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Lieutenant General Thomas Power, Commander-in-Chief, Strategic Air Command, 1957-1964, and Director, Joint Strategic Target Planning Staff, 1960-1964, presided over the creation of SIOP-62 (Image, courtesy of Headquarters, U.S. Strategic Command)

The Creation of SIOP-62 More Evidence on the Origins of Overkill

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Since it was first created in 1960, the Single Integrated Operational Plan (SIOP)--the U.S. plan for nuclear war--has been one of the most secret and sensitive issues in U.S. national security policy. The essence of the first SIOP was a massive nuclear strike on military and urban-industrial targets in the Soviet Union, China, and their allies. To make such an attack possible, U.S. war planners developed a complex organizational scheme involving the interaction of targeting, weapons delivery systems and their flight paths, nuclear detonations over targets, measurements of devastation, and defensive measures, among other elements, and successive SIOPs would become even more complex. Much of this information remains highly secret and may never be declassified; it is even possible that no civilian official has actually seen the SIOP (which one author suggests amounts to a stack of computer print-outs). To ensure tight secrecy, when the first SIOP was created, its architects established a special information category--Extremely Sensitive Information (ESI)--to ensure that only those with a need-to-know would have access to the documents. ([Note 1](#))

The SIOP's tremendous importance--its implementation would mean the death of millions---has made it a subject of acute interest among historians and social scientists, and, to be sure, the subject of many FOIA requests. To shed as much light as possible on how the United States would have waged war in the nuclear age, the National Security Archive has made many declassification requests on U.S. nuclear war planning, especially the early history of the SIOP. High security walls around the SIOP have made this a difficult task but

significant information has nevertheless been declassified. To show how the SIOP came to be created and to show some of its basic features, as well as the problem of presidential control over nuclear planning, the Archive publishes on the Web for the first time documents recently released under appeal by the Defense Department as well as vintage material that was declassified and later reclassified in the early 1980s. This material makes it understandable why presidents, even those with deep knowledge of military affairs, have had difficulty grappling with nuclear war plans. When President Dwight D. Eisenhower, who tried to bring the war plans under control, received his first report on the SIOP 62 (for fiscal year 1962), he commented that it "frighten[ed] the devil out of me." Among the disclosures in these documents:

- The SIOP included retaliatory and preemptive options; preemption could occur if U.S. authorities had strategic warning of a Soviet attack;
- A full nuclear SIOP strike launched on a preemptive basis would have delivered over 3200 nuclear weapons to 1060 targets in the Soviet Union, China, and allied countries in Asia and Europe;
- A full nuclear strike by SIOP forces on high alert, launched in retaliation to a Soviet strike, would have delivered 1706 nuclear weapons against a total of 725 targets in the Soviet Union, China, and allied states;
- Targets would have included nuclear weapons, government and military control centers, and at least 130 cities in the Soviet Union, China, and allies;
- Alarmed White House scientists, Army and Navy leaders were concerned that the SIOP would deliver too many nuclear weapons to Soviet and Chinese territory and that the weapons that missed targets "will kill a lot of Russians and Chinese" and that fallout from the weapons "can be a hazard to ourselves as well as our enemy";
- According to the damage expectancy criteria of SIOP-62, it would take three 80 kiloton weapons to destroy a city like Nagasaki--which the U.S. had actually bombed with a 22 kiloton weapon;
- The Marine Corp commandant was concerned that the SIOP provides for the "attack of a single list of Sino-Soviet countries" and makes no "distinction" between Communist countries that were at war with the United States and those that were not;
- The Defense Department has overclassified and inconsistently released information about the SIOP.

In the late 1960, the Department of Defense leadership, with President Dwight D. Eisenhower's support, approved the Single Integrated Operational Plan-62 (for fiscal year 1962) agreeing that it should go into effect on 1 April 1961. SIOP-62 was the U.S. government's first comprehensive nuclear war plan; the first attempt to synchronize the nuclear forces of the U.S. Air Force, Navy, and Army so that they could be used in a massive attack on the Soviet Union, China, and their communist allies. The SIOP-62 plan for a combined attack by strategic bombers, Polaris submarine-launched missiles, and Atlas ICBMs, among other delivery vehicles was, according to historian David Rosenberg, a "technical triumph in the history of war planning." At the same time, however,

it was also "an American Schlieffen Plan, an ultimate strategy for war winning ... with an even less tenable basis in political and military realities than the German plan, infamous for its inflexibility, executed in 1914." ([Note 2](#))

For many years, the SIOP's very existence was a closely guarded secret. So far as this writer knows, the first reference in the print media was by Seymour Hersh, in a 9 December 1973 *New York Times* article entitled "The President and the Plumbers." There Hersh reported on White House fears that Daniel Ellsberg had revealed "the most closely held nuclear targeting secrets of the United States, which were contained in a highly classified document known as the Single Integrated Operation Plans, or S.I.O.P." ([Note 2a](#)) A few years later, however, information on the SIOP and its early history became part of the public record. In June 1975, a Congressionally-mandated Commission on the Organization of the Government for the Conduct of Foreign Policy--the "Murphy Commission" headed by career ambassador Robert Murphy--published its final report. Included was a multi-volume series of supporting studies including one by former RAND Corporation president Henry S. Rowen on "Formulating Strategic Doctrine." Drawing on years of government experience and consulting, Rowen provided a relatively detailed account of post-World War II nuclear planning. Besides a useful overview of changes in nuclear doctrine from the 1940s to the 1970s, Rowen's report included interesting and important details on the role of the Joint Strategic Target Planning Staff, the production of the SIOP, and nuclear targeting issues. In light of the recently announced "Schlesinger Doctrine," Rowen gave special attention to the problem of developing workable "limited" alternatives to the massive attack options embodied in the first SIOP. ([Note 2b](#))

In the wake of Rowen's seminal study, the mass media began to look more closely at U.S. nuclear war plans. On 10 May 1976, *Aviation Week and Space Technology* published a special report on "SAC [Strategic Air Command] in Transition", which included significant detail on the SIOP as it stood in 1976, when the Command was starting to move away from the concept of a "massive nuclear belch" toward concepts of strategic flexible response. On 5 September 1977, *US News & World Report* published an article by Orr Kelly, "If the U.S. Comes Under Nuclear Assault", which also included more details on the SIOP. *The Washington Post* did not mention the SIOP until the next decade, when Thomas Powers published an article, "What's Worse Than the MX," in the 31 May 1985 issue of the *Washington Post's* "Outlook" section.

By the time that Power's article had appeared, the SIOP had become, if temporarily, a subject that scholars could research. In 1981, the Reagan Presidency had begun but Jimmy Carter's executive order on information security policy and declassification remained in effect. Under provisions for systematic review of documents that were over 20 years old, during the summer of 1981, the Navy's historical reviewers opened up files on the SIOP in former Chief of Naval Operations Admiral Arleigh Burke's papers at the U.S. Navy Operational Archives. Burke had played a key role presiding over the creation of SIOP-62 so his documents included important data on the nature and scope of the attack plans as well as the internal Pentagon controversies over the plan. Two assiduous researchers quickly seized the opportunity and poured through the files. One was David A. Rosenberg, then a Ph.D. candidate in history at the University of Chicago; the other was Fred Kaplan, a Ph.D. candidate in political science at MIT who had worked as defense adviser to the late Rep. Les Aspin (D-Wis). Owing to the Operational Archives' inordinately tight restrictions on copying documents, Kaplan and

Rosenberg had to rely on their note taking abilities.

Within a few years, Rosenberg and Kaplan had published outstanding contributions to U.S. nuclear history. In the spring of 1983, *International Security*, an influential scholarly journal in the security studies field, published David Rosenberg's seminal article, "The Origins of Overkill: Nuclear Weapons and American Strategy, 1945-1960." ([Note 3](#)) Drawing on wide-ranging research in government archives, including the Burke files, Rosenberg provided the first detailed account of the complex interaction between presidential policy, military strategy, and operational planning. At the heart of Rosenberg's account is the growing power and independence of the Strategic Air Command, which gave the Air Force a decisive advantage in bureaucratic conflict over nuclear weapons strategy and planning. Thus, while the other military services had serious doubts about Air Force strategy and Chief of Naval Operations Arleigh Burke offered an alternative strategy, they could not restrain their more powerful rival from developing war plans premised on massive attacks on long lists of targets. A key element in Rosenberg's narrative was intelligence estimating which encouraged the Air Force demands for weapons to strike a growing list of targets. Rosenberg shows that President Dwight D. Eisenhower shared the Army's and Navy's concerns about war plans based on unconstrained nuclear attacks but, in the end, he was unable to alter the course of events.

Also in 1983, Simon and Shuster published Fred Kaplan's highly praised book, *The Wizards of Armageddon* (since reissued in Stanford University Press's "Nuclear Age" series. Like Rosenberg, Kaplan was interested in the nuts and bolts of nuclear war planning, but the focus of his research and writing was the theorists of nuclear strategy and their difficult relationship with the military establishment. The heart of his book was the role of RAND Corporation strategic intellectuals, including Bernard Brodie, William Kaufmann, and Arnold Wohlstetter, who sought to deploy their ideas to impose "rational order" on U.S. nuclear weapons policy. Drawing on an amazingly wide range of interviews as well as extensive primary source research, Kaplan illuminated the impact of ideas on military policy but also expanded knowledge of the history of the SIOP and the interservice controversies over nuclear targeting.

Significantly, the window of opportunity that enabled Kaplan and Rosenberg to write about the origins of the SIOP closed before their publications appeared. Not long after they were opened in 1981, the Navy reclassified the Burke files altogether; in 1982, the Reagan administration imposed a tighter classification/declassification policy that would slow down the declassification of classified historical documents. It was not until 1996 that the Naval Operational Archives reopened some of the Burke files that Rosenberg and Kaplan had seen and which Rosenberg cited in his footnotes. Since then the files were closed once more awaiting further processing of the entire CNO Burke collection. Luckily, researchers at the National Security Archive were able to copy the most important documents for publication in the Archive's collection, [*U.S. Nuclear History: Nuclear Arms and Politics in the Missile Age, 1955-1968*](#) making these documents more widely available to the interested public.

Another major breakthrough in knowledge of SIOP-62 was the declassification and publication of most of the text of a SIOP briefing to President Kennedy by JCS Chairman Lyman Lemnitzer in September 1961.

Stanford University professor Scott Sagan successfully pushed for declassification of this document, which he published, with valuable commentary, in *International Security* in 1987. [\(Note 4\)](#) The declassified briefing provides useful detail on the lead-up to SIOP-62, operational concepts, targeting sequence, SIOP forces, launch times, and the plan's alleged "flexibility." After the strong criticism of the plan from Army, Navy, and Marine Corps leaders who saw the SIOP as too inflexible, the briefing included a justification of the plan. According to Lemnitzer, the "current SIOP effectively integrates in a well-planned and coordinated attack the forces committed" and "is well designed to meet the [NSTAP] objectives."

To expand knowledge of the SIOP's early history, but also to supplement and amplify the contributions of Rosenberg, Kaplan, and Sagan, the Archive's nuclear weapons documentation project filed a number of Freedom of Information requests with the National Archives and the Defense Department. During the 1990s, when it was still possible to file a Freedom of Information Act request with the National Archives and expect to see it processed in a reasonable period of time, a number of documents from a key JCS file on the creation of the SIOP---3205 (17 August 1959)--became available, but with excisions at significant and trivial points. For example, as will be noted on the marking on a number of documents in this collection, the declassification reviewers consistently excised references to the "Sino-Soviet Bloc" as the focal point of strategic targeting (for example, [see document 10 below](#)), as if it were a deep secret that China and the Soviet Union were targeted nations during the Cold War. Moreover, the reviewers withheld data which had been released in the past--for example, the assurance of delivery factor of 75 percent that the weapons necessary to destroy a given target would arrive at each bomb-release line (BRL). Also withheld were damage expectancy probabilities--that is, the probability that weapons would cause severe damage to a given target. A variety of other important, details were also withheld, for example, whether the SIOP included retaliatory and preemptive attack options, or significantly, the general types of targets that would be attacked.

When these documents were released in 1996, the National Security Archive quickly filed a FOIA appeal for the withheld portions. Earlier this year, eight years later, the Defense Department responded to the appeal by releasing more details. Details that should have been released before, the Sino-Soviet bloc, the 75 percent assurance factor, and references to preemption, were duly declassified. Some information on the damage expectancies was partly declassified but not enough to make sense of the issue. Moreover, the reviewers withheld even the most general information on target categories. As these are general policy documents, they do not mention specific targets, but rather the type of targets which would absorb nuclear strikes. Although the documents released from the Burke papers confirm that urban-industrial areas, nuclear weapons installations, and air defenses were targeted, the Defense Department's reviewers refuse to release this most obvious forty-year old information. There may be some uneasiness with acknowledging plans for nuclear strikes against urban-industrial targets and some at the Pentagon may believe that declassifying the fact that nuclear weapons were a prime target is giving something important away.

The Pentagon's declassification policy on nuclear weapons strategy has been inconsistent. Four years ago, when it released, on appeal, a less excised version of the *History of the Joint Strategic Target Planning Staff: Background and Preparation of SIOP-62*, it declassified information that it

presently treats as classified. On the one hand, the Pentagon recently withheld some of the details of the NSTAP target objectives (see document 10 below); on the other hand, only a few years ago, it released the same information in the JSTPS history: "Specific objectives of [the NSTAP] were to destroy or neutralize Sino-Soviet strategic strike forces and major military and government control centers, and to strike urban-industrial centers to achieve the level of destruction indicated in study 2009." These conflicting policies on the release of information on the NSTAP is evidence of the subjectivity of declassification review and perhaps also of a Pentagon decision against releasing any information on SIOP targeting policy in spite of previous declassifications actions.

While newly and less recently released documents on SIOP-62 tell us much about the nature of the SIOP-62 and the forces that pushed it forward, much important information about the first SIOP remains classified. Some details, such as the targets on the NSTL, may never be declassified, at least not for many years. So far, no documents are presently available that detail the gross explosive yield or the fatality estimates associated with the SIOP-62 strikes. Based on their access to the Burke files, Kaplan and Rosenberg found that the megatonnage for the alert force was 2164 or slightly lower (2100). According to Kaplan, a strike by the total SIOP force would produce an explosive yield of 7,847 megatons. 175 million Russians and Chinese would be killed by the alert force, while a strike by the committed force would kill an estimated 285 million with 40 million more injured. [\(Note 5\)](#) As suggested by a recent study, casualty estimates produced by the JSTPS need to be treated cautiously because target planners saw blast damage as the foremost destructive effect of nuclear weapons thereby seriously underestimating the destruction that mass-fires would cause. [\(Note 6\)](#)

SIOP-62 was the first of the succession of SIOPs. The Kennedy administration, looking for "flexible response" and more options for the president, pressed the military to make the SIOP less rigid. The Joint Chiefs were willing to introduce target withholds and create options to strike military targets only (counterforce), but they were reluctant to change the fundamental character of the plan. The next revision, SIOP-63, included some of those changes, but it posited such huge attack options that one insider later characterized as "five choices for massive retaliation." While the SIOP would go through more changes, the overall structure of attack options did not change in fundamental ways until the late 1970s, after the Nixon and Carter administrations had pressed for limited nuclear options that gave the president an alternative to catastrophically massive attacks. Nevertheless, even after attack options became more "flexible" and precise, they involved massive destruction. As studies by the Natural Resources Defense Council have shown, "Even the most precise counterforce attacks on Russian nuclear forces unavoidably causes widespread civilian deaths due to the fallout generated by numerous ground bursts." [\(Note 7\)](#) Moreover, the SIOP always included a preemptive option even though policymakers understood the dangers associated with preemptive attacks--the warning of the enemy attack being preempted might be inaccurate and preemptive attack on another nuclear power could not prevent tremendous destruction to the United States. While some argued that limited use of nuclear weapons might make nuclear war controllable and stave off a global catastrophe, fortunately such theories have never been tested. [\(Note 8\)](#)

Documents

Note: The following documents are in PDF format.

You will need to download and install the free [Adobe Acrobat Reader](#) to view.

Document 1: Memorandum, "Discussion at the 387th Meeting of the National Security Council, Thursday, November 20, 1958," November 20, 1958, Top Secret

Source: Dwight D. Eisenhower Library, Ann Whitman File, NSC Series, box 10, 387th Meeting of the National Security Council; published with excisions in U.S. State Department, Foreign Relations of the United States, 1958-60, Volume III (Washington, D.C. : Government Printing Office, 1996), pp. 147-152

Early in his administration, President Eisenhower established a special subcommittee of the National Security Council, the Net Evaluation Subcommittee (NESC), whose mission was to develop estimates of the net effect of a nuclear war on the U.S., the Soviet Union, and their allies. Each year, the NESC would look at a different scenario and see how a nuclear war played out in terms of civilian fatalities, destruction of economic resources, and damage to military capabilities. The NESC would provide Eisenhower and the NSC a full briefing on their conclusions. Although some analysts have treated the NESC as a war-planning agency, its mission was largely analytical. [\(Note 9\)](#) In November 1958, the Subcommittee briefed the NSC on its study of a war caused by a Soviet strategic surprise attack in 1961 to which the U.S. responded with a retaliatory attack designed to paralyze the Soviet Union. The huge attack on Soviet military and urban-industrial targets posited by the study--one weapon on every Soviet city over 25,000--evidently appalled Eisenhower, who believed that there "was obviously a limit -- a human limit---to the devastation which human beings could endure." Instead of "100 per cent pulverization," he wanted those targets identified whose destruction "would most economically paralyze the Soviet nation." Toward that end, in the fall of 1959, Eisenhower ordered another study: to evaluate the impact on deterrence of "alternative retaliatory efforts" directed at two different Soviet target systems: 1) military targets, or 2) an "optimum mix" of urban-industrial and military targets. Eisenhower would request this under NSC action 2009 and it would be conducted by a secret NESC working group. [\(Note 10\)](#)

Document 2: J.C.S. 2056/131, Notes by the Secretaries to the Joint Chiefs of Staff, 20 August 1959, enclosing memorandum from JCS Chairman Nathan Twining to Secretary of Defense, "Target Coordination and Associated Problems," 17 August 1959, Top Secret

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files 1959, 3205 (17 Aug 59)

While the NESC prepared the NSC 2009 study, top military leaders worried about endemic problems with U.S. nuclear targeting. With the huge expansion of the nuclear stockpile in the late 1950s and the wider dispersal of nuclear weapons and delivery systems among the services, the unified and specified commanders were playing a greater and greater role in nuclear

planning. Thus, unified commanders--that is, the commanders-in-chief (CINCs) of regional, or theater, commands, such as European or Pacific, that included units from all three services--had control of nuclear bombs and missiles, as did, of course, SAC, the first specified command. The proliferation of nuclear weapons inevitably produced duplication of targets. Coordination conferences and special committee failed to solve this problem, much less resolve inter-service conflicts over the weight of a nuclear attack. [\(Note 11\)](#) To get discussion going, JCS Chairman General Nathan Twining, the former Air Force Chief of Staff, sent his colleagues a think piece calling for greater centralization of nuclear war planning; he specifically mentioned the need for a "single integrated operational plan" and a "national strategic target list." By carefully assigning targets, Twining wanted to see "atomic operations ... pre-planned for automatic execution to the maximum extent possible and with minimum reliance on post-H-hour communications." Taking issue with arguments for a minimum deterrent, Twining supported a large strategic force that mirrored the Soviet "Principle of Mass"; a "heavy" strategic force was necessary to destroy "the critical components of Soviet long-range nuclear delivery capability." He believed that the "necessity of prevailing in general war is of such vital importance that any error in judgment should be on the safe side."

Besides strategic nuclear targets, Twining recommended other target categories: "governmental and military control centers," "war-sustaining resources" (war-related industry), and "population centers." Attacking civilians as such contravened the laws of war, but by positing a wide array of military, industrial, government, and urban targets, Twining was following the Air Force tradition of searching for the "Achilles heel" whose destruction would cause a society to break down and capitulate. [\(Note 12\)](#) Twining addressed other issues--Army/Navy versus Air Force on how much destruction was necessary, the role of naval forces in attack plans, and organizational responsibility for developing the single integrated operational plan. Because the Strategic Air Command operated the "major portion of forces responsible for the strategic mission", its commander-in-chief (CINCSAC) "should be charged with the responsibility for developing such a plan."

[Document 3A: A: JCS 2056/143, Note by the Secretaries to the Joint Chiefs of Staff, 5 October 1959, enclosing Memorandum for the Joint Chiefs of Staff, "Target Coordination and Associated Problems," 22 December 1959](#)

[Document 3B: attached memorandum from Chief of Naval Operations, 30 September 1959 attached, Top Secret, Excised Copy With More Details Released on Appeal](#)

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59)

After Twining issued his 17 August memorandum, he distributed to the Joint Chiefs a list of questions on targeting. While the Air Force Chief of Staff solidly supported Twining's call for reform,

the other service chiefs rejected his concept of greater centralization of nuclear war planning under the direction of CINCSAC. All agreed with the Chairman's concept of a strategic target system (excised from this version), but the Army, Navy, and Marines plainly saw the concept of a single integrated operational plan as a challenge to organizational prerogatives. For them, the concept of a SIOP implied a "single integrated operational command authority"; rejecting that, they wanted the Joint Chiefs to develop strategic targeting plans. On the question of a Unified Strategic Command, the Air Force believed that one was necessary once the Navy's Polaris missile was ready for military operations, but the other services objected because they believed that it would downgrade the authority of the Joint Chiefs and the CINCs. The answers showed more diversity of opinion over the role of aircraft carriers, for example, whether they should have responsibility for H-hour coverage of targets.

Chief of Naval Operations Admiral Arleigh Burke's extended commentary on Twining's memorandum is heavily excised (and it is necessary to compare the two to make sense of Burke's paper). Nevertheless, the discussion in section 3 suggests that he had some doubts about Twining's polarization of counterforce and population center targets. In the event of a U.S. preemptive attack, Burke probably believed that non-nuclear target categories--possibly command and control, war-related industry, and urban centers--had to be "destroyed too." In the event of a Soviet surprise attack, Burke rejected going after "empty bases and missile sites", probably suggesting instead command-and-control and urban-industrial targets. Writing before the U.S. had reconnaissance satellites, Burke believed that preemptive strikes would be difficult to carry out because of the problem of finding Soviet missiles. Under those circumstances, a "preemptive attack would not eliminate the threat of unacceptable damage to the United States."

Disagreeing with Twining's emphasis on a "single pre-conceived plan," Burke argued that "we would forfeit the flexibility that is inherent in the decentralized execution of strike plans by several unified commanders." Nevertheless, he reluctantly accepted the idea of a SIOP if the JCS had final approval and if all the unified and specified commanders were involved and participated in its execution. While acknowledging the possibility of insufficiently powerful strikes, Burke wanted to find out "how much is enough" in order to avoid gross overestimates of the "the effort required."

Document 4: JCS Chairman Twining to Director, Joint Staff, "Appraisal of Relative Merits, from the Point of View of Effective Deterrence, of Alternative Retaliatory Efforts," 19 February 1960, enclosing Memorandum to the President, same title, 12 February 1960, with National Security Council memo, same title, 17 February 1960

Source: National Archives, RG 218, JCS Chairman Nathan Twining Papers, 381 Net Evaluation

By the fall of 1959, the NESc had completed its study of nuclear targeting, "Appraisal of the Relative Merits from the Point of View of Effective Deterrence, of Alternative Retaliatory Efforts." So far no copy has surfaced and it remains in question if the document still exists. After reviewing three different target systems--urban-industrial only, military only, and an "optimum mix" of urban-industrial and military targets, including nuclear forces--the NESc concluded that only a strategy that focused on the "optimum mix" targets would enable the United States to "prevail" in a nuclear war. According to White House science adviser George Kistiakowsky's account of the report, "To prevail in the sense defined by this study, it would be necessary to kill over one-third of the population of the USSR (and about 100 million Chinese), in effect totally destroying about 100 cities, since none of them would receive less than a megaton and some several 20-megaton weapons." ([Note 14](#))

On 12 February 1960, Eisenhower presided over a restricted meeting of the National Security Council to consider the NESc study. Before the meeting, Joint Chiefs of Chairman Nathan Twining sent the President a memorandum endorsing the NESc's "optimum mix" target system and recommending that Eisenhower agree to refer the study to the Joint Chiefs as the basis for planning. Some of the Chiefs expressed reservations about the study, for example, General Lemnitzer noted that the problem of "locating and destroying enemy ICBM sites" was a problem that had to be solved and Admiral Burke and Twining were plainly in disagreement over the deterrent value of "forces required only for attack of the urban-industrial system." No minutes were taken of the meeting and, so far, the only account that has surfaced so far appears in Kistiakowsky's diary. Kistiakowsky privately believed that the "overkill" proposed for the attack on the optimum-mix targets was "appalling" and during the meeting Eisenhower showed great concern with this problem (as he had in November 1958). Burke also "fairly strongly objected to overkill." Nevertheless, Eisenhower signed off on Chairman Twining's recommendations.

[Document 5: Memorandum by the Director, Joint Staff, for the Joint Chiefs of Staff, on Target Coordination and Associated Problems, JCS 2056/149, 26 April 1960, Top Secret, Excised copy with more details released on appeal](#)

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59)

Some of the differences among the Joint Chiefs, for example, over the requirements of deterrence, were difficult to resolve. Nonetheless, Eisenhower had given his marching orders and the next step was to prepare "policy guidance at the national level" for the preparation of the NSTL. This would set target priorities and criteria for causing "over-all damage to the Sino-Soviet bloc war potential." In late April 1960, the Joint Staff presented the JCS with a "National Strategic Targeting Policy", later renamed "National Strategic Targeting and Attack Policy" (NSTAP), based on the optimum-mix concept. While this document is excised at

important points, it is possible to read behind the excisions. The first excision would read something like an "optimum mix of [strategic strike, major military and government control, and urban-industrial centers." The next excision is probably a more specific rendition of the optimum-mix concept. The three priority target categories excised from page 1359 are undoubtedly: 1) Sino-Soviet strategic nuclear forces and nuclear weapons storage sites, 2) Sino-Soviet government-military controls, and 3) Sino-Soviet urban-industrial centers.

The excisions from the damage criteria section on page 130 are very possibly in the same order as the target priorities on the previous page. Thus, the attack on nuclear threat targets was supposed to have a "ninety percent probability of severe damage" while attacks on military and governmental control centers were to obtain a "ninety percent probability of moderate damage." Attacks on urban-industrial targets were to have a "ninety percent probability of destruction of 50 percent of industrial floor space." Such high damage criteria were a major source of the "overkill" that worried Kistiakowsky and Eisenhower; several nuclear weapons would be assigned to same "designated ground zero" (DGZ) to assure a ninety percent change of "severe" or "moderate" damage.

Document 6: Air Force Chief of Staff Thomas White to Secretary of Defense Thomas Gates, 10 June 1960, enclosing "Strategic Targeting Authority"

Source: Library of Congress, Manuscript Reading Room, Thomas D. White Papers, box 29, Top Secret General 1960

The Air Force was determined to play a central role in strategic targeting and planning and Chief of Staff Thomas White brought a plan to the Secretary of Defense that would codify such a role. Acknowledging that the Air Force's concept of a unified strategic command, with control over the Navy's Polaris submarines, was unlikely to win top-level support, White supported a "lesser solution" to the target coordination problem by designating CINCSAC the "Strategic Targeting Authority." With "jurisdiction over strategic targeting, strike timing, and force application," the new authority would produce an NSTL and a SIOP. The Joint Chiefs would review and approve both documents. Defining the NSTL as a "list of specific vital enemy targets," the top priority targets was consistent with the optimum-mix concept: "nuclear delivery capability," "governmental and military control centers," and "war sustaining resources, including urban industrial areas."

Document 7: Memorandum for the Secretary of Defense from JCS Chairman Nathan Twining, "Target Coordination and Associated Problems," 29 June 1960, JCSM-273-60, with Enclosures A, "Policy," B, "Selection of Targets," and C, "Planning and Coordination," Top Secret, Excised copy with more details released on appeal

Source: National Archives, RG 218, JCS Chairman Nathan Twining Papers, 381 Net Evaluation

While the proposal for an NSTAP was under considerations, the services began to thrash out important organizational problems: who would prepare the NSTL and who would prepare the SIOP itself. For the first task, preparation of the NSTL, the services saw three alternatives: the JCS/Joint Staff, SAC, or a Unified Strategic Command. For the second task, "to translate the attack of the targets of the NSTL into an effective national effort", the alternatives were essentially the same: the JCS, SAC as an "agent" of the JCS, a Unified Strategic Command, or by the Unified and Specified Command. While these papers only presented the alternatives, the splits over alternative wording showed that the services were leaning in different directions. For example, on pages 8 and 20, it is apparent that the Army/Marines/Navy disagreed with the Air Force over whether the Joint Chiefs had the capability to prepare the NSTL or the SIOP. Especially important for the Air Force was that the agency with responsibility over the target list "must have immediately available electronic computing machines of considerable capacity." For preparing a SIOP, the Air Force, consistent with White's proposal, wanted to designate CINCSAC "Strategic Targeting Authority" arguing that the CINC had the "capability to carry out effectively this type of planning and strategic targeting function." Presumably SAC had the requisite computer capability. The other services, however, envisioned a less elevated coordinating role for CINCSAC, with only limited responsibility for preparing the war plan.

Document 8: Memorandum for General Twining et al from Rear Admiral F. J. Blouin, Joint Secretary, JCS, "Target Coordination and Associated Problems," SM-679-60, 15 July 1960, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59)

After several meetings in early July it became apparent that the JCS remained completely split over the organization and direction of strategic nuclear planning. The spread sheets produced by the Joint Secretariat illustrate the disagreements. Thus, under the "Objectives and Concepts" category, the Army and Navy were content to see key target systems destroyed or neutralized and supported the idea of prevailing in war, but the Air Force had a more thoroughgoing concept drawing upon older thinking about the utility of bombing to destroy a society's morale; it sought to "destroy the Sino-Soviet bloc's will and ability to wage war." While the Air Force had specific concepts of strike priorities--apparently putting strategic nuclear targets at the top of the list--the other services rejected the idea of priority targets, with the Army holding that all on the target list were "important." The Navy probably rejected putting giving strategic targets top priority because of the problem of striking empty silos. Significantly, the services significantly diverged on the issue of restraints over nuclear weapons use. To limit or even avoid "overkill," both the Army and the Navy supported constraints on surface bursts of nuclear weapons. Both services worried about the lethal impact of downwind fallout, with the Army explicitly concerned about

limiting exposure of "friendly forces and people" to radioactive fallout. By contrast, the Air Force saw no need for additional constraints. On organizational responsibilities and methods of organizing attack plans, differences remained profound. Both the Navy and the Marine Corps wanted responsibility for the NSTL and operational plans lodged with the JCS, which would work out attack plans with the CINCs. The Air Force agreed that the JCS should have overall responsibility for targeting policy, but wanted the CINCSAC to have the authority to develop the NSTL and the SIOP. The Army's position leaned toward the Air Force in that it supported designating CINCSAC as the "National Strategic Target Planning Agent," but with less authority than the Air Force envisioned.

Document 9: Admiral Burke's Conversation with Secretary [of Navy] Franke 12 Aug 60

Source: U.S. Navy Operational Archives, Arleigh Burke Papers, SIOP/NSTL Briefing Folder

By early August, Secretary of Defense Gates had met with the JCS numerous times to form a consensus on strategic nuclear planning but he was not able to overcome the wide gulf between the services, especially the Air Force and the Navy. While Gates rejected Air Force ideas for a unified command, he sought Eisenhower's endorsement of the proposals for an NSTL and SIOP to be prepared by a Director of Strategic Target Planning. Apparently, Gates saw SAC's vaunted computer capabilities as a significant reason for lodging strategic planning at Offutt Air Force Base. Strongly dissenting, Burke wanted Eisenhower to hear him out. During a two hour meeting on 11 August, Burke made his plea for JCS "direct control" over nuclear planning; otherwise it would be very difficult for the Chiefs to review target lists and operational plans if another agency created them. Burke further objected to the imposition of SAC methods on the unified commands. Eisenhower was sympathetic to some of Burke's concerns but he wanted to "test" the new approach. Troubled by the "schism over the method of conducting the first two hours or so of war", Eisenhower insisted that the war plan be on a "completely integrated basis" with the strikes "firmly laid on." "The initial strike must be simultaneous." Sometimes the discussion was testy; when there was some possibility of putting the planning on a trial basis, Twining argued that if that happened the "Navy would sabotage it." Eisenhower dismissed such charges and said he wanted to think about the "trial run" concept. [\(Note 15\)](#)

The day after President Eisenhower made his decision to support Gates and Twining in going ahead with the SIOP and the JSTSP, Burke met with Secretary of the Navy William B. Franke. Recounting the meeting with Eisenhower, Burke went over his misgivings about SAC's role in strategic planning and Gate's acquiescence in the Air Force agenda. Nevertheless, Burke was determined to give the new system a try and send experienced Naval officers to work in the new strategic target planning staff. "We want to make this thing work as well as we possibly can."

Burke remained bitter, however, worried that the Air Force was trying to take over all nuclear forces; "smart and ruthless" Air Force leaders were using "exactly the same techniques as the Communists" to win power struggles at the Pentagon. "As a matter of fact [the Air Force's textbooks], originally about ten years ago, were built on the textbooks of the Communists, how to control these things." ([Note 16](#))

Document 10: Note by the Secretaries to the Joint Chiefs of Staff on Target Coordination and Associated Problems, 22 August 1960, JCS 2056/165, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 6

After Eisenhower made his decision, the Joint Chiefs fell into line and made a series of decisions that pushed the SIOP forward. As this document shows, they reached agreement on a final version of the NSTAP, thus setting objectives for targeting, damage and assurance criteria, and assigning responsibility for creating the NSTL and SIOP and final review of the effort. Unlike an earlier draft (see document 4), the NSTAP did not identify priorities for targeting no doubt on the grounds that such a critically important issue was best left to those who prepared the SIOP. Like the earlier draft, however, the NSTAP established broad damage criteria. In addition, the NSTAP prescribed a 75 per cent assurance of delivery at each bomb release line (BRL) of the weapons required to realize the specified levels of damage.

The directive assigned the Director of the of Strategic Target Planning to create a Joint Strategic Target Planning Staff (JSTPS), which would consist of personnel from all of the armed services and would have responsibility for developing and maintaining the NSTL and SIOP. The JCS would have responsibility for the NSTAP as well as the power to review and approve the NSTL and SIOP. To ensure that the JCS would be in a position to monitor the new planning arrangements, they established a "permanent ... liaison group" at the JSTPS headquarters. When the Chiefs approved the NSTAP they also designated CINCSAC Thomas Power as the Director of Strategic Target Planning.

Document 11: Note from Rear Admiral Paul Blackburn, Assistant to Deputy Chief of Naval Operations for Plans and Policy, to Admiral Russell, 12 October 1960, with List of Questions and Comments Attached, Top Secret

Source: U.S. Navy Operational Archives, Arleigh Burke Papers, SIOP/NSTL Briefing Folder

While the JSTPS was establishing itself and preparing the NSTL and SIOP Navy insiders were closely monitoring the developments. Admiral Paul Blackburn, on Arleigh Burke's staff, prepared a list of questions whose answers would shed light on the adequacy of the methods used by the JSTPS. It is likely that the questions were prepared for a Joint Staff briefing that same

day by members of the JCS liaison group that was attached to the JSTPS. In the questions Blackburn raised a number of problems, including damage criteria (whether they were too severe), plans for destroying Soviet missiles, data processing procedures, the "cumulative" impact of nuclear attacks (for example, fires exacerbated by destruction of water supply pumping stations), and the effect of fall-out on hostile and friendly populations). The questions also provide important details, for example, filling in the blanks on the damage requirements of the NSTAP. How they were answered on 12 October remains obscure but during the weeks that followed the Navy would find answers.

Document 12: Note by the Secretaries to the Joint Chiefs of Staff on Analysis of Initial NSTL and SIOP, JCS 2056/184, 18 October 1960, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 7

This document highlights in detail the mechanisms set up by the Joint Chiefs, the Joint Staff, and the JSTPS to ensure that the NSTL and the SIOP conformed to JCS guidance. The Joint Chiefs and the Secretary of Defense, along with the CINCs, would only have a brief window, late November-early December--to review the plans themselves, but before the final review the Joint Staff set up a series of briefings by the JCS liaison group to the JSTPS, requested the JSTPS's director to provide detailed information on the plans, and established a Joint Staff working group to analyze and review the NSTL and SIOP. Among the problems to be reviewed was the target assignments of weapons systems and whether the weapons and delivery systems assigned to the plan would achieve the "levels of damage necessary for meeting" NSTAP damage criteria.

Document 13: Memo from Rear Admiral Paul Blackburn to Chief of Naval Operations, "SAC use of computers in targeting, information on," 26 October 1960

Source: U.S. Navy Operational Archives, Arleigh Burke Papers, SIOP/NSTL Briefing Folder

Although SAC had argued that its capacious advanced computer capabilities gave its headquarters a distinct advantage over the Joint Staff in preparing the NSTL and SIOP, the Navy concluded that SAC had greatly exaggerated its capabilities. An investigation instigated by Admiral Blackburn concluded that "computers are used by SAC for less than 5% of the targeting function." Besides showing how SAC had to rely on its staff to manipulate data manually, this useful document provides a step-by-step account of how the new JSTPS constructed the NSTL and SIOP from establishing target priorities to planning "flights" (bomber and missile strikes). The discussion of how the Planning Staff established and targeted DGZs discloses significant planning assumptions about the weight of the attack. The employment of nuclear weapons with an average explosive yield of 3.8 megatons--about 253 15 kiloton Hiroshima weapons) was among

the "fixed factors" entered into the SAC computer systems. Moreover, JSTPS planners assumed "all surface bursts" which would produce large quantities of radioactive fallout.

Document 14: Cable from General Berton E. Spivy, Joint Chiefs of Staff Liaison Group, Offutt Air Force Base, to JCS, 29 October 1960, Top Secret

Source: U.S. Navy Operational Archives, Arleigh Burke Papers, SIOP/NSTL Briefing Folder

In this progress report, the JCS's liaison to the JSTPS reviewed how the Planning Staff developed its methodology for estimating damage expectancy against a given DGZ, the problem of gauging the survivability of U.S. bases under conditions of nuclear attack, and the status of target plans for the "alert force" (those bombers and missiles that are in a high-state of readiness for attack), the relationship of SACEUR's forces to the plan, and procedures for execution of the SIOP. The discussion of the alert force is especially significant because it shows that it consisted of 880 delivery vehicles with 1459 weapons (several for each bomber aircraft) slated to strike 654 targets. Delivery vehicles would have a 74.5 percent assurance of reaching targets. Most of the 654 targets were military (bomber bases, headquarters, nuclear depots, air defenses), although striking missile bases was then out of the question because the United States was then in the dark about where the Soviets were deploying their ICBMs, much less how many they had.

Developing agreed procedures for SIOP execution had to include an understanding on "base time" for launching nuclear forces. Typically military planners had an H-hour concept (H for hour) for designating the moment when military operations would commence. Perhaps believing that there would be some difficulty in starting operations in an emergency, SAC proposed separating "E-hour" (E for SIOP execution) and "RCS" (radio command system?) H-Hour with a 15 minute planning factor. The Joint Staff, however, argued that the plan should collapse E-hour with H-hour by stipulating only one "reference hour." SAC finally accepted that argument as long as the 15 minutes planning factor was assumed.

Document 15: CNO Cable to CINCLANTFLT (Commander-in-Chief Atlantic Fleet), CINCPACFLT (Commander-in-Chief Pacific Fleet), CINCUSNAVEUR (Commander-in-Chief U.S. Naval Forces Europe), 20 November 1960

Source: U.S. Navy Operational Archives, Arleigh Burke Papers, SIOP/NSTL Briefing Folder

As the Army and Navy learned more about the NSTL and SIOP they began to articulate their reservations. In mid-November senior Army officers prepared a position paper which Admiral Burke transmitted to top commanders noting that the Army's thinking "coincides closely with our positions." Among the Army's concerns was the lack of constraints on surface bursts creating an "excessive and intolerable radioactive hazard," the

"indiscriminate" and "wasteful" attacks on urban-industrial complexes, "arbitrary" point values for targets, high levels of assurance of delivery, and over-emphasis on "non-productive military targets." The Army was also skeptical of the lack of clear retaliatory or preemptive options. Weapons would hit the same targets whether used for retaliation or preemptive ("initiative"); thus, when used for retaliation the SIOP had a strong counterforce element, even though it may have been doubtful that the target, a bomber base, for example, had anything left worth striking.

Document 16: CNO Cable to CINCLANTFLT (Commander-in-Chief Atlantic Fleet), CINCPACFLT (Commander-in-Chief Pacific Fleet), CINCUSNAVEUR (Commander-in-Chief U.S. Naval Forces Europe), 22 November 1960

Source: U.S. Navy Operational Archives, Arleigh Burke Papers, SIOP/NSTL Briefing Folder

Burke would soon comment on the Army paper but in the meantime he shared his thinking with top commanders. Recognizing that Air Force critics could not derail the inexorable NSTL/SIOP process he suggested that the most feasible approach was to treat the plan as a "good first effort" but that many areas, such as damage criteria, the point system, and constraints, and JCS guidance itself needed rethinking. Still concerned about the efforts, spear-headed by the Air Force, to exclude "carrier non-all-weather attacks" from the war plan, Burke believed that they could play a useful role in striking "flexible TOTs [time-over-targets], that is, non-time urgent targets. Like the Army's leaders, he believed that assurance criteria were "excessive", for example, 97 percent for 202 DGZs (presumably mostly nuclear targets). [\(Note 17\)](#) To obtain 97 percent, SAC and other nuclear forces would strike targets with multiple high-level nuclear weapons. Another concern was the size of the minimum NSTL. Based on ONI (Office of National Intelligence) estimates, Burke believed that it was too large. As it stood, the list comprised 750 DGZs, which included nuclear delivery forces, government and military headquarters, and urban-industrial targets. [\(Note 18\)](#) As before Burke remained concerned about the lack of constraints, the failure to take into account fire and radiation effects, and the decision to treat missed strikes as zeros in the "box score of damage achieved" (even though "misses will kill a lot of Russians and Chinese"), among other problems.

Document 17: CNO Cable to CINCLANTFLT (Commander-in-Chief Atlantic Fleet), CINCPACFLT (Commander-in-Chief Pacific Fleet), CINCUSNAVEUR (Commander-in-Chief U.S. Naval Forces Europe), 24 November 1960

Source: U.S. Navy Operational Archives, Arleigh Burke Papers, SIOP/NSTL Briefing Folder

In this message, Burke developed a few areas where he disagreed with the Army. For example, Burke dissented from the Army's interest in extending the SIOP beyond the "initial strike" so it included follow-on attacks. According to Burke, this would be

impractical because "there is going to be a lot of confusion after initial strikes and control of subsequent operations must rest in Unified Commanders and local commanders." Burke felt even more strongly than the Army about the SIOP's preemptive features. For a variety of reasons, Burke argued, "Preemptive, preventative, or initiative strikes will not prevent serious damage on the United States." One of the problems that Burke cited--Washington's lack of knowledge of the location of Soviet ICBM silos--would be solved within a year, but his arguments about the uncertainties and dangers of preemptive attacks would become familiar ones.

Document 18: Note by the Secretaries to the Joint Chiefs of Staff on Review of the Initial NSTL and SIOP, JCS 2056/194, 9 December 1960, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 8

On 1 December 1960, Secretary of Defense Gates, the Joint Chiefs and the CINCs traveled to Offutt Air Force base to get briefings on, and review, the NSTL and the SIOP. So far, there are no primary sources available on these discussions, but Kaplan has a fascinating interview-based account of top-level SIOP briefings that same month which may about this episode. ([Note 19](#)) As this document shows, a week later the Chiefs met and decided that the NSTL and SIOP were "satisfactory for the integration of the initial national strategic attack" and should be used for "the preparation of detailed implementing plans and procedures." SIOP-62 would go into effect on 1 April 1961. Looking ahead, the Chiefs called for a review of the war plan to determine areas where changes might be in order.

The two appendices "A" and "B" to the document provide some interesting material on the procedures used to produce and assess SIOP-62. "Joint teams" working at the JSTPS developed "chronological sequence[s]" showing when weapons would arrive at targets; a key element in the plan was the "roll back" principle designed to destroy air defenses in order to establish "corridors" for the "following sorties." In light of the high assurance requirements, to raise the odds that a weapon would arrive at a given BRL, targeters would assign several of the same type of missile or bomb to the same target (cross-targeting). Appendix "B" summarized a Defense Atomic Support Agency (DASA) study estimating the use of the alert force to cause "severe damage" to industrial complexes. Comparing the damage by one high yield and one low-yield weapon to a given facility, the DASA study concluded that the alert force was "meeting but not excessively meeting the damage level specified in the guidance." This was a controversial subject, however, and Army and Navy leaders remained troubled by high levels of damage. As they no doubt noted, the SIOP often assigned several weapons, not just one, to the same target.

Document 19: Note by the Secretaries to the Joint Chiefs of Staff

on Review of the NSTL/SIOP-62 and Related Policy Guidance, JCS 2056/197, 30 December 1960, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 8

During the weeks after the Chiefs approved the SIOP some of the service chiefs and the CINCs sent in comments, some of them skeptical. Not surprisingly, Admiral Burke sent in the first such assessment. His arguments will be familiar by now, as they express reservations about the damage criteria, which are "based on blast damage only" not taking into account "thermal and radiation effects." Thus, the new policy "results in damage levels and population casualties beyond those which appear to be required." He also saw problems in the interpretation of assurance for arrival of weapons at the BRL, resulting in "extremely high levels of assurance" and the unrealistic estimates of radiation doses. Plainly worried about the fallout effects on friendly countries and U.S. forces, Burke asked for an analysis of "world-wide contamination, to include effect of Soviet weapons employment."

Document 20: Cable from CINCPAC to JCS, "Report of Preliminary Review of SIOP-62," 18 January 1961, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 9

With this cable CINCPAC Harry Felt informed the Joint Chiefs that his recent review of SIOP-62 confirmed "doubts in my mind." Like White House science adviser George Kistiakowsky ([see document 23 below](#)), Felt was concerned that JCS damage criteria were excessive and would produce damage far beyond what a relatively small nuclear weapon did to Hiroshima in 1945. This comparison "revealed the extremes to which we have gone in our plans in the past 15 years." The United States could reach its objectives (presumably to prevail over the adversary) while obtaining far less destruction. Like Burke, Felt believed that damage criteria were unrealistic in that they only considered blast effects but did not take "heat, fire, and radiation" into account. Also like Burke, Felt worried about the fallout hazards to friendly forces and nations: "When we consider that worldwide about 1450 weapons are programmed by alert forces and about 3400 weapons by all the committed forces, we realize that our weapons can be a hazard to ourselves as well as our enemy."

Document 21: Note by the Secretaries to the Joint Chiefs of Staff on Review of the NSTL/SIOP-62 and Related Guidance, JCS 2056/204, 19 January 1961, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 9

On 17 January Army Chief of Staff General George Decker presented the Joint Chiefs with his assessment of SIOP-62. Like

some of his colleagues he believed that the damage criteria were excessive and that the constraints criteria were unrealistic. Like Arleigh Burke, Decker saw the SIOP as problematic because it was a "capabilities plan" that simply threw available nuclear weapons at the Sino-Soviet bloc. [\(Note 20\)](#) As Decker put it, "SIOP-62 reflects an initial strike capability of the forces made available." What Decker thought was needed was a SIOP that was more firmly based in objective; he suggested that the "selection of more precise objectives should more effectively neutralize the war-making and political potential of the ... Bloc at the same or lesser degree of effort." Also like Burke, Decker worried about SAC domination of the JSTPS and called for a more "equitable representation among the services" on the planning staff.

[Document 22: Note by the Secretaries to the Joint Chiefs of Staff on Review of JCS NSTL and SIOP-62, JCS 2056/206, 26 January 1961, Top Secret, Excised copy with more details released on appeal](#)

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 9

The Atlantic Command chimed in next, with a six page critique from acting CINCLANT Vice-Admiral Fitzhugh Lee. Using the "committed force" for a nuclear strike, Lee argued, produced destructive results that exceeded the specific objectives specified in the NSTAP. To correct that problem he recommended that the Chiefs "establish the Essential National Task which must be accomplished should ... deterrence against general war fail." Like Burke and Decker, Lee critically assessed damage criteria, assurance delivery, constraints policy and questioned SAC's predominant role at the JSTPS. He also questioned the JSTPS's point system used for target worth (excised here, but military targets were "alfa" targets, while urban-industrial targets were "bravo" targets; see document 12). Lee doubted whether the plan made effective use of the nascent missile force; recognizing that Polaris missiles were not accurate enough to destroy "hard point" military targets, Lee believed that they could "be very effectively used in their intended role of deterrent/retaliation" by targeting urban-industrial centers. Point 11 on "flexibility" suggests that circumstances could emerge where it was prudent to stop the attack in whole or in part or withholdings attacks on certain targets. While the target categories that he thought could be withheld are excised, Lee's thinking anticipated later decisions to establish SIOP withholds for Moscow, Beijing, China, and Eastern European countries. As will be seen, the Marine Corps member of Joint Chiefs shared Lee's concern about withholding targets (see document 24). Arguments in favor of flexibility would, over the years, have an impact on the SIOP, but in the short-term, the JSTPS would tenaciously argue that "the plan is designed for execution as a whole and the exclusion of attack of any category ... of targets would, in varying degrees, reduce the effectiveness of the plan." [\(Note 21\)](#)

[Document 23: Note by the Secretaries to the Joint Chiefs of Staff](#)

on Strategic Target Planning, JCS 2056/208, 27 January 1961, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 9

In November 1960, before Secretary of Defense Gates and the Joint Chiefs had approved SIOP-62, White House science adviser George B. Kistiakowsky, with two assistants, George Rathgens, from his staff, and Herbert Scoville, jr., then director of CIA's Office of Scientific Intelligence, went to SAC headquarters to receive briefings on, and study, the SIOP. General Power and the JSTPS cooperated with Kistiakowsky only because Eisenhower had signed a letter that gave his adviser "about as much authority as that of the secretary of defense." [\(Note 22\)](#) After he returned to Washington Kistiakowsky prepared a report whose main points dovetailed with the comments from the Army, Navy, CINCLANT, and CINCPAC. While Kistiakowsky acknowledged that the SIOP was the "best that could be expected under the circumstances" and "should be put into effect," he believed that the procedures then used by the JSTPS made it worth questioning whether the damage criteria "result in overkill and ...created unjustified additional force requirements." Given that the same target list was used for preemptive or retaliatory attacks, he suggested that it was excessive to assign 5 weapons to counterforce targets in a retaliatory strike (perhaps on the grounds that they might be striking empty airfields). Kistiakowsky also raised doubts about using blast effect as the only criterion of damage and used the devastation of Hiroshima to argue that the JSTPS had used unrealistic criteria in estimating the lethal effects of nuclear weapons. Indeed, he saw the destruction caused by a preemptive strike by the alert force as "so extensive" that he questioned whether it is necessary to include follow-on force in the preemptive attack.

Tab "B" provides a detailed, but heavily excised, account of how the SIOP was prepared. Some of the information may be found in [document 12](#).

Kistiakowsky briefed Eisenhower on his conclusions toward the end of November. Later, the president confided to his naval aide that the large numbers of targets, the superfluous targeting, and the huge overkill "[frightened] the devil out of me." As David Rosenberg explained in his path-breaking article, Eisenhower realized that the "SIOP might not be a rational instrument for controlling nuclear planning, but rather an engine generating escalating force requirements." Now believing that the SIOP was far more destructive than was necessary to deter an attack, Eisenhower wanted limits: to "get this thing right down to the deterrence." [\(Note 23\)](#) But it was too late for him to change course. Nevertheless, at close of his administration, Eisenhower sent a copy of Kistiakowsky's report to Secretary Gates who, on 20 January, just as he was vacating his office, passed it on to the Joint Chiefs and JSTPS for their comments. The next administration would have to deal with the problem of the SIOP, if it could.

Document 24A: Cable from Vice Admiral Parker, Naval Reserve Training Command, Offutt Air Force Base, to CNO, 6 February 1961

Source: U.S. Navy Operational Archives, Arleigh Burke Papers. NSTL/SIOP Messages, Exclusives & Personals

Document 24B: Memorandum for the Record, "Secretary McNamara's Visit to the JSTPS, 4 February 1961," 6 February 1961

Source: FOIA Release to National Security Archive

While the records of the Gates-JCS-JSTPS conference from December 1961 have yet to surface, two accounts of the first visit by Gates' successor, Robert S. McNamara, to Offutt Air Force Base, a JSTPS memo and a Navy cable, have been declassified. [\(Note 24\)](#) The cable from the Navy's chief representative to the JSTPS, Vice Admiral Edward N. Parker, is particularly informative. Recognizing McNamara's background on probabilities, Parker was impressed by his "penetrating" questions on damage probabilities, assurance, and the effectiveness of force structure but he also found the new Secretary to be "weak in his knowledge of weapons effects." McNamara's response to the briefing showed that he was strongly interested in replacing bombers with missiles, believed that it was necessary for a larger proportion of the SIOP force to be on alert, found the damage criteria problematic, and was especially concerned over the high level of expected damage to China, the Soviet Union, and the satellite countries. Recognizing that if four weapons were targeted on a DGZ to ensure that at least one weapon reached the target (but not taking into account the DBL--damage before launch--factor), McNamara realized that several weapons were likely to strike Soviet territory. That, he believed, could cause "fantastic" levels of fallout. Earlier, McNamara had asked, if using the JSTPS's damage criteria, how many weapons would be assigned to a Hiroshima or Nagasaki-type target? The answer was three 80 kiloton weapons, although Director of Defense Research and Engineering Herbert York, then a holdover from the Eisenhower administration, suggested another answer: weapons totaling one megaton.

McNamara also learned about the implications of damage criteria for weapons requirements. As Herbert York explained, if 90 percent probability of severe damage was changed to 70 percent, force requirements would be cut in half, but if the goal was 99 percent, the force would be doubled. The JSTPS account sheds light on the target list: the NSTL then included 151 urban-industrial targets of which the alert force would target 130. [\(Note 25\)](#)

Document 25: Note by the Secretaries to the Joint Chiefs of Staff on Review of the NSTL/SIOP-62 and Related Policy Guidance, JCS 2056/220, 11 February 1961, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 9

Fred Kaplan's account of the Pentagon's initial review of the SIOP includes an especially memorable episode. During the briefings, Marine Corps commandant David Shoup (the service with the most marginal nuclear responsibilities) saw a chart that showed that the initial attack would kill tens of millions of Chinese. At the closing meeting, General Shoup asked General Power what would happen if Beijing was not fighting; was there an option to leave Chinese targets out of the attack plan? Power was reported to have said that he hoped no one would think of that "because it would really screw up the plan"--that is, the plan was supposed to be executed as a whole. Apparently Shoup then observed that "any plan that kills millions of Chinese when it isn't even their war is not a good plan. This is not the American way." ([Note 26](#))

As this document shows, Shoup put his concerns on paper arguing that the SIOP was inconsistent with National Security Council paper 5904/1, which Eisenhower had approved in ... 1959. Curiously, the reviewers of this document excised the quotation from this NSC paper, even though the Archive's appeal letter showed that it had been fully declassified and published in the State Department's Foreign Relations series. The uncensored quotation reads:

The United States should utilize all requisite force against selected targets in the USSR--and as necessary in Communist China, European Bloc and non-European bloc countries--to attain the above objectives. Military targets in Bloc countries other than the USSR and Communist China will be attacked as necessary. ([Note 27](#))

Taking issue with the SIOP because it did not follow the limited flexibility inhering in NSC 5904/1, Shoup argued that it made no "distinction" between the USSR, China, and other bloc countries and, instead, "dictates that the NSTL/SIOP provide for the attack of a single list of Sino-Soviet countries." While Shoup conceded that the SIOP's execution procedures included language on withholding strikes, he believed that it was not effective enough and called for "greater flexibility" and "precise provisions" for "routine withholding of strikes." The reviewers removed the target categories but presumably Shoup was referring to China as well as European and non-European Bloc countries.

Documents [26A](#) and [26B](#): Memorandum by the Chief of Staff, U.S. Air Force for the Joint Chiefs of Staff on Strategic Target Planning, JCS 2056/230, 17 March 1961, Top Secret, Excised copy with more details released on appeal

Source: National Archives, Record Group 218, Records of the Joint Chief of Staff, Decimal Files, 3205 (17 Aug 59) Sec. 9

After some delay, the Air Force Chief of Staff issued an initial response to Kistiakowsky's report; General White's memo, however, avoided taking on the major criticisms and took issue with he called a "misleading" reference to the 2009 study. White's

memorandum is heavily excised but, according to a Joint Staff memo prepared a few days later, the main point was a disagreement with the "statistical comparison of SIOP-62 and Study 2009" made in Tab "B" of document 22. Seeing this a "minor" error "that is not likely to disturb the SECDEF," the Joint Staff recommended that action on White's paper be deferred until the JSTPS had commented on the entire Kistiakowsky report. Those comments, completed in June 1961, remain to be declassified.

Document 27: JCLSG, Offutt AFB cable 292318Z to JCS, 28 April 1961

Source: U.S. Navy Operational Archives, Arleigh Burke Papers. Messages, file # 2, NSTL/SIOP Messages Other Than Exclusives & Personals, Period 1 Jan

Only a few weeks after SIOP-62 went into effect (on 1 April 1961), the JSTPS began a more or less constant effort at updating the plan so as to take into account the availability of new weapons and changes in alert postures, among other considerations. For example, as this document shows, the crystallization of plans to put 50 percent of SAC bombers on ground alert meant the enlargement of the alert force and the need to reconfigure the DGZs assigned to the bombers.

The most important part of this document, however, is that the disclosure of SIOP-62's aggregate DGZs and weapons. The alert force would use 1706 weapons against a total of 725 DGZs in the Soviet Union, China, and allied states. Of those DGZs, 41 were defense targets (air defense units, radars, and warning systems). As noted earlier, document 23B shows that of the aggregate alert force targets, 130 were in urban-industrial areas. The number of delivery vehicles (bombers and a few missiles) would have been at least 880, but probably somewhat more (for 880 see document 13). The committed force would use 3240 weapons against a total of 1060 DGZs. Of those targets, 25 were pure defense while about 151 were urban-industrial. According to David Rosenberg's study, the DGZs included some 2600 separate installations from a target data base of 4100.

Document 28: History & Research Division, Headquarters, Strategic Air Command, History of the Joint Strategic Target Planning Staff: Background and Preparation of SIOP-62, n.d., Top Secret, Excised copy with more details released on appeal

Source: Freedom of Information Act request and appeal

Not long after the completion of SIOP-62, SAC headquarters produced an official history. While rather short, on the whole it is balanced, giving a judicious view of the controversies that preceded the high-level decisions to create the JSTPS and synchronize target planning through a SIOP-mechanism. Unfortunately, despite an appeal, which took seven years to process, the Defense Department withheld significant portions from the concluding, and most important section, "Preparation of SIOP-62." Significantly, the Defense Department reviewers did release a summary of the NSTAP's prime target objectives, thus

allowing readers to fill in the blanks in document 9. Interestingly, the reviewers also released the aggregate number of targets--4,000-- in the National Strategic Data Base (NSTDB). In addition, a footnote on page 21 includes what is probably a description of the size of the alert force. No doubt much more information, possibly the entire text, could have been released from this history without harm to national security. A new declassification request, recently filed by the Archive, may elicit additional information.

Notes

1. For "extremely sensitive information," see Joint Staff cable 986357 to Director, Joint Strategic Target Planning Staff, 25 November 1960, Record Group 218, Joint Chiefs of Staff, 3205 (17 August 1959), Section 7. For the difficulty that even properly cleared civilian officials have had in getting access to the SIOP, see Peter Feaver, *Guarding the Guardians: Civilian Control of Nuclear Weapons in the United States* (Ithaca, NY: Cornell University Press, 1992), 59-60.

2. David A. Rosenberg, "Nuclear War Planning," Michael Howard et al., ed., *The Laws of War: Constraints on Warfare in the Western World* (New Haven: Yale University Press, 1994), p. 175.

2a. Thanks to Charles Bright, George Washington University, for pointing out this reference.

2b. Henry S. Rowen, "Formulating Strategic Doctrine," Appendices, *Commission on the Organization of the Government for the Conduct of Foreign Policy*, June 1975, Volume 4 (Washington, D.C., U.S. Government Printing Office, 1975), pp. 218-234.

3. Rosenberg's article was subsequently reprinted in Steven Miller, ed., *Strategy and Nuclear Deterrence* (Princeton: Princeton University Press, 1984). Subsequent citations are to this publication.

4. Scott Sagan, "SIOP-62: The Nuclear War Plan Briefing to President Kennedy," *International Security* 12, no. 1 (Summer 1987).

5. Rosenberg, "The Origins of Overkill," p. 116; Fred M. Kaplan, *The Wizards of Armageddon* (Stanford, CA: Stanford University Press, 19...), p. 269.

6. Lynn Eden, *Whole World on Fire: Organizations, Knowledge, and Nuclear Weapons Devastation* (Cornell University Press, 2004). See also the National Security Archive electronic briefing book on fire and nuclear weapons effects, "It is Certain There Will Be Many Firestorms": New Evidence on the Origins of Overkill," <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB108/index.htm>.

7. See Natural Resources Defense Council, *The U.S. Nuclear War Plan: A Time for Change*, at <http://www.nrdc.org/nuclear/warplan/execsum.asp>

8. For background on some of the developments during the late 1970s, see

U.S. Strategic Air Command, "Current US Strategic Targeting Doctrine," prepared by Colonels Kearl and Locke, 3 December 1979, Top Secret, excised copy, published in National Security Archive Electronic Briefing Book, "Launch on Warning," at <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB43/doc20.pdf>. For useful articles on the SIOP and its permutations during the 1960s and 70s, see Desmond Ball and Jeffrey Richelson, eds., *Strategic Nuclear Targeting* (Ithaca: Cornell University Press, 1986). The most detailed account of the Nixon administration's search for flexibility remains Terry Terriff's, *The Nixon Administration and the Making of U.S. Nuclear Strategy* (Ithaca, Cornell University Press, 1995).

9. By the late 1950s, the studies repeated the same grim conclusions; according to a CIA official who opined that the results were always the same and the work was becoming routinized. See General Nathan Twining to Allen Dulles, "Presentation of the 1959 Net Evaluation Subcommittee Report," 29 October, with CIA memorandum attached, CIA Records Search Tool, National Archives.

10. See Rosenberg, "Origins of Overkill," pp. 164-166, for details on the NSC 2009 study.

11. For more on target coordination efforts, [see document 28](#).

12. See Tami Davis Biddle, *Rhetoric and Reality in Air Warfare : The Evolution of British and American Ideas about Strategic Bombing, 1914-1945* (Princeton: Princeton University Press, 2002).

13. H-hour is the specific hour in which combat operations are slated to begin.

14. George B. Kistiakowsky, *A Scientist at the White House: The Private Diary of President Eisenhower's Special Assistant for Science and Technology* (Cambridge, MA: Harvard University Press, 1976), pp. 253-254.

15. For the White House's account of the meeting, with Burke's statement, see Memorandum of Conference with President Eisenhower, 11 August 1960, U.S. Department of State, *Foreign Relations of the United States, 1958-1960*, III (Washington, D.C.: Government Printing Office, 1997), pp. 442-451

16. See Kaplan, *Wizards*, at pp. 264-266, for more on Burke's concerns.

17. The list of 202 was later narrowed down to 7 but 215 other targets would require 95 percent assurance. See Kaplan, *Wizards*, at p. 268.

18. Besides the minimum list, the NSTL included "additional targets considered to be of major importance, those defense targets which must be destroyed in order for attacking forces to reach their targets, plus those targets which theater commanders must destroy in order to protect their own forces." See Chief of Naval Operations Admiral Arleigh Burke to Flag and General Officers, "National Strategic Target List and Single Integrated Operational Plan," Special Edition Flag Officers Dope, 4 December 1960, at <http://www.gwu.edu/~nsarchiv/NSAEBB/NSAEBB108/fire-6.pdf>

19. Kaplan, *Wizards*, pp. 269-270.

20. Rosenberg, "Origins of Overkill," p. 117.
21. Sagan, "SIOP-62," p. 51.
22. Feaver, *Guarding the Guardians*, p. 60.
23. Rosenberg, "Origins of Overkill," p. 118. Unfortunately, by the time that some of the Burke records were temporarily available in 1997, the record of the telephone conversation between Burke and Eisenhower's naval aide, who cited Eisenhower's concerns, had had gone astray at the Navy archives.
24. For Herbert York's brief account of the McNamara SIOP briefing and a more extended account of an earlier briefing, see *Making Weapons, Talking Peace* (New York: Basic Books, 1987), at 184-186 and 204.
25. For Kaplan's account of the McNamara briefing, see *Wizards*, pp. 270-272.
26. Kaplan, *Wizards*, p. 270.
27. NSC 5904/1, Note by the Executive Secretary to the National Security Council on U.S. Policy in the Event of War, 17 March 1959, U.S. Department of State, *Foreign Relations of the United States, 1958-1960*, III (Washington, D.C., Government Printing Office, 1996), pp. 207-210.

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