BALLISTIC MISSILE DEFENSE:
Evolution of the Decision-making Process

David C. Phillips

November 1969
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The views and conclusions are those of the author and do not necessarily reflect those of the System Development Corporation.
ABSTRACT

The roles played by academicians, strategists, and physical scientists are examined in the decisions leading to an American ballistic missile defense system. The conclusion of the study is that the expert discussion of issues influenced the form eventually assumed by the Safeguard system. However, this discussion did little to influence policy makers in Congress who used parliamentary maneuvering to resolve the 1969 debate.
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I. EARLY DEVELOPMENTS

America's ballistic missile defense system is confronted with two debates: separate and unequal. One discussion is at the highest levels of federal government policy making and will be the prime focus of this study. The other is being conducted among academic strategists and physical scientists who hope to influence the policy makers. After a published exchange of letters typical of the second debate, one disgruntled New York Times' reader wrote the Editor on July 6th:

"The protracted quibbling by George W. Rathjens and Albert Wohlstetter [on June 15 and 22, 1969] over costs, accuracy and effectiveness of SS-9, ABM, MIRV and such has all the relevance of the medieval theologians' disputes about how many angels could stand on the head of a pin.

"The important fact is that when the missiles start falling it will matter only to some SAC General Strangelove whether he has left five, fifty or 500 operational Minutemen."

When the debate arose policy makers were divided over the question of the allocation of federal monies after a hoped-for resolution of the Vietnam conflict. This debate occurred at a time when the intellectual community sought to influence the course of events for the next decade.

What Role for Scientists?

Background for the debate has been highlighted in an article which appeared during the Fall, 1965, on the differences between American and foreign intellectuals.¹ A more critical evaluation of the American species was offered some months later in another article in which the scholar's penchant for abstractions

¹Charles Frankel, "The Scribblers and International Relations," Foreign Affairs (October, 1965).
and his aversion to government institutions were considered making him singularly ill-suited for involvement in the policy-making process. But involved he has become: from his remarkable influence on ABM questions during the Kennedy and early Johnson Administrations to his comparative ineffectiveness during the Nixon era.

Even the early headings of Senator J. William Fulbright (D-Ark.) have been virtually ignored by both sides in the debate. It was his once-held view that since war is much too serious a matter to be left to the nuclear physicists, policy-makers should

"...avoid giving undue weight to the political views of highly specialized technical experts whose experience and knowledge have only very limited relevance to the complexities of international relations." 

Indeed Senator Fulbright himself has not been averse to calling upon scientists to "educate" the American public during hearings into the strategic and foreign policy implications of ballistic missile defense. Besides asking their scientific advice, certainly within the realm of their acknowledged competence, this Senator has also asked technical specialists the obviously political question of whether they thought American national security would suffer as a result of withholding an ABM deployment until a later time.

For their part, government scientists have not been reluctant to attack the policy makers' lack of understanding of where science and technology are divided. Certainly some difficulty does exist in distinguishing between the two and in then deciding where either can make its most valuable contribution.

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Goals for Advanced Technology

In the 1950s the scientists themselves were by no means agreed on the role technology would play for the future. On the need for ballistic missile systems, a group led by Vannevar Bush ridiculed the system's concept and its technical feasibility. The principle objections were to guidance accuracy, thrust requirements, and reentry technology. On the other hand, the President's Technical Capabilities Panel headed by Dr. James Killian stressed the need for an aggressive ballistic missile program.

In August 1957, an announcement from TASS that the Soviets had successfully fired an intercontinental missile failed to make an impression on the political community until more convincing evidence of this capability was produced by the launching and orbiting of Sputniks I and II that year. Shortly thereafter defensive measures against ballistic missile attack became a focal point coincident with plans and feasibility studies for an American ICBM.

Harold Brown has written that the United States initiated its own intercontinental ballistic missile program, in 1954-55, only after firm knowledge that the Soviets had initiated their program two years earlier. Starting later, the U.S. completed a first-generation ballistic missile two years ahead of the Soviets. Daniel Fink has written that the U.S. penetration aids program began "on paper" in 1960 when intelligence sources first indicated that the Soviets were working on an ABM. It was during this time that the U.S. initiated early development of a multiple independently targeted reentry vehicle (MIRV).

In its 1958 Gaither Report, the President's Security Resources Panel stressed the futility of trying to buy absolute security through a combination of both active and passive defenses. Before 1963 the scientific and military communities had difficulty adjusting to the concept of a globe-straddling weapons system. Until ballistic missiles became the chief instrument of strategic warfare, their development was handicapped by cultural resistance to the technological innovation of this weapon and also by competition with the manned bomber for a place in the existing weapons inventory.

The Prospects for Ballistic Missile Defense

The feasibility of a ballistic missile defense (BMD) was doubted by many. Henry Kissinger noted at the time that "budgetary restrictions" in the Eisenhower Administration precluded such a defense's coming into existence. Put a more detailed accounting is offered by critic Ralph Lapp. He has written that from 1955-60, Secretary of Defense Neil McElroy successfully fought off a power play by the Army, headed by General Maxwell D. Taylor, to use $400 million for production of the Nike-Zeus. At that time this missile was still two years away from being test flown.

McElroy's battle did not end with a temporary block to the Army. Congress returned money to the Defense Department for the project over the Secretary's objection. He refused to spend it, using White House scientific advice to

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10 Perry, op cit., pp. 23 and 27.
11 Henry A. Kissinger, The Necessity for Choice (New York: Harper and Row, 1961), p. 19. (Professor Kissinger argues that countermeasures against ballistic missile defenses are easier to develop and less costly than the active defense systems. This same argument would be used on many occasions by Roswell Gilpatrick and Defense Secretary Robert McNamara during the Kennedy and Johnson Administrations.)
counter Army claims of the Nike-Zeus' effectiveness. The Army lost the battle for missile defense production in 1960, but continued its research and development of a missile defense under a priority granted in January, 1958.

In 1958, Mr. McElroy created the Department's Advanced Research Projects Agency (ARPA) whose main mission is known as Project Defender. Initially all aspects of ballistic missile defense were included in a $100 million per year budget. Through the years Project Defender activities have been expanded to include "interceptor technology, missile kill and vulnerability, terminal defense of urban areas, hard point (ICBM) defense, and improved early warning."13 All of these projects were still under development in 1967 when Fink's article was published describing the Sentinel operational development programs.

The policy makers' resistance to going beyond the research and development phase in missile defense continued through the Eisenhower second term and into the Kennedy Administration. By 1967 $3 billion had been spent on an antiballistic missile defense.14 Only preliminary research and development on a missile defense system had been given increased emphasis from as early as the mid-1950s.15

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13 Fink, op.cit., p. 67.
II. SENTINEL AND ITS AFTERMATH

Advocates of a ballistic missile defense were enheartened by the successful testing of the Nike-Zeus system in the Spring, 1962. On July 19 the missile was successfully tested on Kwajalein Island by intercepting an Atlas nose cone launched from Vandenberg Air Force Base, California. Had a nuclear warhead been on board, the nose cone would have been destroyed. Critics of the test, including Secretary McNamara, pointed out that the launch and intercept were conducted under controlled, near-laboratory conditions and therefore were not liable to the uncertainties and dynamics of battle conditions. Of the 13 follow-on tests in this series, nine more were rated successful. But despite the successful tests the Army and the Defense Secretary still differed on the need to begin procurement of an ABM.

An initial estimate of $10-14 billion to complete deployment was overruled by the Secretary. The official reason given was the inability of the Zeus radars to adequately discriminate between real warheads and decoys.\(^1\) In addition, the radars and missile launchers were also vulnerable since they were not hardened. Still a third objection to the system was the suspected inability of the Zeus to contend with the anticipated Soviet ICBM threat in the last half of the sixties.

Mr. McNamara reoriented Zeus to development of an advanced system called Nike-X, while missile testing was continued under Project Defender. It was the hope of the military that Nike-X would prove more successful and not have the same shortcomings as its predecessor. Opposing the Secretary's view was Chairman of the Joint Chiefs of Staff, General Maxwell D. Taylor, who argued for development of Zeus to give the United States an operational ABM, even if later developments would make that missile obsolete.\(^2\)

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Growing Pressure for ABM Deployment

A new wrinkle in the ABM opposition occurred in House Appropriations hearings for the Defense Department during 1963. Secretary McNamara stated at this time he would never advise ABM deployment without a fallout shelter program. Advisors to the Secretary at this time included a veritable honor roll of scientific elite. All parties used the difficulties experienced with the Nike-X system as the rationale for opposing deployment. But the testimony of Dr. Harold Brown before Senate Defense Appropriations hearings in 1964 gave the first hints that nontechnical factors would eventually affect the ultimate decision to deploy an ABM system. One year later, the Joint Chiefs of Staff were divided on the value of deployment. General Earle Wheeler, Chairman of the Joint Chiefs of Staff, noted that Nike-X deployment was recommended by the Joint Chiefs, but a contrary decision had been made. At the House hearings, Air Force Chief of Staff General John P. McConnell stated that deployment of Nike-X should be withheld pending resolution of technical difficulties.

The Nike-X experienced problems from 1963-65, but breakthroughs occurred in radar and missiles during 1965-66. Thus pressure was building within the military community, especially the Army, to do battle with the system effectiveness arguments of the Defense Secretary. On November 10, 1966, Mr. McNamara

3 Articles appearing in public journals included Jerome Wiesner's in Scientific American (October, 1964); Freeman Dyson's in the Bulletin of the Atomic Scientists (June, 1964); and Roswell Gilpatric's in Foreign Affairs (April, 1964).
5 Ibid., pp. 220-221.
announced at Johnson City, Texas, that the Soviets had begun deployment of the "Galosh" ABM. There is evidence suggesting this action was taken before the military, to support their desire for an operational ABM, could leak highly classified information based on satellite reconnaissance. Yet in Senate testimony during January-February 1967, the Defense Secretary still opposed ABM deployment for this country.

As early as June 1967, some journalists suspected the Johnson Administration was being pressured by events to realize what further inaction on ABM deployment could mean as a 1968 election issue. Abramson and Sell, writing in the Los Angeles Times, saw the United States edging closer to a 'thin' ABM against an anticipated mid-1970s Chinese ballistic missile threat. Until this time, successive Administrations since Eisenhower had been able to ward off ABM proponents due to actual technical problems, yet at this time Secretary McNamara conceded that recent developments (presumably the radar and missile development breakthroughs) made an ABM feasible from a technical standpoint.

The following month, a committee headed by retired Air Force General Bernard A. Schriever delivered its requested study to the House Committee on Armed Services warning of a growing "megaton gap" between U.S. and Soviet strategic offensive forces. This report from the American Security Council argued that in ten years the two countries had reversed roles and the U.S. was no longer superior in terms of deliverable megatons. The report added to the growing

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8 Ibid.
debate and domestic pressures from all sides favoring an ABM deployment. A rebuttal of sorts appeared in The New York Times some days later. While the Defense Department did not directly contradict the findings of the report, it did argue that deliverable megatonnage over target was not considered an "accurate indicator of 'true military capability.'"

'Thin' ABM Deployment Announced

With growing pressure from the military and with the White House looking ahead to an election, the Secretary announced from San Francisco on September 18, 1967 that the United States would initiate deployment plans for a 'thin' ABM shield to combat the Chinese threat. He said this system's price tag was not an issue, but its penetrability was. The Secretary stated fears that even a 'thick' system would be unable to adequately defend against a massive Soviet missile attack. These thoughts were later reiterated in Mr. McNamara's published reflections in office.

The San Francisco speech included comment that four presidential science advisors to three Presidents had already argued against an ABM deployment, as had three directors of research and engineering to three Defense Secretaries. He also said that the Soviet ABM deployment to date had been limited and left the door open to strategic arms limitations talks, which had been publicly favored by the Administration since the President's State of the Union address in January, 1967. On the premise that an accentuated offense was comparatively less expensive financially than building a larger defense the Poseidon, Minuteman III, and MIRV development programs were accelerated.


12 Ibid., p. 65.

13 Adams, op.cit., p. 223. It is still not clear whether the acceleration of programs was ordered before or after the San Francisco speech.
The threat of the limited Soviet ABM was minimized in the San Francisco speech. The Defense Secretary saw no problem for U.S. offensive forces, since ballistic missiles were said to be equipped with penetration aids. The speech also included warnings against expanding the American ABM and emphasized over and over that the proposed defense was not Soviet oriented. This speech and subsequent utterances from the Secretary's office suggest fear that the door to strategic arms limitations talks (SALT) would be closed.

A speech by the Assistant Secretary for International Security Affairs stressed that the China orientation of the ABM should make its impact on our Asian allies to encourage them to sign the nonproliferation treaty. In this speech the argument was presented that even with a 'thin' ABM, American retaliatory forces would have a greater likelihood of survival. Ralph Lapp argues, however, that at this time Mr. McNamara had little faith in Nike-X as an ABM system and his courageous and even stubborn attack on Pentagon civilian scientists was overshadowed by White House considerations of the election:

"The Republican 'missile attack' involved political warheads whose punch was measured in megavotes, not megatons."15

Richard L. Garwin, a member of the Pentagon's highest scientific advisory board, offered a scientific rationale to the 'thin' ABM decision. He argued that the prospects of using Nike-X deployment as a hedge against Soviet MIRVs could have compelled the actual decision. Nonetheless the political considerations for a limited ABM deployment clearly overwhelmed the scientific.

14 Paul C. Warnke, Speech to the Advocates' Club, Detroit (October 6, 1967).
15 Lapp, op.cit., pp. 144-45.
Political Content of the ABM Deployment Decision

The position of Hubert Humphrey during the decision-making process was recently clarified. In a preface to a Center for the Study of Democratic Institutions pamphlet, Mr. Humphrey uses language which would lead one to suspect he opposed ABM deployment. In fact his subsequent comments have clearly marked him as an ABM opponent. Mr. Humphrey has admitted that he actually supported the Johnson Administration's "reluctant" decision to deploy an ABM as a bargaining device with the Soviets on SALT.\(^{17}\)

The National Committee of the Republican Party took great interest in the ABM issue at an early date. The Committee issued a 55-page booklet, "Was LBJ Right?" It accused President Johnson of foot-dragging on deployment.\(^{18}\)

Additional insight into the political content of the deployment announcement is offered by a New York Times reporter. John Finney asserts that the original Sentinel ABM decision of September 1967 was primarily politically motivated. He adds that the issue had been building for some time, but a report from the Joint Congressional Atomic Energy Committee appearing in Autumn 1967 tipped the scales with information which anticipated an operational Chinese ABM force in the seventies.\(^{19}\)

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\(^{19}\) Reporter Finney's first citation is an article "A New Missile Stirs Up Old Doubts About the Military," The New York Times (February 16, 1969) in which he references a committee report in mid-1967. A few weeks later writing in the "Winds of Change in the Senate," The New Republic (April 5, 1969), Finney cites a committee report of August, 1967, which he says influenced the eventual McNamara decision for the 'thin' ABM. In the absence of any evidence to the contrary, it is assumed that both references are to the same report.
Together with American domestic political considerations, selected foreign events certainly played their role. In October, 1966, Red China test-fired a ballistic missile and on June 18, 1967, exploded a prototype H-bomb. Then the Soviets invaded Czechoslovakia starting August 21, 1968, which helped the appropriations for Sentinel in Congress. In all there was a spell of inevitability cast over the ABM decision. Indeed Mr. McNamara has reflected that at the time of his early 1967 Senate appearances, he felt a decision on an ABM might have to be made as early as mid-year, 1967, or as late as the following January.

Strategic/Military Content of the ABM Deployment Decision

The Joint Chiefs of Staff had already agreed that an ABM was "vital to the nation's security." Starting with the Fiscal Year 1966 House Defense Appropriations hearings, there were varying degrees of enthusiasm among the Chiefs over the form an ABM might take. Two years later General Wheeler wanted to expand the limited $5 billion ABM to $20 billion to protect 50 cities. At the same time Air Force Chief of Staff McConnell favored space research as the answer to ballistic missile interception. There is some doubt, then, that the JCS were ever unanimously in support of ABM deployment in its Sentinel form.

From 1965, Mr. McNamara resisted the "mimic strategy" of following the Soviet lead in deploying their ABMs, even though Congress had already voted a total of nearly $500 million for 1966-67 in ABM deployment funds. Adams, who willingly

22 Ibid.
points to contradictions in the Secretary's congressional testimonies, writes:

"All signs from 1965 to the present make it quite clear that every decision to withhold Nike-X production was a holding action designed to forestall the present situation, i.e., Soviet deployment of an ABM system. The effort failed because the Soviets did not cooperate." 25

The intragovernment debate did not end with the McNamara announcement. Scientists noted even the proposed 'thin' ABM (later called Sentinel) could be easily overcome by penetration aids and offensive tactics. 26 This received a rebuttal from the Army's chief scientist. 27 In July 1968, the United States and the Soviet Union agreed that discussions on SALT be set up at a later date. This was as close to the long sought talks as the Johnson Administration would get.

Reaction to Army Missile Site Surveys

In November 1967, the Army began preliminary surveys around 13 cities. Within a year, resistance mounted in Congress to the city-oriented selection of missile sites. A press wire service reported, however, that the general public was more concerned with the site appearance and economics than with their own vulnerability during nuclear attack. 28 Opposition to Sentinel was amplified and had its real impact through congressmen.

In December 1968, the Los Angeles Times added its voice to those with a dissident tone by editorially supporting the local county supervisors' resolution calling for relocation of Sentinel sites to outlying areas. The Army's preferred site in Los Angeles turned out to be one-half mile from the home of Representative Chet Holifield (R-Calif.), chairman of a subcommittee to the House Committee on Government Operations. Similar objections found receptive ears in both houses of Congress and the uproar increased in its intensity.

By the end of the year, on the eve of a new Administration's taking office, the public clamor expressed through congressmen against the site locations was joined by a former Atomic Energy Commission official and an unsuccessful Democratic presidential candidate. Early months of the Nixon Administration saw a public debate on the influence of the "military-industrial complex" appearing in two national publications.

After a decade and a half of research and development spending which amounted to over $4 billion, some doubts still existed on the effectiveness of the system under an actual attack. Critics of Sentinel pointed to the antiaircraft SAGE system which had not been "proven" in their eyes under an actual attack. Proponents of the ABM system suggested in less emotional terms that perhaps the very existence of SAGE, and of the ABM also, could deter an attack.

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29 "Anti-Missile Site III Chosen" (Editorial), Los Angeles Times (December 19, 1968).
32 Time Magazine started the trend with an article "The Military: Servant or Master of Policy?" (April 11, 1969). Not to be outdone, competitor Newsweek followed up with "The Military-Industrial Complex" (June 9, 1969). Then Time claimed one upsmanship honors with "An ABM Primer" (July 11, 1969) on the eve of the Senate floor debate on defense appropriations.
Congressional critics of Sentinel, however, were still maneuvering within both houses to delay funds for the project. Between April and August 1, 1968, three unsuccessful attempts to delete funds occurred in the Senate and two in the House.  

The Miller Staff Memorandum

On April 18, during the 1968 debate, on a bill for Defense Department weapons procurement, Senator John Sherman Cooper (R-Ky.) received a staff memo from his legislative aide William G. Miller. This memo suggested that Sentinel money should be held up since the system was not "fully proven by research." This staff item and Senator Cooper's reaction are seen as the start of organized congressional resistance to the ABM.  

Congressmen of the same mind as Cooper, thought they were gaining converts until August when Warsaw Pact nations invaded Czechoslovakia. Optimistic hopes of the anti-ABM group were thus dashed by a renewal of the cold war. The impact of the Czech crisis is graphically illustrated in the results of an unusual two-and-one-half hour secret session of the Senate on a proposed amendment by Senator Cooper to eliminate $387.4 million requested by the President to start Sentinel deployment.

The large number of Senators (40) present for the October session was even more unique than the session itself, since the debate occurred on opening day of baseball's World Series. In calling the closed session under a seldom-
invoked rule dating to 1794, Senator Cooper contended that neither the Chinese Communist nor Soviet developments in missiles presented the threat envisioned by the Johnson Administration.

Cooper warned that with ABM deployment the U.S. might be taking an "irreversible step" in the nuclear arms race. The argument favoring the appropriations request was offered by Senator John O. Pastore (D-R.I.) Chairman of the Joint Congressional Atomic Energy Committee. Senator Cooper and his colleagues were defeated on their amendment, and the stage was set for the next development in the evolution of an American ballistic missile defense system as the Republicans assumed control of the White House.

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III. THE SAFEGUARD DECISION
(1969, January through March)

President Nixon's first news conference on January 27, 1969 added a new word to the nuclear dictionary of terms: "sufficiency." Even more significant than the novelty of the word, however, was the apparent switch it gave to the President's own stand on nuclear deterrents. In a nationally broadcast campaign speech on October 24, 1968, Mr. Nixon addressed the need for the United States to achieve and maintain unqualified superiority. His reference to sufficiency, once in office, suggests that the influence of Dr. Henry A. Kissinger, Presidential Advisor on National Security Affairs, was already being felt.

 Nonetheless a few hours after the news conference, Kissinger's White House basement office denied the presidential advisor had ever recommended a policy of sufficiency "in exactly that language."1 Admittedly the suspected source of the word did not overtly deny it, but the response from Kissinger's office was certainly consistent with an earlier stated belief that his work could be best accomplished without fanfare.

To meet criticisms of the earlier Sentinel proposal, an inquiry into the ABM was begun in late January under the guidance of the new Deputy Defense

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1 Robert J. Donovan, "Presidential Style: Simple, Straightforward, Responsive," Los Angeles Times (January 28, 1969). (The origin of the term "sufficiency" remains something of a mystery. A Report by the Republican Task Force on National Security, Gradualism—Fuel of Wars, uses the term "sufficient force" in a critique of the flexible response doctrine. While this Report cannot be considered the source of the new word, it can be said that the Republicans were seeking a concept to replace "superiority" before Mr. Nixon entered the executive office. This mood for change undoubtedly played some part in the thinking of presidential political advisors preceding Mr. Nixon's first press conference.)
Secretary, David Packard. One account showed the Packard inquiry on the ABM to be part of (1) a sweeping review of national security policy and (2) the focus needed to implement that policy. The first part of the study emphasized defensive and offensive missiles, while the second part covered conventional forces and U.S. worldwide commitments.

There are indications the inquiry was responsive to party demands, especially the urgings of Senator Charles H. Percy (R-Ill.) and other Republican congressmen. Percy's first contact with the President-elect on the ABM issue was on a New Year's Day plane trip following the Rose Bowl game in Pasadena. Senator Percy was put on a secured phone with science advisor Dr. Lee DuBridge, who was reported to have displayed little knowledge of the Sentinel system. Shortly thereafter DuBridge was known to be "something less than enthusiastic about Sentinel" even though the concept had been praised by the President-elect during the campaign. In one speech prior to the election, Mr. Nixon said deployment of Sentinel would be a "major step toward candor and clarity."

By late January Senator Percy had met with both Deputy Secretary Packard and Dr. DuBridge.

On the Defense Department side of the house, Secretary Melvin Laird was known to favor an ABM, but he also felt his predecessor Mr. McNamara had blundered badly in approving only a 'thin' system of defense. Critical scientists in academic circles were already calling Sentinel technologically obsolete and a questionable defense system. There were some unkind references to an electronic Maginot Line.

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3 Rowland Evans and Robert Novak, "The Budding ABM Defense System May Be Shot Down," Los Angeles Times (January 31, 1969). (It is entirely possible Dr. DuBridge was not familiar with specific intragovernment literature on Sentinel having been appointed to his position as presidential science advisor only a few weeks before the reported conversation with Senator Percy. However, it is doubtful that a person of Dr. DuBridge's scientific qualifications would be unfamiliar with the general concepts of Sentinel, a topic which had dominated debate within the scientific community since the McNamara announcement in September, 1967.).
Domestic and Foreign Climate

On February 1, 1969, in a four-page letter to Secretary Laird, Senator Edward Kennedy (D-Mass.) urged a 'freeze' on the ABM defenses pending a National Security Council desirability study. Kennedy called the commitment of funds to a yet unproven missile defense "political folly and a serious technical mistake." The proposal received a rapid endorsement the next day from Kennedy's congressional mentor, Senator Mike Mansfield (D-Mont.). Kennedy commissioned his own private study from nongovernment scientists on the feasibility of an ABM system. This study would be released in early May.

In the meantime the Soviets were requesting clarification of the new administration's position on SALT. President Johnson had made a suggestion some two years previous that the super powers freeze ABM deployment, but no tangible results were obtained during his Administration. The day of the Nixon Inaugural, the Soviets expressed interest in bilateral disarmament negotiations. A Pravda article later urged clarification of the Nixon position, while taking the Defense Secretary to task for what they considered "an ambiguous attitude" on the talks. Unlike the Democrats before him, however, Mr. Nixon publicly expressed no desire to enter into such talks hurriedly and in fact postponed them for nearly eight months.

House Action Stopped on ABM

On February 4th, House Armed Services Committee Chairman L. Mendel Rivers (D-S.C.) wrote to Mr. Laird that action would be withheld on the Sentinel ABM until the new Administration's position became known. Rivers' action is seen less...
as a change of his own position favoring Sentinel than as an attempt to smoke out Republicans and force a public commitment on the issue. A few days later the Pentagon announced a halt to Sentinel deployment pending review of the program. Any connection between this action and the Rivers letter was denied.

The Army's aggressive acquisition for Sentinel was brought to a halt on February 6, when the Defense Department also announced suspension of construction activities. The suspension, it will be recalled, was preceded by considerable congressional uproar over the site locations in major population areas. On February 13th, the Los Angeles Times broke a story of major importance.

The Times article disclosed that an unnamed author had circulated a study on Capitol Hill which was expected to have a significant impact on reversing the McNamara ABM strategy. Owing to the author's expertise in nuclear weapons, the prestige of the study was considered great. To date, the Times' writers have been unwilling to divulge the name of the author, but John Finney of The New York Times offers a clue on this matter. Finney cites a memo, circulated in February and March and authored by Dr. Harold Agnew, Chief Weapons Scientist of the AEC's Los Alamos Laboratory, which states that "area defense," under the Sentinel concept, didn't make sense.

It is entirely possible the Times' report refers to this AEC memo.

Goldberger Panel

Advice on Sentinel was not limited to the Packard study in the Defense Department. Under the auspices of the White House Science Advisory Committee,

a panel headed by Professor Marvin L. Goldberger, a Princeton University physicist, submitted a report to the President in mid-February. The Goldberger panel was tasked with the responsibility to consider only the technical feasibility of a missile defense, but not to recommend whether a Sentinel ABM should be deployed. The contents of this study have yet to be released.

A few days after the Goldberger panel submitted its report to the President, a group of the AEC's leading weapons scientists wrote a four-page position paper "What's Wrong with Sentinel?" This paper questioned the Chinese orientation and population protection concept of the Sentinel system. While this AEC report was not formally adopted by the Joint Congressional Committee on Atomic Energy, it certainly added to the mood for change in the nation's capital. This AEC paper might be the aforementioned Agnew memorandum.

Pentagon Revisions Drafted

By late February, after nearly a month's study by Mr. Packard's staff, Secretary Laird briefed key congressional leaders on the Pentagon's modified Sentinel concept. Laird spoke of "phased" ABM deployment which would increase protection, improve chances for successful arms limitations talks with the Soviets, and lessen national and congressional opposition to deployment. The new plan would revise the Johnson ABM estimates upward from $5.8 billion to $6.3 billion, but would relocate missile sites away from the cities.


In early March the Defense Department was reported drafting a revised Sentinel to avoid city bases, the prime aspect of the McNamara deployment over which considerable furor had been raised. On March 5th, a National Security Council meeting included a two-hour analysis of the ABM. The White House termed the session a "full discussion," although no firm decisions were made according to Mr. Laird. Later in the day the Secretary told Representative John E. Moss (D-Calif.) of the House Government Information subcommittee that an Army information program to combat ABM opposition across the country had been ordered to halt.

The next day, March 6th, the Gore subcommittee of the Senate Foreign Relations Committee began its string of "educational hearings" on the ABM. This subcommittee heard Gerald C. Smith of the Arms Control and Disarmament Agency, Daniel Fink, Dr. Hans A. Bethe, and Professor J. P. Ruina.

**Senate ABM Opposition**

On March 7th, one full week before the Safeguard decision was announced, Senator Mansfield led a bipartisan Senate group in a plea to Mr. Nixon not to deploy an ABM until the U.S. made an honest effort to pursue a meaningful disarmament negotiation with the Soviets. At about this time, Senator Stuart Symington (D-Mo.) started his attack on defense spending escalation with the announcement that $23 billion spent in obsolete missile development would only be a harbinger of things to come should the ABM be funded. The effect of Symington's virtually single-handed campaign would be seen in a later Armed Services Committee reduction of Defense Department budget requests in research and development. Senator Symington's motives for this kind of pressure are most curious, since he had until then developed a reputation as one who rarely failed to vote affirmatively on Defense money bills. Although a once-staunch advocate of American air power, the Senator now supported an amendment that would have delayed the introduction of a new manned strategic bomber until at least 1978. One speculation on Senator Symington's position is that while he still believes that defense spending should
continue to have a high priority, he would prefer spending to be allocated for a "remote presence" based upon nuclear submarines, fighter aircraft, and offensive missiles.  

On March 11th a House Foreign Affairs subcommittee heard testimony from Jerome B. Wiesner and Dr. Charles M. Herzfeld, former Director of the Defense Department Advanced Research Projects Agency. In the Senate the Gore subcommittee heard testimony from George Kistiakowsky, Herbert York, and James R. Killian. Later that day the trio left the upper house to present their view to Dr. Kissinger that Sentinel would endanger U.S. security by an acceleration of the arms race. The meeting with the presidential advisor on national security affairs was arranged by Senate subcommittee member Clifford Case. The three men were once presidential science advisors.

The Safeguard Decision Announced

At noon on March 14, the President announced his decision to proceed with a modified Sentinel. A comparison of the official text with the extemporaneous remarks to the press is interesting. No where in the official statement can the term "Safeguard" be found, yet the term is used several times by Mr. Nixon in the broadcast transcript. A later press report attributes to Representative Craig Hosmer (R-Calif.) the change of name from Sentinel to Safeguard ABM. Representative Hosmer relates that the President was having difficulty explaining the difference between Sentinel and the modified plan to some Congressional leaders. Within an hour of the time Mr. Nixon went on the air

13 "Symington: Hawk or Dove?" Armed Forces Management (November, 1969).
16 Thanks are owed Dr. Joseph Fink, System Development Corporation, for providing the official White House stenographic transcript of the March 14 announcement, not available from other sources.
with the decision, Mr. Hosmer suggested the term "Safeguard." The other alternative proposed at that time, "Deterrent," seemed to lack sex-appeal. At the time the President gave no indication he would adopt the idea. The name was revealed for the first time during the broadcast.

In the announcement the President outlined the options open to him, then presented the plan for phased deployment, with immediate system implementation at two northern Minuteman sites at Malmstrom Air Force Base, Montana, and Grand Forks Air Force Base, North Dakota. The program would be subject to a periodic review for either increase or decrease. In arriving at this decision, Mr. Nixon relied heavily on the National Security Council and little on the anti-ABM scientists. One Kissinger staffer, Laurence Lynn—cast in the role of devil's advocate, drafted what were possibly "the most effective anti-ABM arguments to get the President's attention." Dr. Kissinger was reported as favoring the Safeguard as a useful bargaining chip in dealing with the Soviets during SALT negotiations.

Pentagon News Conference

At 2 p.m. (Washington time) that same day, Deputy Defense Secretary Packard and Defense Research and Engineering Director Dr. John S. Foster held a press conference at the Pentagon which laid out in considerable detail the basis for the President's decision. No criticism was made of the 1967

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17 Various sources attribute "Safeguard" to Representative Hosmer of the 32nd Congressional District of California: (1) The New York Times (March 21, 1969), p. 20; (2) a news release #9-21 undated from Representative Hosmer's office; and (3) testimony of Defense Secretary Laird before the Senate Armed Services Committee shortly after the March 14 announcement in an exchange with Senator Stephen M. Young (D-Ohio). The conversation with the President an hour before the announcement was confirmed in personal correspondence from Representative Hosmer to me.

decision announced by Secretary McNamara. The explanation was offered that at that time the Chinese ICBM and nuclear weapons programs were advancing rapidly and hopes existed for a slowdown of the Soviet capability. Now, however, the Chinese ICBM program was seen to be slipping while the Soviet ballistic missile capability had not only failed to level off, as Mr. McNamara had predicted, but had accelerated with continued missile deployment.  

The Soviets had also tested MIRV, but its accuracy was low and the system had not yet been deployed. Mr. Packard then outlined the options open to the President noting that the new Safeguard had fewer sites (12) than the Sentinel (17). The Deputy Secretary also noted that a cities defense was rejected on the grounds that it would only end in a "futile and costly arms race." Instead a defense was devised to give protection to America's offensive missile deterrent.

Additional options were considered but found lacking for a number of reasons. Modifications to the Minuteman and Poseidon missiles to convert them to a defensive role and were thought to take too long to develop and not to be flexible enough to handle all forms of the missile threat ahead. Laser and particle beam technology was also looked into, but was considered so blue sky as to defy serious consideration at this time. Mr. Packard admitted that no ballistic missile defense could be perfect, but the decision must still rest on the need to deter a possible attack from the Soviets by ensuring the survival of at least 200 American ICBMs past a first strike. It was felt with the initial limited Safeguard deployment, this number of weapons could surely survive. The initial deployment was intended to give some protection to Minuteman while permitting "early shakedown of integrated operational components." 

19 Department of Defense News Release No. 184-69. This and all cited DoD NRs are dated March 14, 1969.
20 DoD NR 185-69.
21 DoD NR 186-69.
22 DoD NR 187-69.
The nature of the technical advances alluded to in this Pentagon press conference—improved radar with greater discrimination capabilities permitting interception with low-yield nuclear weapons or conventional warheads, and a new third stage for the Spartan missile providing greater range and maneuverability—were detailed in a later news article.23

Safeguard—a Compromise?

A political motivation for the Safeguard decision was attributed, in one account, to a compromise between the Pentagon's insistence on the need for an ABM and its desire not to threaten ABM critics.24 These critics, however, saw in even an initially limited deployment the possibility of expansion.

Certainly the Pentagon news releases the day of the decision did little to allay the fears of these critics.25 A few weeks later Mr. Nixon's national security advisors were quoted as saying privately that the President would like to avoid Safeguard construction if possible.26 There were those in Congress ready to do everything possible to accommodate him.

Questions about who would decide when to use the Safeguard, once deployed, were headed off to some extent by Mr. Packard on a nationally televised program a few days later. He said he could not recommend a system that relied on the decision of a computer: the decision to use Safeguard must lie with the President.27 No further elaboration was made on the basis of possible compromise to national security.

25See especially DoD NR 187-69 and NR 190-69.
The following day, Mr. Packard was quoted as saying the Joint Chiefs of Staff had backed away from their previously expressed belief in the urgent need for a heavy ABM system in favor of the Nixon proposal one week before the March 14 decision. The Joint Chiefs were no longer advocating small ABM building blocks for an eventual heavy defense. Interservice support (by Air Force General McConnell and Navy Admiral Moorer) for a light ABM deployment was a factor in the decision on the form the Safeguard defense would assume.28

Canadian Reaction

The Safeguard decision was not without international repercussions from America's NORAD ally to the north. One initial press report had it that Prime Minister Trudeau had been notified of the President's decision only 24 hours in advance of the announcement and that Trudeau never was really consulted on the matter.29 A contradiction was issued from Dr. John Foster's office a few days later, in which the Defense Research and Engineering Director said his involvement with U.S. and Canadian talks included Canada's agreement 'to go along with the system' once the operational parameters were explained.30

No doubt reacting to his own domestic political pressures and to fears that Safeguard missile warheads, if used, would explode over Canadian territory Trudeau promised his officials to speak with President Nixon personally on the matter and bring back information of the system to Commons. The meeting between the two leaders occurred in Washington on March 25. The following day Trudeau informed Commons that the two proposed launch sites would not be operational until at least 1975. He felt this was "ample time" for Canada and the United States to discuss Safeguard. Care was taken to leave the matter open for discussion: Trudeau neither accepted nor rejected Safeguard.

ABM As a Partisan Issue

On April 7, Senator George McGovern (D-S.D.) gave his count of the Senate standing to the Associated Press: 30-35 for the Safeguard system, 45 opposed, and 15-20 uncertain. McGovern predicted a defeat of the defense system by a narrow margin. A week later two syndicated columnists, Richard Evans and Robert Novak, reported only one Senator had changed his mind since the President's announcement of March 14. That Senator was Hugh Scott (R-Penn.).

The Evans and Novak tally of the Senate standing differed from figures offered by McGovern, by adding to the supporters of ABM five uncertain Senators. The columnists' tally showed 40 supporting, 45 opposed, and only 15 uncertain. The White House disputed both sets of figures. Evans and Novak concluded from their review of the issue that the ABM was becoming a partisan issue. Slowly the momentum from the debate was turning away from scientific considerations.

Anti-ABM Republicans viewed the White House strategy to be a Senate showdown to make a choice of allegiance: the President or Ted Kennedy, a leader of the anti-ABM forces. The Republicans who opposed an ABM wanted no hint that even their staffs were conspiring with the potential 1972 presidential aspirant. So a sub rosa campaign to polarize the anti-ABM groups by parties was initiated from the White House.

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2. Ibid.
Presidential aides planted a news story in one senator's home state that claimed he was playing into Mr. Kennedy's hands. Another senator, Richard Schweiker (R-Penn.) recoiled from Vice President Spiro Agnew's suggestion that he should avoid Kennedy and "get on the team". Schweiker felt he knew more about military affairs than the Vice President. Senator Percy also entered the fracas, urging the White House to ease up, lest the President lose support from his own party on the issue. On June 30 the President met with a half dozen of the Republican ABM opponents from the Senate. The reported "soft sell" question and answer period did not result in any noticeable changes of mind among the participants. Even the President suggested that when an actual roll call vote came each congressman would have to vote his conscience.

Doubt Cast on "First Strike" Claims

In a page one story for April 8th, The New York Times reported Secretary of State Rogers as being skeptical that the Soviets were seeking a first strike capability. This conflicted directly with the earlier Senate testimony of Secretary of Defense Laird. On this matter Mr. Nixon's own views were unknown. This much was known: no mention of the first strike was made in the March 14 announcement by the President at the White House, nor during the Packard/Foster news conference at the Pentagon that same afternoon.

ABM opponents had called on the consulting services of Dr. Ralph Lapp in drafting a rebuttal to Mr. Laird's first strike claim. Lapp contended that, even with MIRV, the Soviets could not eliminate the U.S. deterrent force. The general public did not receive the flavor of the Lapp rebuttal until two months later in a published article. This article drew some critical comment a month later in the same publication.

With his address of April 21 to the Associated Press, the Secretary of State took an increasingly active part in the ABM issue. He stated that the Soviets had test-fired a MIRV from an SS-9 launch vehicle into the Pacific. This much had already been reported by the Institute for Strategic Studies in London and confirmed at the March 14 Pentagon press conference. Another of Mr. Rogers' remarks however raised eyebrows: the Soviets' testing program would be continued through June 15th. This apparently set the stage in a matter of days for the Defense Department release of contracts for the production of an American MIRV.

**Scientists' Resistance to ABM**

Later in the month relations between the White House and nongovernment scientists were further ruptured by the President's reversal on the appointment of Dr. Franklin A. Long to the directorship of the National Science Foundation. The withdrawal of the appointment was reported at the April 18 press conference by the President due to Dr. Long's "very sincere" opposition to the ABM. Despite an apology by Mr. Nixon, a leading journal for scientific and engineering managers took a dim editorial view of the matter. It was later reported that at a White House meeting with members of both the National Academy of Sciences and the National Science Foundation, Dr. Long rejected an offer to have his name resubmitted.

The Defense Department was also having its difficulties with popularity among scientists at this same time. Dr. Herbert York wired sympathetic senators that his earlier advice favoring deployment of the Polaris missile had been misrepresented in testimony before the Senate Foreign Relations Committee by

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Deputy Defense Secretary Packard. Contrary to the Packard version, Dr. York submitted that he had consistently and strongly supported the submarine-based ballistic missile system. Only after unsuccessfully attempting to get Mr. Packard to amend his testimony, Dr. York wired the Senate and the matter became a part of the public record.

Amidst the scientific and strategic exchange of statistics and charges, public groups formed in support of and in opposition to the Safeguard system. The New Republic issued the first of its "ABM Action Reports" giving names and addresses of groups opposed to Safeguard deployment. One editor saw fit to add a note of levity to the grim debate—with characteristic acumen, The New Yorker offered a "Public Service Pamphlet" illustrated with charts and replete with high satire on the technical and oftentimes confusing mathematics of the ABM debate.

The Kennedy Report

Early in May, Senator Edward Kennedy distributed a report edited by Drs. Jerome Wiesner and Abram Chayes. The highly critical report has been termed a "Summa Theologica" for the anti-ABM forces, providing a non-Pentagon scientific appraisal of the system. Nonetheless the usual ritual of issuing an amplifying statement to accompany the report was foregone in an apparent effort by Kennedy's office to soft-pedal his role in issuance of the report he had commissioned in February. Kennedy had previously tried to stay aloof of endorsement of the ABM opponents to avoid a partisan split in the Senate. However, with issuance of the report, staying aloof became extremely difficult.

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10 "ABCs of Your ABM: A Public Service Pamphlet from your Defense Department," The New Yorker (June 7, 1969).


The assignment to attack the report was given to Defense Director of Research and Engineering, Dr. John S. Foster. In a hastily called press conference in Dayton, Ohio, Foster charged that the Kennedy report was inconsistent and full of errors, and that it contained nothing which had not already been considered and rejected by the Pentagon scientists. Foster also said it was "impossible for the authors...in the time available...to produce a paper which meets the standards of the scientific profession." On the matter that significant numbers of nongovernment scientific experts opposed the ABM, Foster said, "One does not obtain a meaningful technical judgment by taking a vote of the scientific community or even of Nobel laureates." As the anti-ABM forces articulated their position, the supporters of Safeguard raised their voices.

Simultaneous with the appearance of the Chayes-Wiesner document, a conflicting study was issued by the American Security Council prepared by a panel headed by Dr. Willard F. Libby. Other members on the Libby committee included Dr. William J. Thaler, developer of the over-the-horizon radar, and a former Chairman of the Joint Chiefs of Staff, retired Air Force General Nathan F. Twining. This report held that the Soviets had passed arms parity and were still building their offensive forces. The report argued strongly for the Safeguard concept as making sense to deter this growing threat from the Soviet ballistic missile forces.

Only days before the Senate vote on Safeguard appropriations, the Hudson Institute published its comment on the subject. Undoubtedly this volume was issued too late to have a meaningful impact upon the decision-makers. Nonetheless the book did contribute to the debate among scientific and strategic experts, which continued after the August 6 and 7 votes in the upper house. One can speculate whether all the information published in the Hudson Institute book might have been made available to the Senate in a more timely fashion. Certainly some of it was, such as the testimony of Albert Wohlstetter before the Armed Services Committee.

The Question of Costs

Senator John S. Cooper read into the Congressional Record an AEC letter that Safeguard costs quoted by Defense Secretary Laird were $1.2 billion low, since they did not include warhead costs. The AEC increased the cost figures from $6.6 billion to $7.8 billion. Mr. Laird countered the Cooper argument by saying that half of these warhead costs would be for research and development and would not be ABM expenses. Senator Cooper pointed out that when research and development were added to the Safeguard estimates the price tag would reach $11 billion, nearly twice the original estimate.

In May a story appeared in The New York Times (May 15, 1969), that the Defense Department was using Sentinel funds to procure items for Safeguard. The Nixon Administration denied it had pledged to cancel contracts already committed by the Johnson Administration for the ABM system. The Nixon spokesman was reported as saying that the current administration had agreed not to deploy equipment nor to acquire sites until congressional approval was received. It was the Administration's position that this permitted procurement of hardware under existing contracts.


Later in the month, the junior senator from Ohio, William Saxbe, quoted the Brookings Institution study that weapons systems costs increased 300 to 700% over the original estimates. Twelve weapons systems selected at random showed a 220% increase in actual costs over original estimates. The question of costs had also been covered by Washington Post economics writer, Bernard D. Nossiter, in an article, "Weapons System: A Story of Failure" (January 26, 1969), which was read into the Senate Foreign Relations Committee hearings of March 6, 1969.

At a May 29 speech to the New Hampshire World Affairs Council in Laconia Senator Thomas J. McIntyre (D-N.H.) offered a plan to save millions for Safeguard by research and development testing of just the radar and computer components. Under this compromise plan, missile deployment would be postponed until congressional approval. Senator McIntyre's amendment was defeated on August 7th. To meet this rising tide of opposition to defense spending, on June 30 the President announced a blue ribbon civilian commission to study Defense Department organizational management. The chairman of the Commission was Gilbert W. Fitzhugh, Board Chairman of the Metropolitan Life Insurance Company.

Efforts at Compromise

Late in May, Senators Case and Cooper approached Mr. Nixon on the prospect of deferring ABM deployment until the start of arms talks with the Soviet Union, while allowing advanced research and development of Safeguard to continue. Both Senators advised that a Senate showdown on the ABM could be costly to the President, although he could exert pressure to eke out a victory.

According to reporter John Averill, both Senators had tried to see the President in April but got only as far as Dr. Kissinger's basement office. Cooper finally managed to see the President enroute to the Kentucky Derby (May 3rd) aboard Air Force One. No response was given. Undaunted, the Senators planned to try again when Mr. Nixon returned from Midway Island.

**Air Force Academy Address**

The best indication by early June that the President was unwilling to yield on building the Safeguard was given in his commencement address at the Air Force Academy on June 4th. Mr. Nixon accused critics of the military establishment of being "neo-isolationists" lacking vision and courage. Some observers saw in the speech a steadiness on the President's part to press on with plans to test MIRV before disarmament talks with the Soviets.

Discussing the much bantered-about phrase "military-industrial complex" in the late President Eisenhower's Farewell Address, Mr. Nixon reminded his listeners that the phrase is often taken out of context. Mr. Eisenhower also warned a few sentences later "of an equal and opposite" danger: that the policy-makers should also be wary lest "public policy...itself become the captive of a scientific-technical elite."

Reaction to the address was predictable: Senator J. Wm. Fulbright called the speech "distressing and demagogic" and saw in the remarks a reply in kind to his War College speech the week before. Senators Alan Cranston (D-Calif.) and Albert Gore (D-Tenn.) were disturbed. But Senator George Murphy (R-Calif.) had only high praise for the address, recommending it for reading by American forces in Vietnam.

**The Intelligence Differences**

The debate on whether the need existed to deploy an ABM continued into June as discrepancies between CIA's National Intelligence Estimates and the far
grimmer Pentagon projections on Soviet missile capabilities were emphasized. At base may have been the differences in means to make these forecasts. The Pentagon traditionally inclines toward a "worst possible" and "greater than expected" threat estimate. There was also rising indignation at this time over Mr. Laird's selective declassification of information to suit his needs. This was coupled with reluctance on the part of some senators to jeopardize Richard Helms' career as CIA Director by quoting the agency's estimates in direct opposition to the Pentagon analysis.  

Problems affecting the current intelligence data go back to the posture statement made by Defense Secretary Clifford upon leaving office in January, 1969, which was apparently based on a National Intelligence Estimate of September, 1968. His optimistic view perceived a Soviet threat to the United States of fewer than one hundred SS-5 missiles. An unpublished Senate Foreign Relations Committee document quoted U.S. Intelligence Board members as minimizing the extent to which the SS-9 deployment had occurred. Clearly the highest levels of the intelligence community were at odds with the Laird estimate.

It was later reported that Mr. Helms felt it was too soon to determine if the Soviets had or were after a first strike capability. Reluctantly Senator Fulbright agreed to hear Messrs. Helms and Laird in closed session before his Committee on Foreign Relations. An invitation was issued on June 18. For Senator Fulbright a better arrangement would have been to hold an open hearing on the subject.

Senate opposition was dealt another blow about this time when the Pentagon quietly released a contract to the General Electric Company to produce MIRVs for the Minuteman III ICBMs. Congress had not been informed beforehand of this move, and sentiment among legislators had seemed to favor a moratorium not only on MIRV production but on tests and development as well.\(^\text{23}\) On August 5, Dr. John Foster testified before the House Committee on Foreign Affairs that multiple reentry vehicles, as distinguished from multiple independently targetable vehicles which could be controlled to their impact, were already deployed aboard "existing Polaris A-3 missiles."\(^\text{24}\)

The day after Messrs. Helms and Laird were invited to appear before the Senate Foreign Relations Committee, Mr. Nixon said the Soviet missile tests in the Pacific suggest the possibility of some guidance and control in the multiple warheads. This announcement confirmed earlier indications and the Secretary of State's April comment of the Soviet engineering accomplishment.\(^\text{25}\) A new date was set for the arms limitations talks of July 31 to August 15, in either Geneva or Vienna.

**Foreign Relations Committee Closed Session**

On June 23rd, Laird and Helms appeared at a closed session lasting four-and-a-half hours. Mr. Laird announced afterward that no disagreement existed between the CIA Director and him. Senator Fulbright called this "an overstatement." For Fulbright this session was to be exhausting, the most difficult

\(^{23}\) Ibid.

\(^{24}\) House Committee on Foreign Affairs, *Diplomatic and Strategic Impact of Multiple Warhead Missiles* (91st Cong., 1st Sess.). Of special interest is the August 5 testimony of Dr. John Foster, which was originally given in closed session. This House testimony was one day before the first Senate vote. The Committee released censored portions of the testimony on August 14.

he had experienced in twenty-five years. Senator Gore saw Laird backing off an earlier "indefensible position" by redefining a first strike. Neither Fulbright nor Gore saw any reason to justify Safeguard deployment based on the testimony heard.

Secretary Laird denied any change of mind on the SS-9, now calling the ICBM a first and possibly second strike weapon. Within days a syndicated column reported the Atomic Energy Commission was conducting tests in the Nevada desert to prove the ABM could work. If successful, such tests would naturally have an impact on Senate criticisms that the warhead was untested.

Despite the furor, the Senate Armed Services Committee approved the proposed Safeguard. The vote was close: 10 for and seven against. This was the tightest victory on a major weapons system in nearly two decades according to one veteran Senate committee member. Critics of the ABM saw these results as a forecast of the way the floor vote would go in the upper chamber.

In the committee roll call one member had responded "Present," refusing to take sides on the issue. Another, Senator Thomas McIntyre, held to his previously committed position for a compromise resolution on the Safeguard controversy to deploy only radars and computers, but no missiles, in order to adequately test the integrated electronics systems.

V. PARLIAMENTARY RESOLUTION OF SAFEGUARD

The Matter of Poll Taking

At mid-stream in the ABM debate the Freedom House separated the issues into primary and secondary interests. In the first category were the following questions: Is an ABM needed, and if so, what form should it take? Would an ABM provoke an arms race? Of secondary concern were the following: Would the system work? Should the money be better spent on urgent domestic concerns? No attempt was made by the Freedom House to answer these questions. Its function was viewed as formulating the appropriate priorities. Yet from other sources public opinion seemed clearly to favor an ABM defense of some kind.

On April 6, a Gallup Poll was released of a public attitude sampling conducted March 28-31, two weeks after the Safeguard announcement. For every 100 adults of the 1,225 surveyed, 60 had never heard or read about the ABM. The other 40 had made up their minds, however, in favor of the ABM five to three. Thus in the total sampling: 25% favored an ABM, 15% were opposed, and the remaining 60% had no opinion.

Two major national newspapers exercised some license in reporting the results of this poll. The Los Angeles Times listed the statistics, then only those reasons often given for favoring Safeguard. The New York Times also reported the statistical results, but listed only those reasons most often given for ABM opposition. Neither report, then, could be called balanced.

Comparisons of Public Attitude Polls

On July 14th, the Citizens Committee for Peace with Security took out a full page advertisement in the Los Angeles Times urging public support for the Safeguard proposal. This group based its position on a poll which was released by Senator Hugh Scott on June 5th. The poll showed a sampling of 1508
interviews aligned as follows: 34% in favor of Safeguard, 8% opposed, and only 8% without an opinion. During the ABM debate, this poll was far and away the most favorable to the Safeguard proposal and differed significantly from results of three Gallup Polls conducted at separate times.

Shortly after this Committee's poll results were published, three Gallup Polls were compared in the Los Angeles Times and The New York Times (July 27 editions). These Gallup Polls, including the one published April 6 were compared in the Los Angeles Times and The New York Times (July 27). The results follow:

<table>
<thead>
<tr>
<th></th>
<th>March 28-31 (1225 adults)</th>
<th>May 16-19 (1777 adults)</th>
<th>July 11-14 (1517 adults)</th>
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<tr>
<td>For Safeguard</td>
<td>25%</td>
<td>24%</td>
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</tr>
<tr>
<td>Against Safeguard</td>
<td>14</td>
<td>14</td>
<td>18</td>
</tr>
<tr>
<td>Still undecided</td>
<td>1</td>
<td>2</td>
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<tr>
<td>Unaware of ABM or</td>
<td>60</td>
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<tr>
<td>still no opinion</td>
<td>100%</td>
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Thus the Gallup polls taken on three separate occasions since the Nixon announcement on March 14 were remarkably stable. In reporting the results, The New York Times gave three reasons each for favoring and opposing the ABM most often given by the poll takers. By contrast, the Los Angeles Times quoted one "typical verbatim comment" from both sides, devoting 12 lines of space to Safeguard advocates and five lines to the opponents. Of interest to this study is the lack of attention congressional leaders paid to these poll results. The debate was now nearing completion and the lines were being drawn on the partisan issue. In the Gallup Poll results while the respondents against Safeguard had risen slightly, the majority of those who had formed an opinion on the issue remained in support of the President's modified plan for a missile defense.
Senate Debate Launched

An unprecedented amount of defense budget requests in procurement as well as research and development was eliminated when the Senate Armed Services Committee cleared the appropriations bill. It is highly probable that this nearly $2 billion cut reflected behind-the-scenes work by Senator Stuart Symington, who was a strong critic of defense weapons spending escalation. Although the close Committee vote of ten to seven cleared the bill to the floor, only three senators joined in the minority report: Symington, Young, and Inouye.¹

On the evening of the floor debate, The New York Times saw the power of the Joint Chiefs of Staff increasing under the Nixon Administration's reorganization of the National Security Council. The Times contended that the new Council machinery provided an outlet not previously open to the uniformed services for expressing their views and influencing public policy.²

As the soon-to-become-heated discussion of military spending began, Senators Hart and Cooper announced their intention to introduce an amendment to the bill. This alteration would bar use of defense funds for Safeguard deployment or even site acquisition. Further, the amendment would continue Safeguard under research and development status in the Pacific only.

A few days after the bill reached the floor, ABM critics were attacking the Pentagon. Senator Fulbright was the first. In a letter to Defense Secretary Laird, the Senator charged that testimony was suppressed to cover up intra-administration conflicts on the Safeguard system.³ The comment came after

Fulbright's review of the heavily censored transcript of Laird's testimony before the Foreign Relations Committee on June 23. Laird had earlier written a letter on July 1st complaining to Fulbright that heavy censorship on all Helms' testimony provided a distorted picture of the situation. Fulbright retorted that the censorship had been imposed by the executive branch and not by his committee. For the time being the Laird/Fulbright feud left the public sphere.

Hints at Willingness to Compromise

ABM opponents were encouraged on July 10th when the dean of Senate Republicans, George Aiken of Vermont, cast his support with their ranks. Aiken hinted at the time that the Administration would be ready for a compromise on Safeguard soon. The Senator himself favored the McIntyre amendment to the appropriations bill, which allowed deployment to the two initial sites of radars and computers but not missiles. There were also hints at this time that Mr. Nixon would regard the McIntyre amendment less a compromise than a modification for Safeguard. At about this time, The New York Times editorially urged Senate approval of one of the two compromise amendments to impress the Soviets in SALT negotiations.4

If the Administration held a view toward compromise, it was well hidden from the public and the Senate at large. Senator Aiken's remarks were attacked by the Defense Secretary the following day. Mr. Laird opposed any kind of compromise and reemphasized his own "unqualified support for the Safeguard proposal as submitted by the President to Congress."5 At the same time, Senators John Stennis (D-Miss.) and the late Everett Dirksen (R-Ill.) announced that they were opposed to compromise.

Closed Session on Senate Debate

Near the end of the second week of upper house debate, the Senate conducted an almost six-hour closed session, both sides endeavoring to convert the wavering and proselytize the undecided. It was generally agreed that this session called by Senator Symington, the fourth closed session in seven years, was both informative and helpful, although no changes of mind were immediately apparent. Senator Mike Mansfield noted afterwards that "attention was excellent." This session also featured a "battle of the charts" between Senators Stuart Symington and Henry Jackson (D-Wash.). Both sets of charts were based on Pentagon information. For the most part senators agreed after the session that Jackson's charts (prepared for him by the Pentagon) out-did those prepared for Symington by his staff.

For the first time, press reports suggested that the ABM proponents may have achieved a slight edge in strength, if not actual votes in the Senate, over the critics of Safeguard. John Finney saw the opponents winning first place in the initial technical-military debate on the issue, yet lacking enough firm votes to overrule Safeguard and achieve full victory in the second crucial phase of the debate. He concluded that the odds were with the White House because of the "personal approach" of the President, who opened once closed doors to wavering freshman Senators. In this same article, Kenneth E. Belieu, White House aide in charge of Senate relations, was quoted as ruling out arm twisting as a method to sway the Senate in favor of Safeguard.

7 Ibid.
The Cooper/Hart Amendment

Due to the backlog of requests to speak to the issue, Senators Cooper and Hart dropped plans on July 22 to bring their amendment before the Senate for a vote. However, the next day the amendment was called up without any effort by the authors to seek a vote. Opposing the amendment, Senator John Tower (R-Tex.) claimed it would delay Safeguard deployment for at least two years. The original Cooper/Hart amendment was modified to clarify the intent of its authors to forbid any development, even for research purposes, at any of the 12 proposed U.S. sites. Senator Cooper saw this as preventing "in the coming year a premature commitment to deployment."

Tempers flared on the floor during July 25th, when Senator Fulbright admitted "over-speaking" on the alleged influence of the military-industrial complex on national policy matters. In commending freshmen Senators for their opposition to ABM, Fulbright said this indicated their intention to refuse to become "stooges of the military." Senator Stennis was irate over Fulbright's remarks. Not satisfied with Fulbright's withdrawal of the term "stooges," he demanded and received a formal apology from Fulbright. Stennis held that the term was used without basis in fact. Fulbright then referred Stennis to a Pentagon memorandum which reportedly launched a corporate public relations campaign supporting the Safeguard ABM.

After the session, Senator McIntyre moved to the opposition camp, giving ABM critics a total of 50 committed votes, one shy of the needed majority. McIntyre, while indicating he would vote for the Cooper/Hart proposal, was still supporting his own compromise amendment. He planned to seek a vote on his compromise to deploy only electronic components once the Senate had voted on the other compromise amendment.

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The Senate Authorization Votes: August 6-7, 1969

The first funds to be committed by either chamber of Congress for Safeguard deployment were approved by the House on August 5th, the eve of the historic Senate votes. The House vote had not been expected until after upper house action. In fact the sponsor of the $2.5 million authorization, Armed Services Committee Chairman L. Mendel Rivers, offered a floor amendment to delete the money from House consideration.

However, Representatives Robert L. F. Sikes (D-Fla.) and Elford A. Cederberg (R-Mich.) held that the communications installation could be used by the North American Air Defense Command in Colorado if the ABM deployment was not approved. With no support from its author, Rivers' amendment to delete the authorization was killed by voice vote. The military construction bill was approved 375 to 30.  

Meanwhile over in the Senate, the ballistic missile defense concept was being prepared for the showdown vote. The authorization narrowly passed the Senate Armed Services Committee on June 28th, by a 10 to 7 vote. According to some veteran committee members, this was the "closest vote on a major weapons system in nearly two decades." 

Attached to the Committee Report on the bill were: (1) a minority view from Senators Stuart Symington, Stephen Young, and Daniel Inouye outlining their reasons for opposing deployment of Safeguard; (2) supplemental views of Senator McIntyre offering an alternative to the proposed deployment; as well as (3) supplemental views of Senators Schweiker and Young providing a recommendation for adding a fifth title to the authorization bill to give

the Controller General greater review authority over major contracts. This proposal was sponsored by Senator Schweiker on the Senate floor. By a close 47 to 46 roll call vote on August 7th, the General Accounting Office was authorized to subpoena records of major defense contractors for examination.

As the heated debate neared an end, both sides privately admitted the vote could go either way by one or two votes or end in a tie. Late on August 5th, Senator Margaret Chase Smith (R-Me.) offered an amendment which would ban Safeguard altogether, including further ABM research and development on that system. Under Senate rules, her amendment would be voted on first, before the Cooper/Hart amendment which would have deferred deployment in favor of continued research on Safeguard.

In a letter distributed by Senator Smith early in the afternoon of August 6th, she expressed a lack of confidence in Safeguard. ABM opponents read the contents of this letter as a hint that if her own amendment were defeated, Mrs. Smith would then vote against the Cooper/Hart proposal. At a time when individual votes were crucial, consolidation of the Safeguard opponents was paramount. A swift move materialized to retain solidarity among the opponents. Senator Albert Gore eventually suggested wording acceptable to Senator Smith as a revision to her amendment, without jeopardizing the intent of the Cooper/Hart amendment in the eyes of its supporters.

Twenty-four years to the day after the first atomic bomb was dropped on Japan, the Senate voted. An immediate vote was forced on the original Smith amendment, when Senator Barry Goldwater (R-Ariz.) objected to Mrs. Smith's request for unanimous Senate consent to have Senator Gore's words added to the original

15 Senate, Committee on Armed Services, Authorizing Appropriations for Fiscal Year 1970... (91st Cong., 1st Sess.), Report No. 91-290 (July 3, 1969).
amendment. The vote was an overwhelming defeat of the strongly worded amendment: 11 for and 89 against. The revised and more softly worded amendment was made the order of business.

It, too, was defeated: this time by a tie vote. However, the final tally read 50 for and 51 against, when Vice President Agnew exercised his chairman's prerogative to cast an unneeded opposition vote. The day's third vote, this one on the Cooper/Hart amendment, was the disheartening defeat for ABM opponents: 49 for and 51 against. Senator Mansfield later termed this vote "the high water mark" in upper house opposition to the Safeguard deployment. Several critical votes contributed to this defeat.

Mrs. Smith, in exercising her inalienable right to stand steadfast, expressed opposition to Safeguard by voting against even continued research on the proposal. Other crucial votes for the Administration stand were cast by Senators Clinton P. Anderson (D-N.M.) and John J. Williams (R-Del.) both of whom remained uncommitted until the actual voting. Both Senators voted against the Smith amendment.

On the following day, August 7th, the Senate defeated Senator McIntyre's compromise amendment to deploy only Safeguard computers and radars to the Montana and North Dakota sites. The vote on this last issue was 27 for and 70 against. Later in the day, the Senate approved by a one-vote margin (47 to 46) Senator Schweiker's proposal for stiffer budget oversight on major contracts.

ABM opponents called the defeat of the Smith and Cooper/Hart amendments hollow victories for the Administration. While presidential comments were declined, the White House noted that Mr. Nixon was "pleased" with the outcome. Press Secretary Ron Ziegler provided a comment which came near to being official that day, "In this business, you win or you lose. You don't win or lose by a little bit."
Editorially the Los Angeles Times (August 8) acknowledged the close vote and considered this a "case where the proverbial inch is probably as good as a mile." The New York Times stated (August 7) that both sides of the debate could claim victory on the results: the Administration for the defeat of the amendments and the ABM opponents for their ability to muster the requisite support to make the vote the closest on a major weapons system since the end of the Second World War.

The momentum which had built during this unprecedented nine-week issue over the Pentagon spending policies slowly subsided. In the days to come, defense critics lost votes on other items in the authorization bill. There is some evidence suggesting that the Nixon Administration, anticipating the critics' strength, cut the Air Force's Manned Orbiting Laboratory and the Army's proposed new combat helicopter from the military budget proposed by the Johnson Administration. 17

Although the Armed Services Committee cut almost $2 billion from the original bill in the Senate, critics managed to delete only $700 million from the authorization bill, most of these cuts coming from research areas. On September 17, the Senate passed the overall authorization bill by an 81 to 5 vote and sent it to the House for further consideration. The lower house did not take as much time in debating the issue: only two days compared with six weeks of floor discussion in the upper chamber. House efforts to slash billions from the authorization bill were defeated, and a $21.35 billion bill was passed the evening of October 3 by a vote of 311 to 44. Minor differences were referred to a conference committee, but the path was clear for deployment of the Safeguard ballistic missile defense system.

Concluding Comments on the Decision Process

The 1969 debate over the Safeguard system is a striking example of the interplay by scientists, politicians, and the military to achieve certain policy objectives. The unique characteristic of this extended debate was the clear demarcation between the preliminary conflict of defense doctrine among strategists, then the emerging primacy of congressional maneuvering, particularly in the Senate, to the eventual outcome. The roles played at various stages of the debate by scientists and politicians, and their intriguing manipulation of methods of persuasion were significant facets in the result.

The discussion among academicians, strategists, and physical scientists did little to influence the policy makers during the final stages of the debate. However, scientists did make their mark in the formative stage by influencing the decision for a less controversial type of ballistic missile defense. Opposition to Sentinel and its location in and near metropolitan areas clearly had its effect in the relocation of the Safeguard sites to outlying areas. Dr. Harold Agnew's memorandum which was critical of the Sentinel's area defense concept also had its impact soon after the new administration assumed office. During the debate, the Administration did not cater to the nongovernment scientists who opposed ABM. From the start a firm line was drawn on that matter.

During the intragovernment debate, the opposition viewpoint was articulated by a staff member in the office of the Presidential Advisor on National Security Affairs. The stance was reinforced on several occasions: the withdrawal of the appointment of Dr. Franklin Long to the National Science Foundation; Deputy Defense Secretary Packard's refusal to amend congressional testimony to clarify a view of Dr. Herbert York, a former presidential science advisor; the routing of the visit of three presidential science advisors (from previous administrations) who opposed ABM deployment to Dr. Kissinger's office rather than to the President's; and finally, when the anti-ABM forces issued
their privately commissioned evaluation of Safeguard, Dr. John Foster's candid statement that a meaningful technical judgment on a major weapons system could not be achieved through a poll of Nobel Laureates.

Starting with the President's commencement address at the Air Academy some sense of perspective emerges from the unfolding of events on Safeguard. In that speech, he quoted the late President Eisenhower's Farewell Address as having more meaning than is usually attributed to the warning of a military-industrial complex. The Farewell Address also urged policy makers to beware of an overcommitment to a scientific-technological elite. At times the Safeguard issue seemed to be a test case of the new Administration's capability to achieve its policy objectives with the assistance of--but not a sole reliance upon--narrowly specialized groups of experts.
APPENDIX A

Scientific and Strategic Opposition To
Missile Defense: A Selected Bibliography


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APPENDIX B

Scientific and Strategic Support for
Missile Defense: A Selected Bibliography


------. "For the ABM." IEEE Spectrum (August, 1969).


Seitz, Dr. Frederick. "We Can't Afford a Pearl Harbor in the Space Age." Air Force (June, 1969).


"Planning for Peace." Orbis (Summer, 1966).


"Illusions of Distance." Foreign Affairs (January, 1968).


APPENDIX C

Alternatives to Safeguard


The roles played by academicians, strategists, and physical scientists are examined in the decisions leading to an American ballistic missile defense system. The conclusion of the study is that the expert discussion of issues influenced the form eventually assumed by the Safeguard system. However, this discussion did little to influence policy makers in Congress who used parliamentary maneuvering to resolve the 1969 debate.