to clarify the seriousness with which the US would regard any Soviet action that significantly increased the Backfire's range/payload capability. 85 The committee concluded that the US could probably detect any large-scale efforts to prepare to use the Backfire against the US, upgrade its names/payload capabilities, or increase its production rate, but that soviet contingency plans to use Backfire as a reserve or follow on strike weapon against the US cannot be dismissed as a possibility. 86

In private discussions with Staff members of the Committee, it was apparent that no Senator thought it politically wise to endorse the Administration's handling of Backfire "without playing with it." They also realized that it was hard to vote against a floor amendment to include the Backfire when the bomber was acknowledged by all as having the capability, letter notwithstanding, to bomb the United States. To Committee members, the US appeared to have gained little that could be explained to voters in a positive fashion and the argument that the Soviets would not accept Backfire within the aggregate was useless domestically. The wording of the Category III Reservation, therefore, was carefully chosen.

Committee proponents of SALT II tended to avoid any Backfire discussion beyond the legal issues. They clearly prefered to talk about areas where the Soviet concessions were apparent. Opponents, on the other hand, used Backfire as an understandable symbol of US weakness at the negotiating table, as a marketable method of attaching a killer amendment in a manner unacceptable to the Soviet side but difficult for US Senators to reject.

Senate Armed Services Committee. When the draft of the SALT II Treaty was referred to the Senate Foreign Relations Committee, the Armed Services Committee also prepared for hearings with the expectation that its eventual summary of testimony received would carry considerable weight in the full Senate. Junior Senators in their first term, interested in SALT and arms control, viewed the Committee as the best place to influence the upcoming treaty and some, on entering the Senate, were specifically advised to seek placement on the Committee for that purpose. Various members of the Committee were also among Senator Cranston's group of 23 selected to manage the upcoming floor debate.

No report from Armed Services was planned in the early stages of ratification. Each committee understood and respected jurisdictional lines, and under the rule of comity, expected to provide no interference with Foreign Relations' traditional control over treaties. But, with the SALT II Treaty, some members of the Armed Services Committee let their anti-SALT feelings override comity. By a vote of ten to zero, with seven members voting present, the majority decided to issue a printed report which, in effect, rendered a judgment on the treaty itself. The seven holdouts abstained on the grounds that, while hearings were fine, a report was not. When Senators Jackson and Tower held a press conference in which they referred to the report and used the words "committee" and "majority of the committee" interchangeably, the seven dissenters objected. They were given until 1 February 1980 to submit their positions and the deadline was subsequently extended to 1 March and beyond. At last report, the additional comments still had not been submitted.

However, the initial draft report has been given limited circulation, and has received considerable attention in the Senate. This draft credits Backfire with one-way capability against the US, mentions an eventual production run of 375-400 bombers, and notes the JCS opposition to Backfire outside the aggregate, as well as the Administration decision that counting Backfire would impede movement toward a treaty. It then suggests that Soviet assurances "caused problems more serious than the one it was intended to solve. It [the statement] promises not to give the Backfire capabilities the US knows the Backfire already has. It is therfore, in our judgment, false. Worse, it is deceptive toward the American public." 87

"When President Carter attempted to obtain agreement [at the Vienna Summit] with a US interpretation to the effect that any significant

increase in range/payload of the Backfire would be inconsistent with Brezhnev's assurances, he was reputifed—the Soviets thus paying the way for significant improvements to the Backfire.

"At various stages of the negotiations, the United States sought a number of 'collateral assurances'...all aimed at inhibiting its [Backfire's] use as a strategic bomber...At one point, the Administration took the position that the assurances finally agreed upon were inadequate and would have to be substantially enlarged. At another point, the Administration expected that the Backfire assurances would be incorporated in an exchange of letters signed by the heads of state and accorded a status comparable to the treaty as a whole. In all of this, Soviet intransigence was rewarded by American acquiescence....In short, the treaty permits the Soviet program to continue much as it was estimated to continue in the absence of an agreement."89

"We thus find ourselves with an assurance that does not assure but, rather, deepens the concern of the Committee that the Soviets intend to fully exploit their right to deploy nearly 400 Backfires, many of them significantly improved versions, between now and the time the treaty expires. Such a fleet...unchallenged by US air defense, will have formidable strategic capabilities against the United States and its Allies."

The draft then depicts the Backfire's ability to deliver an additional one-third of total Soviet megatonnage (four million pounds), the need for ten billion dollars for improved US air defense, the worthlessness of a US equivalent to Backfire, and the problem of no agreed definition covering "heavy bombers." "In light of the foregoing, the proposal that the Senate act to incorporate the Soviet assurances on Backfire in the treaty or otherwise elevate its status would seem illadvised, likely to make matters worse rather than better. For one thing, it would imply that the defect in the Soviet assurances is one of form when, in fact, it is profoundly one of substance. If taken seriously it would mislead the American people into believing the problem had been solved."91

The Armed Services Committee draft report, unlike that of the Foreign Relations Committee, does not yet have minority viewpoints incorporated. However, such views do exist. One of the Senators who voted present when the issue of printing a report was discussed was Senator Levin, Democrat from Michigan; another was Senator Nunn, Democrat from Georgia. Both men take less negative views of Backfire assurances, and they will both undoubtedly have an influence on the outcome in the entire Senate, if the treaty is ever brought to the floor.

Senator Levin, as a treaty proponent, considers the Administration's Backfire arrangements unsatisfactory. He stresses the need for some Soviet acknowledgement going beyond the Foreign Relations Committee reservation. He and Senator Exon of Nebraska cosponsored an amendment to have a Russian text of the Backfire statement attached to the ratification document, which the Soviets could then acknowledge publicly in the forum of their choice (the Supreme Soviet perhaps). He is concerned too about the impact of a production violation by the Soviets, wondering if 31 or 32 aircraft per year off the production line is cause for abrogation. He also appreciates that the issue is clearly understandable to a public largely ignorant of the more complex SALT issues, that his vote would have to be explained in Michigan, and that the present letter is unsigned, unenforceable, and thus of marginal value. For him, however, the Backfire assurances could be positive political assets when explained as a

constraint on the Soviets and not on comparable US aircraft. In sum, faced with an up or down vote, he will vote for the treaty in spite of Backfire, but would clearly have preferred a more saleable outcome. 92

Perhaps the crucial Senate vote on the Armed Services Committee among those who did not support the majority is Senator Nunn's. Others in the Committee and on the staff see him as essentially neutral toward SALT II. He considers the Backfire as far from the most deadly issue in SALT, since it has no real first strike capability, is heavily committed to the peripheral mission already, is a superb naval and theater strike weapon, and would at best be foolishly expended in a strategic role. However, the arguments (about public currency, an easily translatable issue, an apparent absurdity) were not lost on Nunn's staff either. But Nunn's principal concern is defense spending, and he is certainly against SALT without the Carter Administration's demonstrated commitment to a stronger defense in the neighborhood of an annual five percent increase over the next five years. 93

Others associated with the Armed Services Committee felt the Administration "blew it" at the summit, and that, at best, the oral exchange drew attention to a bad issue. They expressed confusion over what was traded for what. All were aware that Backfire was best utilized in a peripheral role, that most Soviet destructive power was in ICBMs, that the lack of any serious US air defense capability enhanced Backfire's threat in the follow-on to a first strike consisting of a major missile exchange, and that production limits were useful to keep additional Backfires out of LRA. For most, the US Backfire was not a significant option since the US would never, in all likelihood, build such a marginal intercontinental bomber. 94

The House Armed Services Committee. Pursuant to its subcommittee (on Intelligence and Military Application of Nuclear Energy) oversight responsibilities for arms control and disarmament matters, the House has also been involved with its own SALT II hearings conducted under House Rule X, clause 3(A). Their conclusions, in a report labeled SALT II: An Interim Assessment, are closely aligned with the majority report of the Senate Armed Services Committee.

"When coupled with the realities and trends in the military force structures, SALT II could have profound and adverse effects upon the United States-Soviet strategic balance. Since SALT II will not constrain—in any militarily significant way—the Soviet Union's military power but will constrain several important US strategic force options, SALT II will not prevent a destabilizing imbalance of power from emerging. If SALT II is to be in the best interests of the United States, the interest to be served is in making the balance of power more stable. The panel finds no such attribute in SALT II as it is presently structured." 95

On the Backfire specifically, the House comments also mirror those found in the Senate Armed Services Committee draft. "...There is no longer any reasonable doubt that the Backfire has the capability to attack the United States. Moreover, significant improvements to the Backfire's existing capability could be made which would not be detected by US national technical means of verification." 96

"The supersonic Backfire Bomber meets all reasonable definitions of a strategic delivery system, and is far less limited than subsonic B-52s and ground and sea-launched cruise missiles. The panel believes that the Backfire should be included in the aggregate total of strategic nuclear

delivery vehicles permitted on each side. A failure to include the Backfire in the aggregate total would mean that the Soviets by 1985... could have a force of some 400 Backfires deployed. A bomber fleet of this size would count for a 25 to 30 percent increase in the Soviet Union's deliverable megatonnage." 97

"'Assurances'...would be without military significance in a crisis period. Since it is obvious that any attack on the United States would involve only weapons then in being, the panel's concern with the Backfire bombers...is their potential impact in time of war. [italics original] Assurances which would limit the Backfire in time of peace, but not in time of war, are, in the panel's view, wholly irrelevant if not patently ridiculous. Further, the panel is concerned that in a time when the United States is seeking assurances that the Soviet Union will not increase the present production rate of the Backfire bomber, the Soviets have significantly expanded their Backfire production capability."98

"The panel submits that a SALT agreement which addresses none of the root causes of the so-called 'arms race,' but which would legalize a future de facto Soviet strategic superiority, would solve none of the problems of detente, but may well cause new problems in the future."99

The Current SALT Status in Congress. Shortly after the treaty was favorably reported out of committee in November 1979, President Carter asked the Senate leadership to move it to the bottom of the Senate calendar, not because of Cuba and Afghanistan, but because the votes were not there to support its passage. The President also declared his intention to abide by the treaty's provisions—the functional equivalent, for the United States, of an executive agreement with the Soviet Union. However, in a 14 March 1980 news conference, President Carter reportedly surprised his aides by stating that, after close consultation with Congress, he might declare SALT no longer in the nation's interest, and that if such a declaration were made, he would notify the Soviet Union that the treaty's terms were no longer legally binding. 100 Announcement aside, the SALT II Treaty is expected to remain where it is until after the 1980 election.

V. Backfire in 1980 and Beyond

Conclusions on Backfire. The military has consistently maintained that arms control agreements must be based on capabilities, not intent. Therefore, they have insisted that Backfire be considered on its technical merits and included in the aggregate since all parties acknowledge it has some intercontinental capability. In spite of rational arguments citing Soviet intent to use Backfire in a theater role, the argument about capability has never been completely resolved. Rather, a political judgement overruled the military judgement. The JCS accepted the political judgement because they could live with it, and because, with renegotiation, the cure would be worse than the disease.

The argument about capability versus intent, however, is not clear-cut, because the element of technological change has been interjected. In the current environment it has become almost impossible for arms control agreements to be unequivocably equitable when technological change is so difficult to incorporate. 101 "The trend toward multicategory and multimission systems is rapidly eroding the link between restrictions by category and curtailment of military performance. Visible size and configuration of a weapons system are no longer teliable indicators of performance and mission. The particular significance of multimission weapons is precisely that they cannot be pinned down in any category: they

can span the whole spectrum. "102" Backfire provides an interesting model of a weapons system proliterating outside negotiations: a gray area weapon which has operational, teployment, and growth potential characteristics which "cannot be brought under the agreed criteria chosen for the purpose of a particular negotiation, either functional or geographic." 103 It has been difficult to define Backfire as a strategic weapon because of the ambiguity of its capabilities, its function when deployed with operational units, the nature of its impact. 104

Not only is it difficult to treat in SALT II, but it promises to remain a nightmare in future negotiations because cruise missiles can be added, performance can be subtly improved, and deployment can always be altered in wartime, adding to the existing ambiguity. There is also the clear danger that the present assurances fly in the face of the historical Soviet tendency to repeatedly refine a basic airframe with incremental improvements. Further, one can only be skeptical about the attempt to slow procurement when all previous efforts have been thoroughly discredited. Finally, arguments over range calculations are basically worthless given the ability to refuel aircraft in flight. Thus, as a precedent for treating new Soviet and American bombers, the assurances have limited utility.

It is also clear that the Soviet interest in keeping Backfire outside the central strategic systems aggregate of 2400 presently (and 2250 by the end of 1981) has been far stronger than the marginal US desire to include it. 108 The Soviets have a major disincentive to eliminate additional systems beyond the 200-250 weapons they already have to destroy by 1981, and counting Backfire would require an additional cut for each Backfire counted. The current administration has in effect ruled that the strategic significance of Backfire, with only an incremental contribution to deliverable Soviet strategic megatonnage, is at best only marginal for the US when the Soviets already have ample weapons to cover every important US target with redundancy. 109 For these reasons, and because the Soviet deployment patterns for the Backfire bomber seemed to signal their intent to use it in the theater and naval strike roles, both sides concluded that Backfire would be excluded from the heavy bomber category in SALT II. With this precedent it will be difficult to reverse the US position in future negotiations.

In spite of the rational technical arguments for leaving Backfire outside the aggregate, the Backfire assurances have caused problems domestically. One is forced to conclude that in its political treatment by the Administration the best has clearly been the enemy of the good. "Much of America's negotiating effort over the last years has been taken up with the frustrating task of seeking to protect the eventual treaty against SALT's critics; the result may be a sounder and tidier agreement—but whether these mostly marginal improvements will have been worth the delays must remain open to question. "110 The years since Vladivostok spent improving Backfire's technical assurances for political reasons have not borne fruit. Now SALT faces strong domestic political opposition, and during the ratification process Backfire has been useful to an opposition discontent with broader trends, with American acquiescence, with disappointment over arms control in general, with frustration over the US inability to contain the Soviet strategic momentum.

The Lessons from SALT I and SALT II: While SALT I froze offensive forces, stopped the ABM deployment; and saved considerable dollars, it was not intended to address the concept of equality and it failed to prevent the Soviets from taking advantage of the opportunity to put at risk our secure second-strike force of Minuteman missiles. SALT II codified parity,

but did not establish sufficiently low force ceilings to prevent the continued emergence of the Minuteman threat and was not intended to address threats to peripheral stability. Thus, faced with a deterioration of the foundations of US and of Allied security policy which have existed for two decades—the ICBM in the US and the long-range theater nuclear strike forces in Europe—the US has been forced to acquire the MX (or some other) missile system and NATO Europe has decided to supplement arms control with force modernization.

SALT II has raised crucial issues for NATO, for those very weapons on which NATO's defense and deterrence depend and those by which they are threatened are subjects of the talks, yet outside Europe's ability to influence. SALT II has introduced US-NATO problems into the arena of US-Soviet negotiations and creates the potential for driving a wedge between us and our allies. Il In the face of the threat from new Soviet theater weapons, NATO has decided to modernize, but they have also made a political commitment that any major NATO tactical nuclear force modernization must be accompanied by a concerted alliance effort to achieve theater arms control. 113

Chancellor Schmidt's remarkable speech in London in October 1977 clearly pinpointed the new problem for NATO. "SALT codifies the nuclear strategic balance between the Soviet Union and the United States. To put it another way, SALT neutralizes their strategic nuclear capabilities. In Europe, this magnifies the significance of the disparities between East and West in nuclear tactical and conventional weapons...The strategic arms limitations confined to the United States and the Soviet Union will inevitably impair the security of the West European members of the Alliance vis-a-vis Soviet military power if we do not succeed in removing the disparities of military power in Europe parallel to the SALT negotiations. "114" "The implication of the Chancellor's argument was that in a codification of strategic parity...US strategic forces could be neutralized..." The Europeans are worried that Backfire assurances deal only with the US and not with Europe, that the American strategic deterrent may be decoupled from Europe's tactical nuclear force deterrent, and that "while a bad Backfire kills Americans, a good Backfire kills Europeans." 116

In more general terms, the SALT process has been misunderstood. SALT "is not a carrot to tempt the Soviets into good behavior nor a stick to beat them into line....It is not a barometer or a polygraph between trusting friends....It is not a school to educate the Soviet Union....It is not a cool, technical, rational bargaining forum into which details of a permanent stable military balance can be drawn up."117 But because SALT was often oversold as the way to accomplish various of these tasks, SALT is no longer surrounded by enthusiasts and many former advocates are now keenly disappointed in arms control as an effective instrument of national security policy. While opponents "have found it difficult in reality to fault the treaty...its proponents have found it difficult to present as a major contribution to America's and the West's security."118 Therefore, the debate has tended to focus, not on the merits or demerits of the treaty, but on the broader and less well defined issues of the strategic balance and on legalisms by which to refine various parts of the treaty. As a political exercise, SALT took too long, was not always well handled, and the Soviets' adventurism and growing supply of weapons by which to circumverst the treaty-Backfire included -became more threatening. The Goviets, who do not share America's concept of stability, saw a way to move the confrontation to an area outside SALT. 119 A concensus did develop, however, that those concerned with the deteriorating strategic balance might use SALT to apply pressure on the Administration to increase its expenditure for defense and thus create leverage on the Soviets that is now absent. Arms control by itself has proved to be insufficient. These experts now believe we can only provide for our own security through arms procurement linked to arms control, and that if the two are not joined, neither will be sensible. 120 As one official said, and SALT II has clearly illustrated, "there are no sweetheart deals in this business."

The Case for SALT II. "SALT II only ratifies the existing balance. It cannot create a new one." 121 "The Western problem is not a poor SALT package, rather it is a poor set of Western strategic programmes which provide the negotiating base for SALT." 122 It is true that SALT II leaves aside Backfire and does not address the problem of a secure second strike force in NATO Europe. Yet it is also clear that there would be a major political problem if SALT II were not ratified. "If an administration which has put so much effort and political capital into the treaty negotiations should be incapable of engaging the necessary legislative support, its authority would be shattered across the board—for allies and adversaries alike...America would appear incapable of orderly international conduct." 123 It would signal a major policy reversal after ten years of negotiations aimed at improving US-Soviet relations, especially in light of the new initiatives with China. To reject SALT and thus parity would be a return to the race for superiority, and risk a damaging, costly renewal of the Cold War. 124

In the author's opinion SALT II should be accepted in spite of Backfire, which only tangentially damages US security interests at the strategic level. While SALT does not solve the problem created by an insecure second-strike force or limit Backfire, neither does it cause the problems. SALT does give us a stable planning environment and an equally clear measure of performance against which to measure Soviet conduct. 125 It does allow us to build on prior negotiations, to secure the advantage of continued dialogue, and is an introduction to the critical, twin issues of force modernization and arms control in Europe. Finally, it does require the Soviets to dismantle nearly ten percent of their strategic forces beginning in 1981, which they surely would not attempt without the stimulus of a ratified SALT II Treaty. Thus, on balance, the author concludes that it is in the best interests of the United States to ratify the treaty in its present form. As General Russell E. Dougherty, formerly Commander-in-Chief, Strategic Air Command, argued before the Senate Foreign Relations Committee, "I do not like the exclusion of the Soviet's Backfire bombers....I cannot even disagree with my respected colleagues who are confident that we could (or might) have negotiated a better agreement -- they may be right, but we didn't negotiate a better one, we negotiated this one."126

Backfire in Follow-on Negotiations. An analysis of the negotiating history surrounding Backfire suggests its treatment as other than a central strategic system is likely to continue. An analysis of technical data suggests the Backfire is a superior long-range tactical weapon. An analysis of the threats suggests that, although it has intercontinental capability, Backfire is presently more dangerous to theater and naval forces than to the continental United States. An analysis of the guid pro quo suggests there are trades for Backfire in Europe. Finally, an analysis of the political climate suggests there is strong European interest in new arms, control initiatives in conjunction with NATO force modernization.

However, this study has also suggested that forlow on negotiations dealing with gray area weapons will be technically complex. "Apart from the asymmetries in currently deployed forces [favoring the Soviets] the difficulty of measuring the [long-range tactical nuclear] LTN balance, and verifying what is to be controlled, there remain a number of extremely difficult and intricate political and technical impediments to be considered and overcome." Politically it will be equally complex, for while the President's proposed scheme for deep cuts in central strategic weapons for SALT III may help the United States, it will only exacerbate the concern in Europe over the current asymmetry and the dangers of decoupling. Therefore, if we are to involve gray area weapons in some manner in future negotiations, we will require extremely close and detailed technical and political coordination with our allies.

Bearing these cautions in mind, there are several possible arenas for such talks. Linking gray area weapons to the Mutual and Balanced Force Reduction talks is not promising. These talks have been stuck on dead center for five years over the question of reducing the overwhelming Soviet conventional superiority which the Russians have no incentive to bargain away. A separate, special negotiation dealing only with gray area weapons "and all those that possess them or can produce them would be a negotiating nightmare and assure failure.... The very nature of these weapons is such that they cannot be contained in a specific forum because they cover a whole range of weaponry: they elude definition, and any attempt to define them is foredoomed to failure."128 The only choice seems to be to include in SALT "those weapons on the periphery which, if not included, would devalue any agreement that might emerge." 129 However, "because Western European nations have little, if any, margin of excess capabilities with which to negotiate...it appears probable that the United States will have to bear the initial responsibility...."130 Thus, the forum which appears to offer a realistic hope without impenetrable complexity is a SALT III that further reduces central systems in concert with President Carter's wish but simultaneously deals with the more significant long-range tactical nuclear forces of the United States and the Soviet Union and acknowledges the existence of, and accounts for, comparable French and British weapons. The political climate is ripe, and the emerging Pershing II and ground-launched cruise missiles confront the Soviets with serious enough threats and with staggering defensive costs sufficient to induce them to bargain.

Arms control proponents have argued forcefully for a series of small, specific, limited steps for short periods to rebuild confidence in the arms control process and to demonstrate that the idea can work. 131 Therefore, it seems to be most useful to suggest that the items for discussion be separated into three categories (aircraft, land-based missiles, and sea-based systems) and dealt with in an integrated, sequential fashion.

The weapons which might be considered in addition to the present intercontinental forces now in SALT are those of multiple use that have ranges approaching 1500 nautical miles (the distance from London to Moscow). These would include: US F/FB-111s, British Vulcan and French Mirage aircraft, Allied SLBMs, and various ballistic and cruise missile systems for the NATO side; and Badger, Blinder, and Backfire aircraft, various submarine-launched missiles, and the SS-4, SS-5, and SS-20 missiles for the Soviet side. (It could be argued that systems with lesser range capability might be included, but this would enormously complicate the number of participants, expand the number of systems greatly, and create verification problems of serious magnitude.)

However, before any talks begin, there must be an intense period of planning cooperation with our NATO Allies to identify the main security problems, to assess how arms control can help to alleviate them, and to set up, within the Alliance, the negotiating environment. "Above all it will be vitally important for the United States and the Alliance, as they prepare to enter the next round, that they know roughly where it is that they want to arrive at the end. The old dictum—if you don't know where you're going, every way will lead you there—simply does not [and cannot be allowed to] apply to the sensitive effort of seeking security through constraints on military power. "132"





SOVIET BACKFIRE STATEMENT

On 16 June 1979, President Brezhnev handed President Carter the following statement:

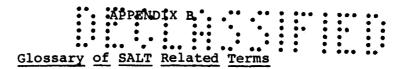
"The Soviet side informs the US side that the Soviet "TU-22 M" airplane, called "Backfire" in the USA, is a medium bomber, and that it does not intend to give this airplane the capability of operating at intercontinental distances. In this connection, the Soviet side states that it will not increase the radius of action of this airplane in such a way as to enable it to strike targets on the territory of the USA. Nor does it intend to give it such a capability in any other manner including by in-flight refueling. At the same time, the Soviet side states it will not increase the production rate of this airplane as compared to the present rate."

President Brezhnev confirmed that the Soviet Backfire production rate would not exceed 30 per year.

President Carter stated that the United States enters into the SALT II agreement on the basis of the commitments contained in the Soviet statement and that it considers the carrying out of these commitments to be essential to the obligations assumed under the Treaty.

CYRUS VANCE





Aggregate: Overall limits on ICBM launchers, SLBM launchers, heavy bombers, and Air-to-Surface Ballistic Missiles. The overall weapons limit is 2400 initially and a reduction to 2250 by the start of 1981. There are also aggregate sublimits on various categories of weapons.

Capability: The ability to carry out a specific course of action, dependent on variables such as enemy forces, time, space, weather.

Cruise Missile: A pilotless, winged, airbreathing, guided vehicle, whose flight path to the target is conducted at nearly constant velocity. Its strength resides in very low altitude flight, small radar signature to elude enemy radar, and extremely accurate guidance for the warhead.

<u>Deployment:</u> The allocation of manpower and equipment to operational units; the relocation of forces to desired areas of operations.

Essential Equivalence: A recent American concept calling for US and Soviet strategic capabilities to be effectively equal, though not numerically identical. It is equated with parity, and within the political context is an attempt to capture the peacetime political implications of the strategic force balance.

Forward Based Systems (FBS): Aircraft or other nuclear delivery systems that could be launched from foreign soil in strikes against a third country. Essentially American forces designed to support NATO forces in Europe to offset Warsaw Pact conventional superiority.

Gray Area Weapons: Those systems which do not fit easily into clearly defined functional weapons classifications (tactical or strategic) but have capabilities in both conventional and nuclear conflict or for both intercontinental and regional conflicts.

Freedom to Mix: A US SALT concept that each side in the negotiations should be free to determine the composition of individual delivery systems within set overall aggregates.

Heavy Bomber: A multiengined aircraft with intercontinental range, designed specifically to engage strategic targets whose destruction would reduce the enemy's capacity and/or will to wage war. A source of disagreement in SALT, the Soviets defined it as a long-range aircraft intended to destroy ground or sea objectives in the enemy's deep rear or homeland. In SALT II language, it was described by type, and included four categories in the aggregate: B-52 and B-1 for the US and Bear and Bison for the USSR; future types of bombers which can carry out the mission of a heavy bomber in a manner superior to or similar to that of the above listed bombers; types of bombers equipped with cruise missiles capable of a range in excess of 600 kilometers; or types of bombers equipped with air-to-surface ballistic missiles.

Intention: An aim or design (as distinct from capability) to execute a specific course of action. Intentions are conditioned by variables including: interests, objectives, policies, principles, commitments, and national will.

Intercontinental Ballistic Missile (IOBM): A land-based missile capable of a range in excess of 5,500 kilometers (about 3,000 nautical miles) that flies an elliptical trajectory, a portion of which is outside the earth's atmosphere.

Medium Bomber: A US Defense Department definition for aircraft designed for a tactical operating radius (unrefueled) of under a 1000 nautical miles at design gross weight and bomb load. There is no direct Soviet equivalent and the type has not been defined in SALT.

SALT Backstopping Committee: An interagency group established during the Carter Administration to give staff support to the Standing Consultative Commission and the US SALT Delegation, chaired by ACDA. During the Nixon/Ford Administrations its functions included transmitting guidance on SALT issues and providing other kinds of day-to-day support for the delegation in Geneva. It also supported the Verification Panel and Verification Panel Working Group.

SALT Working Group: A Carter Administration staff in the National Security Council supporting the Special Coordinating Committee on SALT-related matters. It is chaired by a National Security Council representative.

Special Coordinating Committee: One of the two committees created in the National Security Council under the Carter Administration, replacing the Verification Panel of the Nixon/Ford years, meant to deal with SALT and non-SALT issues.

Tactical Nuclear Forces: Nuclear combat forces expressly designed for deterrent, offensive, and defensive purposes that contribute to the accomplishment of localized military missions. They may be employed in general or limited war.

Verification Panel/Working Group: A policy-making body and support staff in the National Security Council during the Nixon/Ford years for the interagency study of the strategic implications of SALT and verification problems associated with those agreements. Chaired by the Assistant for National Security and National Security Staff respectively.

APPENDIX C Comparison of Backfire With Other Contemporary Aircraft

Country & Type	Unrefueled High Altitude Range (nautical miles)	Combat Payload (pounds)	Maximum Weight (pounds)	Engines number type		Total Number Available
				i		
United States	6 100	60 70 000	. 300 000	4		
B-1.	6,100	60-70,000	389,000	4	jet	4
B-52D	6,025 3	$\begin{array}{c} 10,000 & 3 \\ 60-70,000 & 1 \end{array}$	450,000	8	jet	75
B-52G/H	10,000 1		488,000	8 2	jet	285
FB-111	3,100	13,500	114,000	2	jet	65
United Kingdom						
• Vulcan	4,600	21,000	200,000	4	jet	48****
France						••••
	2 000	16 000	67 700	2	2.44	36
Mirage IV	2,000	16,000	67,700	Z	jet	30
Soviet Union						•
Bear	6,775	25,000	340,000	4	turboprop	189 • • • •
Bison	7,000 2	$10,000^{2}$	363,700	4	jet	4 3
Backfire	5,000+ ¹	20,000 ³	270,000	2	jet	200 • • •
Badger	4,250	7,000	175,000	2	jet	1,500 +
Blinder	1,400	unknown	185,000	2	jet	135
******						*••
•••••						

Jane's All the World's Aircraft, 1960/61, 1961/62, 1964/65 and 1978/79, unless otherwise noted.

- John M. Collins, American and Soviet Military Trends, 1978, p. 107.
 Air Force Magazine, March 1980, pp. 120-21.
 The SALT II Treaty, Part 4, 1979, p. 371.

- NOTES

 Jane's All the World's Aircraft, 1978-79 (New York: Franklin Watts, Inc., 1978), p. 201.
- 2. Jane's, p. 202.
- 3. Jane's, p. 202.
- 4. The Backfire can carry two each AS-4 Kitchen or AS-6 Kingfish missiles with ranges approximating 150 miles low altitude or 500 miles high altitude. Aviation Week and Space Technology, Vol. 112, No. 12, p. 116. Also, Air Force Magazine, Vol. 63, No. 3, (March 1980), pp. 120-21, 133.
- 5. John G. Behuncik, "The Soviet Backfire Bomber: Capabilities and SALT Complications," The Heritage Foundation Backgrounder, No. 57 (April 1978), pp. 6-7. Also, Georg Panyalev, "Backfire--Soviet Counter to the American B-1," International Defence Review, May 1975, p. 640.
- Georg Panyalev, "Backfire and SALT II," <u>International</u> <u>Defence</u> <u>Review</u>, February 1977, p. 209.
- 7. Senate Committee on Foreign Relations, The SALT II Treaty, Report (Washington, D.C.: GPO, 1979), p. 175, and Part 4, p. 465.
- 8. The SALT II Treaty, Report, p. 177, and Part 3, p. 148.
- 9. John Newhouse, Cold Dawn: The Story of SALT (New York: Holt, Rinehart and Winston, 1973), p. 69.
- 10. Personal Interview with Paul Nitze, Washington, D. C., 11 March 1980.
 "President Johnson stressed in his proposal, that he was only interested in discussing offensive limits if appropriate defensive limits were also included. The Soviets rejected air defense talks due to their difficulty in distinguishing between strategic and tactical US aircraft and because the same air defense system countered both types of aircraft."
- 11. Newhouse, pp. 123, 130.
- 12. Paul Nitze Interview. "The OSD definition was very complicated and hinged on differences for jet, turboprop, and swing-wing aircraft. The ACDA version was adopted because of its simplicity, and favored the type designation that was eventually incorporated in SALT II."
- 13. Personal Interview with a member of the US SALT I Delegation, Washington, D. C., March 1980. Between 1969 and 1972 the bomber problem was repeatedly discussed by the delegations. When it became clear that the US would scrap its supersonic B-58 bombers and limit its buy of FB-lll aircraft, the Soviets declined further discussion on offensive bomber limits. In Washington, at the interagency level, some consideration was given to including medium bombers in the aggregate. JCS wanted to limit as few systems as possible and ACDA and State agreed that including medium bombers would only complicate the count. So the issue was dropped.
- 14. Strobe Talbott, Endgame; The Inside Story of SALT (New York: Harper and Row, Publishers, 1979), p. 31.

- 15. Paul Witze Interview. After the first session of SALT II, the principal members of the US Delegation, with the exception of Mr. Nitze and Br. Harolf Brown, were all replaced. The changes were made because the White House was displeased with Gerard Smith as head of the delegation and also because Senator Jackson was unhappy with some of the team members. The JCS representative, Lt Gen Royal B. Allison, USAF, was replaced by Lt Gen Edward Rowny, a man thought to be more acceptable to Senator Jackson.
- Paul Nitze Interview. Also, Personal Interview with Ambassador U. Alexis Johnson, Washington, D. C., 11 March 1980.
- Personal Interview with a former member of the OSD SALT Task Force, 17. Washington, D. C., March 1980. When the option papers were prepared and circulated for agency comment, OSD and JCS footnoted Backfire as a heavy bomber. At the Verification Panel Working Group it was agreed that the appropriate force structure table would be footnoted with their position highlighted. When the paper was circulated the next morning at the Verification Panel meeting, the footnote was absent and its contents had been expanded elsewhere in the body of the report. The OSD and JCS staffers were too late to surface the disagreement, and the Backfire was not classed as a heavy bomber.
- Thomas W. Wolfe, The SALT Experience (Cambridge: Dallinger Publishing 18. Co., 1979), p. $17\overline{5}$.
- Paul Nitze Interview. Also, Bernard Gwertzman, "Atom-Arms Vehicle Limit will be Set Below 2,500, " New York Times, 26 November 1974, pp. 1,6.
- Bernard Gwertzman, "Kissinger, After Senate Briefing, Calls Criticism of Arms Accord Surprising," New York Times, 5 December 1974, p. 3.
- 21. Ambassador Johnson Interview.
- Ambassador Johnson Interview.
- Personal Interview with Lt Gen Ed Rowny, USA, Washington, D. C., 5 March 1980.
- 24. Ambassador Johnson Interview.
- 25. Ambassador Johnson Interview.
- John M. Collins, American and Soviet Military Trends Since the Cuban Missile Crisis (Washington: Center for Strategic and International Studies, 1978), p. 19.
- Gerald R. Ford, A Time To Heal (New York: Harper and Row, Publishers, 1979), pp. 304, 306. Also, Wolfe, pp. 86, 201.
- 28. Wolfe, p. 212.
- Ford, p. 358. Also, Talbott, p. 37. 29.
- 30.

- 32. Talbott, p. 39.
- 33. Roger P. Labrie (ed.), SALT Handbook: Key Documents and Issues, 1972-1979 (Washington, D. C.: American Enterprise Institute, 1979), pp. 420-21.
- 34. Talbott, pp. 46-47.
- 35. Talbott, p. 53.
- 36. Talbott, pp. 58-60.
- 37. Talbott, p. 62.
- 38. Talbott, pp. 66-67. Even Walt Slocombe of OSD and General Rowny of JCS, who accompanied Secretary Vance to Moscow, were not given the detailed proposal until after they landed in Moscow, and only then an expurgated version. See Talbott, pp. 68-69.
- 39. Personal Interview with a member of the US SALT I and SALT II Delegations, Washington, D. C., March 1980.
- 40. Labrie, pp. 428-29.
- 41. Talbott, pp. 83-85.
- 42. Labrie, pp. 446, 449, 457. In Brzezinski's 1 April 1977 press conference and Secretary Brown's 13 April 1977 speech at the University of Rochester, both men publicly expressed the willingness to exclude Backfire from the aggregate as long as assurances were provided.
- 43. Talbott, pp. 86-87.
- 44. Talbott, pp. 89-90.
- 45. Labrie, p. 482.
- 46. Wolfe, pp. 46-47.
- 47. Labrie, pp. 389-90.
- 48. Personal Interview with a past high State Department official, Washington, D. C., March 1980. Also, Talbott, p. 213.
- 49. Labrie, p. 512.
- 50. Labrie, p. 394.
- 51. High State Department official, Interview.
- 52. Labrie, p. 579.
- 53. Talbott, p. 214.
- 54. Labrie, p. 579. General Jones remarked, "There are two considerations: one is to improve our air defense to the point that it would not be reasonable to consider the Backfire as an effective system trying to penetrate the United States; the other one is for us to have an option for our own Backfire. I wouldn't advocate this second option

- 54. Continued as just a they have their Backfire, we have our Backfire. If we ever went this direction, it should be because we would have a fundamental need for a system in this category. But this all against the backdrop of a discussion that takes place after a statement that we continue to recommend that Backfire be counted."
- 55. Talbott, p. 214.
- 56. Wolfe, p. 235.
- 57. Talbott, pp. 224-25.
- 58. Talbott, pp. 14-15.
- 59. Talbott, p. 15.
- 60. The SALT II Treaty, Report, p. 453.
- 61. Personal Interviews with senior officials of the Arms Control and Disarmament Agency, Washington, D. C., March 1980.
- 62. High State Department official, Interview. Also, Ambassador Johnson Interview.
- 63. Personal Interview with a senior official of the Central Intelligence Agency, Washington, D. C., March 1980.
- 64. Personal Interview with a high Administration official, Washington, D. C., March 1980.
- 65. Personal Interviews with past and present officials of the Office of the Secretary of Defense SALT Task Force, Washington, D. C., February and March 1980.
- 66. The SALT II Treaty, Part 1, p. 371.
- 67. Gen David C. Jones, USAF, <u>United States Military Posture for FY 1981</u> (Washington, D.C.: GPO, 1980), pp. 68-69.
- 68. Thomas M. Franck and Edward Weisband, Foreign Policy by Congress (New York: Oxford University Press, 1979), p. 288.
- 69. Franck and Weisband, p. 289.
- 70. Franck and Weisband, pp. 290-92.
- 71. Franck and Weisband, p. 292.
- 72. Personal Interview with Senator Carl Levin, Washington, D. C., 12 February 1980.
- 73. Senate Committee on Foreign Relations, The Role of the Senate in Treaty Ratification (Washington, D. C.: GPO, 1977), p. 3.
- 74. The Role of the Senate, pp. 5,7,8.
- 75. The SALT II Treaty, Report, p. 18.
- 76. Franck and Weisband, p. 293.

- 77. Personal Interviews with staff members of the Senate Foreign Relations Committee, Washington, D. C., March 1980.
- 78. Jeffrey G. Barlow, "SALT II Treaty Ambiguities: The Backfire Bomber and the SS-20," The Heritage Foundation Backgrounder, No. 102 (October 1979), p. 3.
- 79. The SALT II Treaty, Report, p. 175.
- 80. The SALT II Treaty, Report, pp. 18-19.
- 81. The SALT II Treaty, Report, p. 65.
- 82. The SALT II Treaty, Report, p. 62.
- 83. The SALT II Treaty, Report, pp. 51-52.
- 84. The SALT II Treaty, Report, p. 182
- 85. The SALT II Treaty, Report, p. 182.
- 86. The SALT II Treaty, Report, p. 215.
- 87. Senate Committee on Armed Services, (Unpublished Draft) Report on Military Implications of the Proposed SALT II Treaty Relating to the National Defense (mimeographed) (Washington, D. C.: Committee on Armed Services Staff), 1979, p. 18.
- 88. Unpublished Draft, p. 19.
- 89. Unpublished Draft, p. 19.
- 90. Unpublished Draft, p. 20.
- 91. Unpublished Draft, p. 20.
- 92. Senator Levin Interview.
- 93. Personal Interviews with Senatorial legislative assistants of Members, Senate Armed Services Committee, Washington, D. C., March 1980.
- 94. Legislative Assistants Interviews.
- 95. House Committee on Armed Services, SALT II: An Interim Assessment (Washington, D. C.: GPO, 1978), p. 3.
- 96. An Interim Assessment, p. 11.
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- 106. Bertram, Arms Control: Part II, pp. 13-14.
- Robert Perry, "Verifying SALT in the 1980's," The Future of Arms Control: Part I (London: Adelphi Papers, 1978), No. 141, p. 20. 107.
- Ruehl, p. 30. 108.
- Edward N. Luttwak, "SALT and the Meaning of Strategy," The Washington Review, Vol. 1, No. 2 (April 1978), p. 19. 109.
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