CHAPTER FIVE

The Innovative Context

Standing Firm, Pushing Forward, and Giving Way After *Sputnik*

On October 4, 1957, the Soviet Union launched a 184-pound satellite called *Sputnik* into outer space, causing a global sensation. Although the American government quickly concluded that the satellite provided no immediate threat, it did, in combination with other Soviet technological advancements, pose a potential long-term threat to U.S. national security. Accordingly, the administration quickly decided that it needed to organize its scientific effort better and encourage more students to study the sciences. Sensing the new public concern could allow him to overcome entrenched opposition, Eisenhower began a campaign to reorganize the Defense Department. After a second larger Russian satellite was launched in early November, the administration moved to raise defense spending and to launch its own satellite to mollify the public's apprehension. In the end, the administration adopted a series of policies based on both national security and public opinion, including a public information program, a backup and higher-priority satellite program, the creation of a science adviser position in the White House, reorganization of the defense establishment, an education bill, an increase in defense spending and acceleration of the missile program, a plan for space exploration, and a civilian space agency.[1]

Because the Soviets combined their ballistic missile and satellite programs (the United States had separate programs), *Sputnik* implied a

significant booster capability for Soviet warheads. Even though the Soviets still had problems with guidance and reentry, the booster thrust (of *Sputnik II* in particular) in combination with a Soviet high-yield thermonuclear weapons test the previous summer and a series of recent missile tests suggested that they did possess the range and throw weight capability necessary for a successful intercontinental ballistic missile (ICBM).[2] This capability came as a distinct surprise not only to the media, Congress, and public but to the administration as well. According to the notes of the NSC meeting the day afterward, Deputy Secretary of Defense Donald Quarles reported that the Soviets "possess a competence in long-range rocketry and in auxiliary fields which is even more advanced than the competence with which we had credited them."[3] In his memoirs, Eisenhower recalled that the "size of the thrust required to propel a satellite of this weight came as a distinct surprise to us."[4] Given its Cold War propaganda value, the booster and satellite contained serious implications for American international prestige. In addition to providing the first practical threat to the continental United States in some time, the short amount of time it would take for a Soviet ICBM to reach the United States greatly reduced the American bomber force's response time and could open it to a potentially disarming first strike. The government had expected a Soviet satellite at some point (although the public did not), but it did not anticipate the specific timing of the launch.[5]

In response to this achievement, the administration initially pursued a public relations strategy to calm the public's apparent concern. After the second *Sputnik*, the administration began to see unrestrained public hysteria over the satellite as a challenge to its policy goals. They thus attempted to keep what they saw as the public's overreaction from altering security policies by developing several policies to confront the threat and allay public concern, including a public information program, defense reorganization, and an education bill. The administration continued to push these policies, but when it became clear that the public could not be calmed with these efforts alone, it adopted several additional policies (increased defense spending, missile acceleration, and a space program).

Realist and Wilsonian liberal theories generate different expectations of policy behavior for this context. As discussed in chapter 1, according to realist theory, decision makers use their best judgment to fashion a policy to meet the national security threat. Because of the surprise, realist theory also suggests that public opinion might become

(irrationally) aroused by the shock of the revealed threat and may limit viable policy options. Expectations based on Wilsonian liberal theory indicate that the long decision time allows policymakers an opportunity to measure public opinion and the public an opportunity to influence policy decisions. Given these conditions, officials respond by trying to carry out the public's policy preferences.

The beliefs model offers similar behavioral predictions for Eisenhower and Dulles. As with previous cases, Eisenhower would have made the decision that best reflected his perception of national security and then tried to gain public support for the option. If he perceived public opposition to be unchangeable, it should have constrained his choices. Dulles should have attempted to persuade the public to support the policy he perceived as best for national security, since the long decision time would have allowed him the time he thought necessary to generate public support.

The *Sputnik* case provides mixed evidence for these views of decision making. The realist perspective finds support throughout, since decision makers chose certain policies to meet national security needs and then attempted to lead the public. However, decisions on defense spending, missiles, and space policy during the policy selection and implementation stages support the Wilsonian liberal view. For this reason, the influence of public opinion for the entire case is coded as a combination of the *lead* and *follow (moderate) categories,* with the lead category as the primary overall influence.

The beliefs variable also received mixed support. For several policies, Eisenhower acted according to his beliefs at both a *consistent* and a *causal* level of influence. But he relented to public pressure on defense spending, missile acceleration, and space policy, which is *inconsistent* with beliefs predictions. Even so, the presence of his public opinion beliefs remained apparent (even as he acted against them) as shown in his irritation in having to respond to public opinion. Dulles reacted to national security concerns and attempted to lead the public because of his beliefs, which implies a *causal* influence.

Problem Representation: Setting the Agenda

Before *Sputnik*, the administration recognized the link between American international prestige and satellites but regarded the missile program as paramount, which thereby limited the satellite effort. The administration decided on May 16, 1955, to launch a satellite during the

International Geophysical Year (IGY, between July 1957 and December 1958) based on the recognition of the "considerable prestige and psychological benefits" from being first, but the small ($20 million at the start and $110 million per year by May 1957) satellite program was not to interfere with the ongoing ballistic missile program.[6] At a later NSC meeting, both Eisenhower and Dulles emphasized the need to develop an ICBM capability as soon as possible because of the impact of a Soviet ICBM on America's international prestige and domestic public opinion. According to the meeting's notes, Dulles warned that the administration needed to consider "how to minimize the consequences of a Russian achievement of these weapons prior to the United States" because "it was going to be very difficult to persuade public opinion on this score" given the inevitable Soviet propaganda efforts. Eisenhower stressed that he was "absolutely determined not to tolerate any fooling with this thing. We [have] simply got to achieve such missiles as promptly as possible, if only because of the enormous psychological and political significance of ballistic missiles." Although the notes reveal that he was thinking primarily about the international reaction, Eisenhower punctuated his comments with references to the many telegrams and letters he received from the public calling for the quick development of an American ballistic missile.[7]

After the October 4, 1957, launch, press comment largely mirrored the administration's fears that the satellite would enhance Soviet prestige and provide significant propaganda leverage. Press reports linked the satellite achievement to the Soviets' ICBM capacity (with the implied threat to the American mainland), and some called for a reexamination of American defense policies and missile programs. Sensing an opportunity, Democratic leaders took the administration to task for allowing American continental defenses to waste away through spending cuts and issued calls for unrestrained efforts to catch up.[8]

The administration's initial response focused on the scientific aspects of the Soviet achievement and downplayed the military implications. Because Eisenhower remained at his Gettysburg retreat over the weekend, Press Secretary James C. Hagerty issued the administration's first response on Saturday, October 5. He emphasized that the administration was not surprised, did not think of the satellite program as a race, and suggested that the administration was following *Sputnik* because "of great scientific interest." Other administration statements to minimize the Soviet achievement were less polished and even increased public concern by appearing to misunderstand the satellite's significance.

Secretary of Defense Charles Wilson called *Sputnik* "a nice scientific trick," and Assistant to the President Sherman Adams dismissed exaggerated efforts to catch up by asserting that the United States would not take part in "an outer space basketball game." On Monday October 7, Eisenhower returned from Gettysburg to a chaotic White House. Despite a calm outward appearance, the fact that he hit golf balls (an activity he used to relieve stress) for a considerable period of time in the evening reflected his worries about *Sputnik*.[9] Later Adams recalled that "although Eisenhower maintained an official air of serenity, he was privately as concerned as everybody else in the country by the jump ahead that the Russians had made in scientific enterprise."[10] Eisenhower recollected, "There was no point in trying to minimize the accomplishment or the warning it gave that we must take added efforts to ensure maximum progress in missile and other scientific programs."[11]

Problem Representation: Defining the Situation

Eisenhower later recalled that *Sputnik* created two problems: "The first, a short term one, was to find ways of affording perspective to our people and so relieve the current wave of near-hysteria; the second, to take all feasible measures to accelerate missile and satellite programs."[12] This retrospective is consistent with the administration's actions during the first months after *Sputnik,* which centered on the satellite's public relations and propaganda implications. The administration believed that to resolve this problem, it needed only to reassure the public (by accelerating the Project *Vanguard* satellite program and making comforting statements) rather than change the broader national security program. Soon after the launch, in a move to attempt to head off congressional action, Eisenhower instructed his advisers to communicate that the government had formulated a solid approach to satellites and planned no immediate changes.[13] Privately, Eisenhower cautioned his cabinet about the long-term threat implied by *Sputnik*. The notes record his saying that he expected Congress to request new legislation and that *Sputnik* created "increased tensions with which we would have to learn to live for a long time."[14] In a week, administration discussions moved to consider the possible long-term threats to national security revealed by *Sputnik* concerning education and defense reorganization.

The initial efforts to assess the threat were made at an October 8 meeting that began with a presentation of a Pentagon memorandum on *Sputnik*.[15] The report noted two Cold War implications: "(1) the impact

on public imagination of the first successful invasion and conquest of outer space, and (2) the inferences, if any, that can be drawn about the status of [the Soviet] development of military rocketry." The paper recommended no change in satellite or missile programs, concluded that the lack of an American satellite had no military significance, and proposed a public statement to this effect. It further advised that no effort be made to push up the planned December 1 launch date of an "experimental part-size" American satellite, since this would only increase the chance of failure.

According to a memorandum of conversation, after the presentation of the Pentagon memorandum, Eisenhower asked whether an army *Redstone* missile could have placed an American satellite into orbit earlier.[16] Upon hearing that it could have, Eisenhower immediately seized on the political implications and noted that the Democratic Congress would press the administration about failing to use the *Redstone*. At odds with statements from 1955, Eisenhower asserted that the "timing was never given too much importance in our own program" as long as it protected military secrets and succeeded during the IGY. Sensing the possible benefits from overhead satellite reconnaissance in terms of estimating Soviet military capabilities, Eisenhower told the group to think five years ahead and referred to the reconnaissance satellite program. He rejected a "sudden shift" in the satellite program because it would "belie the attitude we have had all along."

In fact, Hagerty and Dulles had agreed in the morning of October 8 that Eisenhower needed to have a press conference to put *Sputnik* "in proper perspective."[17] Eisenhower actively prepared for the press conference and outlined several pieces of information he wanted: the history of ballistic missile programs, the status of the missile and satellite programs when Eisenhower came into office in 1953, a chronology of costs, and an explanation for cost increases.[18] Undoubtedly, several of these items were directed at documenting the previous Truman administration's and Democratic Congresses' lack of interest in and funding for missiles. Continuing his public relations focus, Eisenhower went over his press conference statement and said he wanted "to allay histeria [*sic*] and alarm" and "bring out that the Russian action is simply proof of a thrust mechanism of a certain power accuracy and reliability."[19]

At his last meeting with Secretary of Defense Wilson on October 8 (Neil McElroy was scheduled to replace him the next day), Eisenhower and Wilson seemed unaware of the pressures for increased spending that *Sputnik* would generate. Since Congress had actually cut the adminis-

tration's fiscal year (FY) 58 defense budget request the previous summer, Wilson predicted that Congress would again cut his request.[20] This political assessment, though correct just five days before, failed to consider the rising sentiment in Congress and the press for increased spending. Wilson assumed that *Sputnik* would bring more attention to the missile program and recommended removing overtime restrictions because of political perceptions. Although the restrictions' cost and influence were minor, Wilson felt that some members of Congress would contend the limitations slowed the missile program. Eisenhower agreed and suggested a backup to the *Vanguard* system in case it failed or was significantly slowed. At this meeting, neither Wilson nor Eisenhower saw a large policy influence from *Sputnik,* so both concentrated on alleviating potential near-term public relations problems rather than substantive policy responses.

Dulles, too, focused on the public relations aspects of the satellite, writing in an unused draft statement for Eisenhower that the satellite was "an event of considerable technical and scientific importance" but that its significance "should not be exaggerated."[21] He attributed the launch to the high priority the Soviets had given the project, the German scientists that the Soviets had captured at the end of World War II, and the rigid nature of Soviet society.

Eisenhower continued to concentrate on public relations on October 9. At a meeting with the newly sworn in secretary of defense, McElroy, and other top Defense officials, Eisenhower instructed them on the "attitude that the group should maintain in the present satellite situation." He recalled the intentional separation of the military and scientific components and warned them that they gave "exactly the wrong impression" by making "the matter look like a 'race' " when they claimed other missiles could have put a satellite into orbit earlier.[22]

At his pre-press conference briefing that same day, Eisenhower asserted that *Sputnik* did not necessitate "revamping foreign policy" and had no implications concerning the arms race.[23] At his press conference (rebroadcast on television), the press was hostile to Eisenhower's attempts to downplay the incident and the perception of threat.[24] The public statement he released emphasized the scientific nature of the American satellite program, the separation of the military missile program and scientific satellite program (hence, satellite progress had nothing to do with military security), and the absence of a satellite race.[25] Attempting to project a sense of calm, he insisted that "so far as the satellite is concerned, that does not raise my apprehensions, not one

iota." He expressed confidence in American security, since the American ICBM and intermediate-range ballistic missile (IRBM) programs were moving ahead without delay and could counter any Soviet ICBM achievements. Because the American satellite program had never received the same level of priority as the missile program, he found no reason to grow "hysterical" about it. He rejected the notion that missiles made bombers obsolete and stressed that his administration had provided maximum funding for missiles. He reminded his audience that science, not political considerations or interservice rivalry, had determined the decisions regarding the satellite program. Perhaps as an afterthought, he committed the administration to a December satellite launch.

This effort failed, however, to quiet press criticism of the administration's program. By adopting a subdued attitude toward the satellite and continually referring to advice from experts, Eisenhower appeared unmoved by *Sputnik*'s implications, which served only to heighten rather than reduce anxiety.[26]

Despite the common assumption in the administration, the press, and the world that the American public suffered from "hysteria," the available information does not support this view. Unlike the dire assessments in the press and Congress, public opinion remained largely restrained in *Sputnik*'s immediate aftermath and accepted the administration's explanations, as shown in two Gallup polls, one taken before *Sputnik* and the other in the days immediately afterward (see table 5.1).[27]

Indeed, the public appeared more concerned about school integration, because of Little Rock, Arkansas, as evidenced by the dramatic rise in the surveys' ranking of integration and race relations. In fact, the importance of relations with Russia even dropped somewhat. Even though some respondents now listed *Sputnik*, missiles, and defense preparedness as the most important problems, combining these responses with general Russian relations (yielding 39 percent) creates an increase of only 5 percent over the previous month. These results hardly represent a "hysterical" reaction to *Sputnik*. Public opinion researcher Samuel Lubell, who was conducting interviews immediately before and after *Sputnik,* reported similar findings. From his anecdotal evidence he concluded that most of the public's responses followed the administration's position rather than the press's criticism.[28]

When asked in an October 25 poll why the Russians were the first to launch a satellite, Americans gave several reasons: 22 percent said the Russians worked harder and longer on the program; 14 percent indicat-

TABLE 5.1 **Poll: "What do you think is the most important problem facing this country today?"**

September 15, 1957 (Interview dates, August 27–September 4, 1957)		**November 6, 1957 (Interview Dates, October 10–15, 1957)**	
Keeping out of war, relations with Russia	34%	Integration, race problems	29%
High cost of living, threat of inflation	22%	Keeping the peace, foreign policy, dealing with Russia	26%
Integration problems	10%	Economic, money problems	12%
Don't know any	13%	Defense, preparedness	7%
Nuclear tests, atomic control, juvenile deliquency, foreign aid, need of religion, farm problems, labor unions, labor corruption, and others were each less than 10%		Sputnik, missiles	6%
		Other social problems	4%
		Farm problems	2%
		Miscellaneous	5%
		None, can't say	9%

ed they had better scientists (notably the German scientists); 7 percent blamed a poorly organized American program (because of interservice rivalry); and 7 percent thought the Russians gave more money to the program. The first and fourth reasons reflected the administration's explanations.[29] Although Americans did worry about *Sputnik* (as did the administration), opinion in the first weeks after *Sputnik* was more restrained than hysterical, whereas the press and elite commentary is more indicative of a "media riot."[30]

In the face of mounting press and congressional criticism and calls from within the administration for a more dramatic response, Eisenhower remained determined to maintain the established programs and public relations approach. At the October 10 NSC meeting, anticipating press and congressional questions of NSC members, Eisenhower instructed them that "he could imagine nothing more important than . . . [standing] firmly by the existing earth satellite program . . . In short, we should answer inquiries by stating we have a plan—a good plan—and that we are going to stick to it." When one adviser suggested a program

for human space flight or a trip to the moon, Eisenhower, perhaps sensing the costs of such public relations endeavors, countered, "We must, above all, still seek a military posture that the Russians will respect."[31]

Although the administration had always denied that interservice rivalry was a problem, Eisenhower felt that a question at a press conference on possible delays in the missile program caused by interservice rivalries "showed the widespread belief in our country that we are competing among ourselves rather than with the Russians." Even though Eisenhower had accepted slight delays in the missile program in the summer of 1957 to save money, he now announced that "nothing should be allowed to stand in the way of getting [a successful IRBM tested]." The meeting's minutes report that Eisenhower reverted to his 1955 position, reminding the NSC of "the great political and psychological advantage of the first achievement of an IRBM and an ICBM. He noted that from the inception of the ballistic missiles program, the Council had agreed that these political and psychological considerations were perhaps even more important than the strictly military considerations."[32] As a result, Eisenhower approved the continuation of both the *Jupiter* and *Thor* IRBM programs until one had a successful test flight, thereby making a choice possible.

Perhaps based on the October 9 press conference and his reading of the newspapers, Eisenhower's perception of public pressure for policy alternations changed. At the October 11 cabinet meeting, he now expected Congress to press for increased defense spending beyond the $38 billion target for FY59, but he still believed that the administration should hold the line, resist new legislation, and "try to keep [the American] fiscal house in order despite increased tensions with which we would have to learn to live for a long time." He believed the administration would have to "ride the black horse this year" and thought the best approach would be to propose a low figure for defense even if it had to be raised later.[33] He warned McElroy that some in his department would try to force a choice between "security and a sound budget." Eisenhower stated that he believed both were necessary and the administration needed to find the proper balance. Vice President Richard Nixon warned, and Eisenhower concurred, that "the satellite development could change the temper of the country rapidly." On October 14, Eisenhower observed that Congress would appropriate $41 billion (rather than his preferred $38 billion figure) for defense in FY59, barring "some striking military development in the coming months." Given the probable decline in revenues from the growing recession and a possible

budget deficit, he feared that a rise in the debt limit "might induce a popular reaction. . . . Members of Congress will face a troublesome dilemma in meeting economy pressures from one side and demagogic temptations for more defense spending on the other."[34] In essence, he saw both spending imbalances and a pared-down budget as potentially unpopular.

Eisenhower's perception of the *Sputnik* threat crystallized during an October 15 meeting with scientists from the Office of Defense Management Science Advisory Committee (SAC). He expressed his exasperation about public opinion, saying, "I can't understand why the American people have got so worked up over this thing."[35] He said he had been reflecting on the government's scientific activities and wondered whether American science was being "outdistanced."[36] I. I. Rabi, the head of SAC, expressed concern at the Soviets' tremendous progress in science and warned that they could rapidly pass the United States unless corrective actions were taken. Believing that the Soviets inspired their public's interest in science, Edwin H. Land, who invented the Polaroid Land camera, wondered whether there was "not some way in which the President could inspire the country" to value science. Eisenhower thought he could try to create a nationwide respect and enthusiasm for science through speeches and reasoned that "now is a good time to try such a thing. People are alarmed and thinking about science, and perhaps this alarm could be turned to a constructive result." However, he believed that scientific research could not be allowed to undermine the priority of ICBM and IRBM testing because of their psychological necessity. Eisenhower concluded from this meeting that Soviet scientific progress could dangerously outpace American science, threatening the nation's security if the administration took no action. He also now realized that public unease over *Sputnik* would not go away with the administration's limited public relations effort.[37]

Dulles continued to downplay the significance of *Sputnik* and to reject hasty policy changes. At his press conference on October 16, he attributed the Soviets' success to their continuous efforts since World War II, their capture of German rocket scientists, and their single-minded focus on one objective. He reiterated his belief in the superiority of American power, especially bombers, which, he argued, would be important for years to come. He also observed that *Sputnik* might serve a useful purpose by awakening the public and Congress, which had cut defense and foreign aid spending in the summer of 1957, from complacency on missiles.[38] Privately, he admitted to Eisenhower a possibly

"discouraging future for the free world unless current trends can be reversed."[39] He viewed the shock caused by *Sputnik* to "free world opinion" as an "indispensable first step" in reversing the decline and reasoned that the shock could have the same influence on "galvanizing" the world to confront the Soviet threat as Pearl Harbor had had on the American public. Dulles clearly hoped that *Sputnik* would create greater support for American global policy both at home and abroad.

Option Generation

The administration developed several options between mid-October and early November, ranging from continued public relations efforts and relatively minor organizational changes (satellite work, a science adviser position) to major policy initiatives (defense reorganization, an education bill, increased defense spending, and adjustments in the missile program). Eisenhower continued to resist the perceived pressure from public opinion to increase defense spending and expand the space exploration program and considered policy options that might direct attention to less costly areas (such as education).

Almost from the first news of *Sputnik*, Eisenhower saw an opportunity to pursue his long-desired goal of reorganizing the Defense Department. He had advocated reforms since the end of World War II (testifying before Congress in favor of them in 1945, 1947, and 1951) and had attempted to mount a significant but ultimately unsatisfactory reorganization effort in 1953.[40] Nelson Rockefeller, chair of the President's Advisory Committee on Government Organization (PACGO), had suggested reorganization even before *Sputnik*. Although Eisenhower preferred to wait until about six weeks after McElroy took office (mid-November), he sensed that *Sputnik* provided an opportunity to progress rapidly on this front.[41] Eisenhower hoped that reorganization would, without sacrificing quality, achieve greater efficiency and savings while keeping expenditures at the same level. The real obstacle continued to be convincing Congress.[42] Recognizing that *Sputnik* might mitigate this problem, he commented that "in the present climate a giant step toward unification could be made. This might permit the secretary of defense to close out numerous installations, cut down overhead, etc."[43]

The October 15 SAC discussions resulted in three additional policy directions. First, Eisenhower pushed forward consideration of a new position of science adviser to the president. Second, on October 22, he announced a series of speeches on defense and education to raise public

awareness, as suggested by the scientists. Third, he attempted to channel public and political pressures away from more costly programs such as space exploration and defense spending and into less expensive improvements in education and defense organization to benefit national security.[44]

The SAC recommendations dovetailed with previous administration plans for education. By October 2, before *Sputnik*, the Department of Health, Education and Welfare (HEW; now the Department of Health and Human Services) had nearly finished drawing up a list of alternatives (which eventually were presented to Eisenhower after *Sputnik*) to the administration's school construction bill which Congress had earlier rejected.[45] After *Sputnik*, Eisenhower saw the SAC proposal for science education as a focused educational effort that would provide a cheaper alternative to the rejected school construction bill while at the same time fulfilling a national security need.[46] The SAC convinced him to act in two ways to rectify the paucity of scientists: (1) create public awareness of the problem and (2) provide federal assistance for the sciences.[47] Eisenhower emphasized these two factors as he began his attempt to divert the public's attention away from defense spending and toward education at his October 30 press conference, saying that "[the scientist's] chief concern is not the relative position of ourselves today in scientific advancement with any other nation, but where we are going to be in ten years."[48]

Eisenhower also continued to pay a great deal of attention to American missile programs and potential IRBM deployments in Europe. After the pivotal October 15 SAC meeting, Eisenhower maintained these programs at the highest defense priority (over that of the satellite program).[49] At the same time, he ordered overtime restrictions on missile work to be removed, as Wilson had suggested on October 8.[50]

Dulles, too, remained concerned about the missile program in response to the United States' relations with its allies. He convinced Eisenhower on October 31 that they should use the forthcoming December NATO meeting to complete an IRBM deployment agreement with Britain and convince other countries to accept them.[51] Given the shock of *Sputnik* and the perception of threat, Dulles wanted an announcement—particularly one by Eisenhower at the NATO conference—concerning the acceleration of IRBM deployments because it might bolster flagging European morale.[52]

Although Eisenhower placed less priority on the satellite program than on the missile program, he understood the need for an American

satellite as soon as possible, for public relations and political reasons.[53] Based on the satellite's importance, McElroy suggested to Eisenhower that they use a modified army *Redstone* rocket (called the *Jupiter-C*) as a backup to the navy's *Vanguard* rocket to "make sure we fire a satellite at an early date." Although irritated that the Defense Department had earlier rejected a similar suggestion, Eisenhower approved the backup.[54] Eisenhower realized that the satellite program had taken on great political and prestige significance and believed that much of the pressure for action would be relieved after a successful satellite launch.

Finally, pressure increased for more defense spending in response to *Sputnik* even as Eisenhower continued to oppose it. His philosophical approach to defense spending and the Cold War, based on restraint and preparations for a long-term conflict, remained unchanged after *Sputnik*. Eisenhower wrote to one acquaintance that a program to defeat the Soviets "must be designed for indefinite use and endurance. Hasty and extraordinary effort under the impetus of sudden fear" or complacency because "of the lack, over a period, of overt aggressive action" would not provide adequate security. Given *Sputnik*, he anticipated that the next Congress would support large appropriations for defense. The problem he saw with this view was that the nation faced "not a temporary emergency, such as a war, but a long term responsibility." He believed that the challenge was to renew public support and understanding for this long-term effort, which rested on predictable levels of defense spending.[55]

Eisenhower continued his public explanation at his October 30 press conference, acknowledging that some increases in defense spending beyond the $38 billion figure might be necessary, but he attributed this rise to an increase in inflation rather than an enhanced national security need.[56] Accordingly, he tried to deflect concern about national security into an effort to increase education spending. Dulles agreed with this approach and suggested leading the public to support this view. He wrote to Eisenhower that he feared *Sputnik* would "lead Congress to be liberal with military appropriations, perhaps even with the military aspects of mutual security, but will offset this by cutting down on the economic aid."[57]

By the end of October, the administration was considering a range of options: defense reorganization, an education bill, a new science adviser, additional funding for space R&D, a satellite program, adjustments in the IRBM program, and increased defense spending. Eisenhower opposed options that might greatly increase government spending (defense spending, space research), added an alternative when he

saw an opportunity to pursue his own policy objectives (defense reorganization), reacted to perceived threats to the national interest (education bill, missile deployment, science adviser), and moved to decrease public pressure on the administration (satellite programs).

Policy Selection

The administration chose several alternatives to respond to *Sputnik*. To calm the public, Eisenhower adopted the special assistant proposal, gave speeches, and pushed to put a satellite into orbit. Although he resisted increasing defense spending, Eisenhower eventually accepted moderate increases and approved an accelerated IRBM program because of the perceived pressure of public opinion. The administration also moved to develop policy on defense reorganization and an education bill designed to address scientific shortcomings and national security needs. The administration eventually relented to congressional pressure in early 1958 and drew up a plan for a new civilian space agency and space exploration.

In the week after the October 15 SAC meeting, the administration prepared a formal proposal for improving the White House's coordination of science through a special assistant to the president for science and technology. The SAC would be transferred from the Defense Department to the White House and be reconstituted as the President's Scientific Advisory Committee (PSAC).[58] Eisenhower decided to announce the new appointment of James Killian, the president of MIT, at the first speech of his series.[59]

But before Eisenhower could give his first speech to reassure the nation, the Soviets announced another startling achievement: orbiting a satellite, called *Sputnik II*, which weighed 1,121 pounds and carried the first living organism (a dog) into space. The missile's thrust capacity was estimated at 500,000 pounds, which was clearly enough to propel an ICBM from the Soviet Union to the United States. The press reacted with heightened alarm and pressed for greater attention and financial commitments from the administration.[60] Although privately, Dulles acknowledged the importance of "the weight of this thing" to Eisenhower, publicly he downplayed the launch, as did the rest of the administration, by saying that it revealed nothing new about Soviet ICBM capabilities.[61]

In response to *Sputnik II*, Eisenhower decided on November 4 to move up the first of his "chins-up" speeches to November 7, which he

would deliver from the Oval Office (instead of waiting until a planned November 13 speech from Oklahoma City), and would address national security rather than science (which he left for the Oklahoma speech).[62] While acknowledging public "complacency would be worse," Eisenhower believed that he could "allay some of the fears" the public felt through his speeches.[63] He hoped to create a "spiral of confidence and optimism" that could sustain public support of the long-term program to combat the Soviet threat.[64]

Eisenhower personally shaped his November 7 speech around a focus on national security because there were "so many parts of the defense problem that have *really* to be put before the American people." He emphasized that "money alone will not solve this problem" and intended to end with a statement of his "complete conviction that the American people can meet every one of these problems and these threats if we turn our minds to it."[65] His confidence in his persuasive abilities made it easier for him not to reveal information gathered from the secret U-2 spy plane program that regularly overflew the Soviet Union and gave him an accurate picture of Soviet missile activities. The U-2 information indicated that the Soviets were only a few months ahead of the United States in its ICBM research and that they had not taken steps toward deploying the missiles.[66] Although revealing this information and capability might have ended the criticism of the administration's handling of national security and removed the pressure for increased defense spending, Eisenhower did not want to jeopardize the source of this valuable information.[67] He wrote to one friend that regarding relative Soviet and American military capabilities, "You can understand that there are many things that I don't dare to allude to publicly, yet some of them would do much to allay the fears of our people."[68]

In the evening of November 7, Eisenhower gave his first speech from the Oval Office to a radio and television audience. After describing the United States' defensive capabilities, he identified four areas needing improvement to prevent the country from falling behind: (1) scientific education, (2) greater public and private research, (3) the sharing of scientific information with American allies, and (4) better government organization and effort concerning science, technology, and missiles. Leaving the first two subjects for the later speech, he announced Killian's appointment to ensure that interservice rivalries did not harm R&D, as well as other actions to streamline the missile programs. He rejected calls to increase spending and acknowledged that "certainly, we need to feel a high sense of urgency. But this does not mean that we

should mount our charger and try to ride off in all directions at once."[69] By emphasizing these alternatives, he attempted to direct public attention to those areas he believed required government action to confront the *Sputnik* threat: science education and defense reorganization to reduce interservice rivalry. The press, however, did not view his proposals in the same light, with comments ranging from "biting criticism to lukewarm praise."[70]

Eisenhower gave his second speech on November 13 from Oklahoma City, also to a radio and television audience. He outlined a series of actions to preserve America's retaliation capability, including accelerated bomber dispersal, improvements in bomber response time, increased warning capabilities, and active missile defenses. He added that because his science experts regarded science education as even more important than defense programs, he was suggesting several actions to improve the quality of science teaching and the attractiveness of scientific careers.[71] The press reacted favorably to this second speech, which continued Eisenhower's effort to direct the public's concern about *Sputnik* to less expensive areas such as education reforms.[72] He believed that his messages had reassured the public and hoped that additional speeches would further convince the public that his administration was addressing the nation's defense needs.[73] However, these speeches were never given, because Eisenhower suffered a mild stroke on November 25, effectively scuttling the information campaign.[74] Although he soon recovered from the stroke, polls reveal an increasingly apprehensive public after *Sputnik II*. A November 24 Gallup Poll (taken during the week of November 7–12) asked whether the public was "satisfied with the present defense policies of the United States—or do you think there is a need to take a new look at our defense policies?" Only 26 percent reported being satisfied with the current policies, and 53 percent wanted a new examination (21 percent gave no opinion).[75]

On November 25, the day on which Eisenhower suffered his stroke, Senate Majority Leader Lyndon Johnson (D, Tex.) opened several months of hearings before the Defense Preparedness Subcommittee of the Senate Armed Services Committee. Witnesses described the urgency with which the United States needed to address its shortcomings in science and technology, defense organization, and defense spending. Even though the hearings made Eisenhower's case for defense reorganization easier to make, the extensive criticism also undermined Eisenhower's prestige in an area in which his competence had not been previously challenged.[76]

Whatever Eisenhower hoped to gain from the *Vanguard* launch disappeared when the missile exploded on the launch platform on December 6. Subsequent editorials extensively criticized the administration, chastising the American failure as "Kaputnik" and "Flopnik."[77] Dulles complained to Nixon that he had seldom been this despondent and surmised that the United States was well behind the Soviets.[78] After the *Vanguard* failure, the administration pinned its hopes on the *Jupiter-C* missile launch, scheduled for late January. Senator William Knowland (R, Calif.) explicitly linked the satellite program to efforts to restrain defense spending when he reported that unless the administration had a successful satellite launch soon, congressional demands for increased defense spending would go "hog-wild."[79] Fearing such an eventuality, Eisenhower raised the *Vanguard* and *Jupiter-C* satellite programs to the highest level of priority in the Defense Department (equal to that of the missile programs), even though the Defense Department recommended maintaining the satellites at the lower priority level.[80] But these efforts paid off on January 31 when the army's *Jupiter-C* orbited the first American satellite, named *Explorer*, and relieved some of the pressure on the administration.

Eisenhower had hoped that a successful satellite launch would reduce pressure for more defense spending, but he was forced to fight a progressively more difficult battle to restrain it. In early November, the Security Resources Panel, formed by Eisenhower in early 1957 to examine the viability of a national shelter program for nuclear defense, delivered its analysis, commonly known as the Gaither report. During its deliberations, the panel had expanded its purview to recommend changes in active measures to protect civilians and enhance the nuclear retaliatory force. The plan's costs were staggering. It called for $44 billion in increased defense spending over a five-year period, nearly $9 billion a year on average—almost a 25 percent increase over Eisenhower's preferred $38 billion defense budget.[81]

The panel members met with Eisenhower on November 4 and warned him that a surprise bomber attack could destroy the American strategic bomber force on the ground and predicted that by 1959, the Soviets would have enough operational ICBMs to threaten the American bomber force and population. Eisenhower remained unconvinced and disputed the vulnerability of the American deterrent. Even when it was argued to Eisenhower that the American bomber force's slow response time (when not on alert) would enable a Soviet bomber strike to disarm it, both Eisenhower and Dulles calmly dismissed the possibil-

ity of such an attack.[82] Instead of focusing on the military aspects, Eisenhower recalled the October 15 recommendations of his scientists:

> We are not behind now, but we must make great exertions in order not to fall behind. This means we must educate our people for the scientific and technological needs, and must also educate our people so they will support what is required. The difficult thing is that, in our democracies, we can apparently only do this with crisis, and we do not think government by crisis is the right process. The crux is, therefore, how to keep up interest and support without hysteria. . . . Americans will carry a challenging load for a couple of years, but it is very hard to obtain the commitments to indefinite burdens.[83]

Although Eisenhower agreed with some recommendations (such as the dispersal of bombers), he reiterated his support for the $38 billion defense ceiling, recognizing that "an increase above $38 billion is inevitable," especially because of inflation.

At the November 7 panel presentation to the NSC, Eisenhower stated his support for neither a "panicked" nor a "complacent" attitude and instead asked for a comprehensive survey of what "could and should be done." He reasoned that "in this context, perhaps the advent of *Sputnik* had been helpful" but cautioned that "we certainly did not wish to appear frightened and he had received information today indicating that fear had pervaded the population of the United States. The President believed that we could correct this situation." Eisenhower observed he could not just accept the report without regard for its impact on the public, since "we have before us a big job of molding public opinion as well as of avoiding extremes. We must get the American public to understand that we are confronting a tough problem but one that we can lick."[84] In fact, Eisenhower began the series of speeches that evening to correct this fear and direct public attention to the problem of education. Dulles worried that the report, because of its attention solely to the military problem, had failed to consider the other aspects of security.[85]

Although Eisenhower accepted some of the report's minor recommendations such as improvements in bomber dispersal and reaction time, he essentially rejected the Gaither report's call for dramatically increased defense spending. He decided that the level of spending required to implement the report's proposals would undermine the economy, necessitate economic controls, and harm individual freedoms by an eventual resort to a garrison state. He later, however, did accept some relatively minor enhancements, but he held the line against vastly

increased defense spending in circumstances in which he could have easily relented.[86]

Eisenhower met on November 11 with McElroy and Quarles to discuss the FY59 defense budget. McElroy recommended a series of spending increases above the $38 billion base to improve the strategic forces and reaction time. Eisenhower accepted his recommendations, noting the $38 billion ceiling was not "sacrosanct." Combined with other cuts, he thought the defense budget could be kept between $39 billion and $39.5 billion.[87]

The Pentagon presented the FY59 Defense Department budget to the NSC on November 14. When Eisenhower realized that the Defense figures assumed it would continue working on two ICBMs (the *Titan* and *Atlas*) and two IRBMs (the *Jupiter* and *Thor*), he protested, opposing the production of large numbers of these missiles until they were proved effective through testing—an insistence he soon abandoned because of public opinion. Despite Eisenhower's complaints about the requested defense increases, he eventually accepted the budget, reasoning that one unbalanced budget would not create a problem. Eisenhower's willingness to accept increases in defense spending may have been influenced by a new intelligence estimate that the Soviets might have ten operational ICBMs by 1959, one hundred by 1960, and five hundred by 1961, with U.S. plans, calling for only twenty-four ICBMs in 1960 and sixty-five in 1961.[88]

A November 22 meeting on the FY59 defense budget concerned the issue of an additional $573 million to place an increased number of *Jupiter* and *Thor* IRBMs into production and to complete them at an earlier date.[89] With McElroy and Killian in attendance, Eisenhower opened the discussion saying that he "wanted to approach these [defense budget] proposals not on the basis of 'can we do it in response to public outcry,' but 'should we do it.' The matter is not one of justification, but rather of need." Although Eisenhower agreed to produce both missiles, he returned to his point that "we should not spend money simply because of public pressure, but should do what is based on real need."[90]

At a NSC meeting on November 22, the Defense Department presented its revised defense figures.[91] McElroy supported a decision to deploy one squadron of IRBMs by the end of 1958 to bolster the allies' morale. Dulles noted, however, that it was unlikely the Europeans could deploy missiles before the end of 1959 (the date he recommended). Although he did not mention it then, Dulles later told Eisenhower that

he feared public and congressional fixation on spending on missile programs would undercut financial support for other necessary national security programs such as foreign military and economic aid.[92] Perhaps sensing that domestic pressure, despite the technological shortcomings, necessitated the acceleration of IRBMs, Eisenhower hinted that he would eventually relent to public opinion, saying "that when the Council had first become involved directly in the ballistic missiles programs he had expressed the opinion that the effect of ballistic missiles would be more important in the psychological area than in the area of military weapons."

A meeting of top administration officials discussed the acceleration of IRBMs on November 26 when Eisenhower was recovering from his stroke. In McElroy's view, "the chief reason for taking the action is psychological—to stiffen the confidence and allay the concern particularly of our own people. Militarily, the acceleration is not needed." When McElroy suggested that he announce the production of IRBMs the following day at the Senate preparedness hearings, Eisenhower's liaison with Congress, Wilton Persons, agreed, observing, "There is great pressure from the Congress to do this or something like it." Dulles resisted this line of action, maintaining that American bomber forces would be a strong enough deterrent during 1959 and 1960 even if the Soviets acquired nuclear missiles that could threaten Europe. He argued that the pressure for the missiles came not from the Europeans "but rather our own people, who feel exposed to attack for the first time." However, McElroy found public concern as reason enough for acceleration, as "this would tend to calm our people down." Dulles tried again to dissuade the group, suggesting that he "could get along much better in the foreign policy field with a full military aid program and a lower missile program than vice versa."[93] Despite Dulles's protests, because Eisenhower had approved the decisions, McElroy announced the decision to place the *Jupiter* and *Thor* into production the next day during his testimony at the Senate preparedness hearings.[94] A recovered Eisenhower led the American delegation to the NATO conference in mid-December, where his personal involvement in the proceedings and the IRBM commitment helped restore European confidence in the administration.[95]

Even though he rejected an excessive reaction to what he perceived as public panic, Eisenhower realized that public opinion had influenced his defense spending decisions. At a December 5 meeting with McElroy to approve the $1.26 billion in additional FY58 spending and a $39 billion FY59 defense budget, the notes record that

> the President said what he is really giving a lot of thought to is what is the figure that will create confidence. He thought that a feeling of greater confidence in the security sphere might go over into economic confidence as well, and thus help the economic picture. The President said that he thought that about two-thirds of the supplementary funds are more to stabilize public opinion than to meet [the] real need for acceleration, and Mr. McElroy agreed.[96]

Not only had Eisenhower increased defense spending, but he had approved the simultaneous production of both the *Thor* and the *Jupiter*, which he had long opposed. He also increased the number of planned IRBMs by the end of 1960 from 60 to 120 (by adding 60 *Jupiter* missiles to the planned deployment of 60 *Thor* missiles).[97] Eisenhower grudgingly took into account public opinion and even rationalized that the spending might help the faltering economy. Despite his reaction to public opinion, he believed that he had been restrained in light of the pressures for even greater spending, such as suggested by the Gaither report. Given the choice, Eisenhower accepted a relatively small increase in defense spending, which he believed was not militarily warranted, to reassure the public and head off possible greater increases which he felt would more seriously threaten the nation's economic health, his presidency, and possibly political freedoms.[98]

Although Eisenhower did react to public opinion on defense spending, he used the context of public opinion after *Sputnik* to press for reorganization of the Defense Department. That is, Eisenhower saw public opinion as a resource that he could use to press his case, pointing out that "the present feeling in the country supports some such change."[99] Eisenhower held a dinner with the JCS and secretaries of the military departments on November 4 to sound out the military on reorganization and to push their thinking in his direction, with public opinion as a prod.[100] He discussed his support for reorganization and admonished them to rise above interservice rivalries and "take the stance of soldier-statesmen." When Defense Department officials balked, Eisenhower insisted that he "wanted the American people to have a complete faith in the services" and that "the American public has lost a large measure of confidence in the services" because of interservice rivalries. According to the notes of the meeting, "The United States is disturbed over the security situation. He [Eisenhower] does not want to be complacent about it, or hysterical. But he thinks that our people now believe the services are more interested in the struggle with each other than against an outside foe."

Eisenhower also worked to build public support for reorganization, personally writing the portion of his State of the Union message on it.[101] He saw the speech as critical to forming public opinion on the subject and told Republican legislative leaders that although several instances of interservice rivalry had been revealed, he believed that "what is important is what [the] public thinks about it—so I devote several pages [of the State of the Union address] to what we intend to do."[102]

As Eisenhower pushed forward on reorganization, he also made certain that the administration was focusing on the education proposals. At a November 6 meeting on the education bill, Eisenhower stated that even though Congress would not pass a school construction bill, he felt that "it was necessary to get something new and in the present public mood."[103] At the November 15 cabinet meeting, HEW Secretary Marion Folsom presented a broad outline of the education bill, which included improvements in graduate schools, scholarships, and fellowships for college and graduate school students; aptitude testing of high school students; improvements in equipment for and the teaching of math and science in high schools; and improvements in teaching foreign languages.[104] Eisenhower later stated his belief "that anything you could hook on the defense situation would get by. He said 'I can't understand the United States being quite as panicky as they really are.' " Although he was not wholeheartedly enthusiastic about the proposal, it did meet his concerns about the education of future scientists. When the National Defense Education Act of 1958 was announced in late December, the most common reaction to the expanded four-year $884 million program was that it was too small.[105]

Unlike the education program, Eisenhower resisted efforts to commit large amounts of money to space research, since he feared it would be wasted on spurious research projects such as sending a rocket to the moon.[106] As a result, the administration did not seriously consider a new civilian-based government organization for space research until pressure from Congress forced the issue in January and February 1958.[107] The issue of whether the space agency should be in the Defense Department or be separate arose at the February 4 Republican legislative leaders' meeting.[108] After hearing Killian's outline of possible future exploration projects, the notes record Eisenhower as stating that he was "firmly of the opinion that a rule of reason had to be applied to these Space projects—that we couldn't pour unlimited funds into these costly projects where there was nothing of early value to the Nation's security."

Although Senator Knowland strongly favored being first with a lunar probe because of the psychological impact, Eisenhower did not "want to just rush an all-out effort on each one of these possible glamor [*sic*] performances without a full appreciation of their great cost." As this discussion reveals, the costs of the potential program and a focus on the defensive implications largely affected Eisenhower's views on space research and organizational options.

A month later on March 5, Killian presented the PSAC proposal for NASA to Eisenhower, saying that the limited nature of military space activity made necessary a civilian agency to handle the civil aspects and that the military would control defense-related space research.[109] Eisenhower relented. He reasoned that military aspects concerned the "application of knowledge," whereas most areas of basic "discovery" research, except ballistic missiles, were scientific rather than military in nature. Although not mentioned in the notes of the meeting, Killian's memorandum stressed civil interest in space exploration, along with "public and foreign relations considerations" as reasons for adopting separate civilian and military programs for space research.[110] The minimum estimated costs for the space exploration program were $275 million for the first year, reaching $650 million a year by 1965, as compared with some congressional proposals to spend upward of $1 billion in the next year.[111]

Policy Implementation

The administration worked throughout 1958 to secure the passage of its chosen policies in four areas. First, the administration gathered support for its defense budget and considered the Gaither report's recommendation for faster development of ICBMs. In response to congressional pressure, the administration chose to augment FY59 defense spending to purchase additional missiles. Second, the administration started a largely successful public information program to promote its defense reorganization plan. The third and fourth policies concerned the education program and NASA bill. Once the administration presented its proposals, most of the activity involved congressional wrangling over their exact form.

The political context at the end of 1957 and early 1958 provided more bad news for the administration. On December 20, a *Washington Post* article gave a mostly accurate version of the highly classified Gaither report, much to the administration's dismay.[112] The report's view of

imminent danger and calls for increased spending and negative year-end press assessments of Eisenhower and the American global position further unsettled the public.[113]

Public opinion, however, remained fairly sanguine about the American position. A February 2 poll on the most important problem rated keeping the peace (30 percent) and economic problems (18 percent) highest. *Sputnik*/space problems (11 percent) and national defense (9 percent) were mentioned by one out of five respondents. Eisenhower had raised the importance of education (6 percent), and integration remained a concern for a much smaller percentage (4 percent) than in the November poll. A March 23 Gallup poll on the most important problem again pointed to factors other than *Sputnik*, with the following distribution: economic conditions (40 percent), keeping the peace (17 percent), *Sputnik*/space problems (7 percent), integration (4 percent), and defense (3 percent).[114] *Life* magazine asked the public to evaluate the administration's handling of defense, and 18 percent judged it as very good; 53 percent as fairly good; and 19 percent as poor (10 percent held no opinion). The most important problems were seen as catching up with the Russians in defense, producing more scientists, and taxes.[115]

At the January 3 cabinet meeting, both Eisenhower and Dulles observed that a Soviet ICBM capacity did not change near-term American security.[116] Eisenhower reasoned that Soviet ICBMs did not neutralize American bomber power, and Dulles added that the key was having "sufficient military power to deter aggression" rather than superiority. Since missiles constituted a change in the means of delivery (requiring greater attention to warning) but not in destructive capacity, Dulles thought the American deterrent remained robust.

As the administration began to discuss the Gaither report's recommendation to increase the planned ICBM force, Republican congressional leaders pressed the administration to calm the public. Noting the "defeatism" in the newspapers, the leaders urged Eisenhower to use his State of the Union address to make "a strong personal-type statement to inspire the trust and confidence of the American people." Eisenhower compared the situation with the gloom following Pearl Harbor and recalled how a speech he made in 1942 seemed "a very effective antidote."[117]

Eisenhower designed his State of the Union address, delivered on January 9, to provide the confidence-boosting statement about American defenses that the Republican leaders desired.[118] In the speech, he briefly reviewed the country's defense strengths and the administration's

action to confront the Soviet threat and outlined several areas that required action, including defense reorganization, an accelerated defense effort, education, research, and a balanced budget.[119] Press and congressional reactions greeted the speech positively.[120] A week later, Dulles added his own comment, noting that *Sputnik* had "jolted the American people" and created "a wave of mortification, anger and fresh determination" that had led to "a more serious appraisal of the struggle" with the Soviets and "an increasing willingness to make the kind of efforts and sacrifices needed to win that struggle."[121]

Even as the administration attempted to reduce the pressure for increased defense spending, the demands for action continued. Eisenhower complained about the shifting sentiment in Congress on military spending, saying that whereas six months ago, "the Congress was a group of economizers and cut the budget," it now wanted to increase defense spending, even though the world threat remained the same. He concluded that the reason for this behavior was "the heat that comes on the Congress from the States."[122] In other words, Eisenhower saw Congress as worried about public opinion back home rather than national security.

Although the administration did feel the pressure for increased defense spending, the problem of projected Soviet missile developments continued. When Eisenhower learned that American solid-propellant ICBMs would not be ready until 1965/66, the administration had to face the question of how many of the quickly obsolete, liquid-fueled ICBMs (*Atlas* and *Titan*) to produce, given the projected Soviet capabilities. On March 10, he decided to wait to deploy solid-fueled ICBMs until mid-1965, when they would be perfected. In the meantime, the *Atlas* ICBM would be used until it could be replaced with the *Titan II* (which used an improved liquid fuel, allowing it to be stored in hardened silos). By using the *Titan II* as a transitional weapon, Eisenhower resisted the air force's pressure to accelerate the development of solid-fuel ICBMs (and accept the greater associated costs) and effectively provided for the shift from liquid- to solid-fueled missiles.[123]

Eisenhower remained concerned about public opinion and continued to attempt to control its influence, for two reasons. First, he feared that high defense spending would hurt the economy. On March 20, he commented to his brother Milton Eisenhower that he would "try to show [in a planned speech] what the enormous expenditures for defense are doing to our economy." Defense spending needed to be restrained "to keep this thing in the size a free economy can carry indefinitely."[124]

He also told Republican legislative leaders on March 25 that he was trying to "exert some reasonable control" and to reject calls based on "hysteria and demagoguery" for increased defense spending.[125] Second, because he believed that high levels of defense spending could be maintained only in a crisis atmosphere such as that created by *Sputnik*, he thought that the public would soon oppose higher defense spending, thus creating a feast-or-famine cycle in defense spending he wished to avoid. Eisenhower told Dulles he worried about

> the costs of relative security with the attendant possibilities of, either: (1). Seeing the American people get so tired of these huge expenditures as to cause them to refuse to support necessary appropriations and thus expose us to unacceptable risks. (2). Imposing on our people such political and economic controls as would imply a dangerous degree of regimentation. . . . I personally believe that one of the main objectives of our own efforts should be to encourage our entire people to see, with clear eyes, the changing character of our difficulties, and to convince them that we must be vigilant, energetic, imaginative and incapable of surrender through fatigue or lack of courage. . . . A part of [the job of achieving reliable settlements with the Soviets] is educating and informing our own people—so that they will support every burden we must carry.[126]

Eisenhower continued to fight an increasingly difficult holding action on defense spending. In the spring, the military departments asked for a $10 billion augmentation to the FY59 program (a figure that Eisenhower said indicated a lack of responsibility). The Defense Department later pared down the request to an additional $1.6 billion.[127] Eisenhower claimed a "moral victory" after McElroy shaved an additional $200 million off the augmentations, returning it to $1.6 billion after it had been increased again to $1.8 billion.[128]

At the April 24 NSC meeting, the administration returned to the question of producing ICBMs and IRBMs.[129] Despite the military's request, Eisenhower refused to increase beyond 130 the number of ICBMs planned by the end of FY64. The military also requested an increase to 180 in the number of liquid-fueled IRBMs from the December estimate of 120 missiles in 1960. Although the decision astonished those in the room, Eisenhower approved the increase to 180 IRBMs but noted that it "did not constitute the austerity program" he preferred. The reasoning for this decision remains unclear, but Robert Divine believed that Eisenhower chose to spend more than he wanted to "hedge his bets" against a potential missile gap and go slow on the more

important solid-fueled missiles while averting the huge increases suggested by the Gaither report and the Democrats.[130]

Believing that too much defense spending could harm the nation's economy, Eisenhower continued to complain about congressional pressure, accusing Congress of planning to "kill every Russian three times."[131] But he eventually relented to this pressure on the condition that the new funds came in the form of new obligational authority rather than expenditures (which had to be spent in a particular year)—making it possible to spend the money only if necessary.[132] With this compromise, Eisenhower grudgingly approved Congress's $39.6 billion budget for FY59 appropriations ($815 million more than the administration request but $1 billion less than the Democrats wanted).[133] As he had previously, Eisenhower approved a relatively small amount more than he preferred (because of congressional pressure based on public opinion) in order to avoid spending a great deal more than he thought wise.

To complement this effort, Eisenhower hoped that his defense reorganization plan would reduce defense spending by eliminating waste and duplication. He had learned two things from the Truman administration's 1947 reform effort. First, Eisenhower felt Truman made a mistake by first deciding on the plan and then allowing public discussion. Instead, he thought that public discussion should come first or Truman should have at least pressed his case once having made the decision. Second, since Pentagon opposition could effectively scuttle any change, he saw agreement by the Defense Department as necessary for lasting reform.[134] Eisenhower had already felt "political heat" from newspaper reports for not moving fast enough and so urged McElroy to speed his advisory committee's consideration of policy specifics.[135]

Eisenhower influenced the Pentagon deliberations by ensuring that his PACGO representative attended all consultant meetings.[136] In fact, the PACGO continued to develop proposals for reorganization and to have them approved by Eisenhower. His representative then presented these proposals to the Pentagon committee, thus making sure that the president had previously approved many of the proposals eventually adopted.[137]

Given his strong feelings, Eisenhower said he was prepared "to lead, persuade, cajole and of course to some degree compel" the necessary action and at one point inserted himself into the process when he attended a Pentagon committee meeting, at the suggestion of an aide, to shift the balance away from the military.[138] At this meeting, Eisen-

hower pressed the military to act, pointing out that they could not "laugh off the present criticism," since "public opinion . . . is a strong force and must be respected."[139] Following these discussions, Eisenhower approved the Defense Department plan on March 27.[140]

To gain public support for his proposals, Eisenhower recognized the need to undertake an education campaign.[141] Accordingly, he gave a series of speeches to several different groups in which he stressed how much money defense reorganization would save.[142] In tandem with this effort, Eisenhower wrote to top business executives to enlist their support and encourage them to pressure Congress to support his reorganization plan.[143] As reports from Congress indicated, this letter-writing campaign pressured Congress to be more accepting of the administration's proposals, and after some congressional wrangling, Eisenhower eventually got most of what he wanted in the measure he signed on August 6.[144]

Eisenhower took a similar approach on the education bill. When Secretary Folsom reported that they had not encountered serious opposition, Eisenhower assumed that it "certainly was a good political move to put all [the] new [administration education proposals] into this security effort."[145] Eisenhower presented his four-year, $1 billion education program on January 27. The Congress eventually passed the bill in August, and Eisenhower signed it on September 2.

As with the education program, implementation of the NASA bill centered on congressional negotiations, and the administration tried to cool public and congressional expectations by outlining a moderate program.[146] In discussions with Congress, Eisenhower rejected early lunar probes to achieve a psychological advantage because of the costs, his desire to avoid a space race with the Russians, and his fear that concentrating on this might cause the United States to fall behind in other areas.[147] However, Eisenhower relented on March 24 to public pressure for a plan to reach the moon before the Soviets did when he approved the requests for space research funding.[148] As part of his attempt to limit expenditures, on March 26, he released the administration's plan for space exploration, entitled "Introduction to Outer Space," and asked the press to publish the paper (which it did) to ensure wide dissemination.[149] By emphasizing instrumented projects with no early goals, the administration hoped that the paper would relieve the public pressure for quick, costly achievements and for competition with the Soviets.[150] Despite a great deal of attention early on, Eisenhower's signing of the NASA bill on July 29 seemed to go unnoticed by much of the public.[151]

Variables

Assessments of the state of public opinion figured prominently in the administration's deliberations after *Sputnik*. Although Eisenhower feared that public opinion might persuade Congress to try to increase defense spending, he thought relatively little explanation could allay public concern and so sought at the October 9 press conference to convince the public that *Sputnik* required little corrective action. Although polling data and anecdotal reports suggest that public opinion remained fairly restrained, press and elite opinion remained inconsolable regarding *Sputnik*'s possibly dire consequences. Given these reports, Eisenhower remained perplexed by what he perceived as the public's continuing concern with *Sputnik*, despite the country's defensive position and his assurances. In the face of this pressure, he attempted to channel public apprehension into directions that would be responsive to his security-oriented concerns and that might be difficult to achieve under other circumstances (reorganization, education) rather than into areas that he viewed as costly and unproductive (defense spending, space exploration).

To do this, Eisenhower embarked on a public information campaign to calm what he saw as continuing and irrational public hysteria about defense. Believing in his ability to lead the public (based on his public opinion beliefs), he thought he could combat the rising tide of skepticism with a series of speeches. The administration's satellite policy went hand in hand with this effort because he thought an orbiting satellite would reduce public concern and pressure for action. But as public anxiety built after *Sputnik II* and the December *Vanguard* failure, the need for an American satellite increased, forcing him to approve a backup satellite program and increase its defense priority. Fearing the Gaither report would panic the public into approving what he saw as needless defense spending, Eisenhower continued to try to generate public support for a steady defense program for the "long haul" rather than massive increases in response to Soviet achievements.

Soon after the Oklahoma speech, however, it became clear to Eisenhower that his efforts would not quiet the storm, and so he adjusted his policy. He increased defense spending, authorized the production of technologically questionable IRBMs, and approved the production of two types of IRBMs simultaneously—all of which he had previously opposed. Still, he resisted the greatly enlarged program recommended by the Gaither report because he feared that once the crisis had abated,

public support would wane, causing a "feast-and-famine" cycle he greatly wanted to avoid.

This public pressure also affected the administration's position on space exploration research. Although Eisenhower initially wanted to leave such research in the Pentagon, at the prompting of his advisers, he soon relented to congressional (and possibly public opinion) pressure for a civilian agency but used this proposal to deflect attention from other, more costly alternatives.

Although the information on Dulles is not as extensive, he appeared to focus mostly on public relations, seeing the heightened public concern as an opportunity to galvanize American and world opinion behind the government's policy to combat the Soviet Union. Accordingly, he lectured the public on the need to react correctly to the threat and reasoned that *Sputnik* had performed a positive function by awakening the nation to the possible danger.

Other interests also played a prominent role in policy deliberations. The importance of missile and satellite programs for American national security, international prestige, and the size of the Soviet booster forced the administration to respond to *Sputnik*. But Eisenhower did not see a need for changes in the satellite program, defense spending, funding for R&D, or foreign policy. As a long-time proponent of the reorganization of the Defense Department to improve national security, he now found an opportunity to put his preferences into operation in the new public opinion climate. The information from the scientists on October 15 also confirmed in his mind the need for limited federal action to improve U.S. science and science education. Dulles, too, focused on national security concerns. Although he saw no need to alter the present defense program, he believed that *Sputnik* had created an atmosphere of domestic and world opinion more conducive to pursuing the policies he felt were necessary to win the Cold War.

At the same time, Eisenhower and Dulles feared that overreacting would harm national security. Eisenhower chose to create the position of special assistant for science and technology because of the SAC's recommendations in mid-October. He also rejected the Gaither report's recommendations because he felt the level of increased spending was unnecessary, given the threat, and would undermine the American economy and political freedoms. Dulles rejected the report's single-minded focus on the Cold War's military components to the exclusion of other factors (i.e., economic, political, and relations with allies) and feared the program would hurt the administration's foreign policy pro-

gram. On IRBM programs, although he eventually relented, Eisenhower opposed procuring missiles before they were fully tested, so as to avoid waste, and preferred keeping the spending for missiles at the previously established pace because he thought bombers were a sufficient deterrent. Dulles rejected domestic public opinion as a reason for accelerating the missile program and concentrated instead on the allies' reactions (pointing to practical problems with the missiles' deployment) and the need to spend the money elsewhere (such as on mutual security programs).

Beliefs predictions suggested that Eisenhower would have attempted to lead the public to support the policy that best enhanced national security, but public opinion might have constrained his view in the face of unyielding opposition. Initially, national security drove his decisions across several issues, such as the speech program, defense spending, and defense reorganization, with references to public opinion in these discussions as predicted from beliefs. His statements reveal that he saw his efforts directed at either calming public opinion through public relations or persuading the public to support his policy preferences. He attempted to use the satellite effort to relieve pressure for policy adjustments and tried to generate support for defense reorganization and the education program. However, as the public's anxiety continued and his broader leadership efforts failed to help, he responded to public opinion by (1) approving the production of IRBMs, although he opposed it; (2) authorizing defense spending increases when he thought it unnecessary; (3) supporting a civilian space agency when he thought the Pentagon alone should control space research; and (4) accelerating the satellite program. Although upset about adopting these policies in reaction to public opinion, he saw them as necessary in the political context.

Although Eisenhower's behavior did not follow predictions, the influence of his public opinion beliefs still is evident. He reluctantly reacted to public opinion on both defense spending and the space agency and saw his actions in both these cases as the best possible alternatives. The defense increases he authorized were small relative to other options, especially compared with the Gaither report's recommendations. The space program he approved also cost much less than some congressional proposals. So even though Eisenhower responded to public opinion, he reacted in what he saw as the most minimal manner possible consistent with maintaining public confidence—an action congruent with his belief in the necessity of public support. Eisenhower's discernible reluctance suggests that although he found public opinion an

irresistible force on these issues, his beliefs still affected his actions. In sum, he did not act happily against his normative beliefs about how foreign policy should be formulated. Even though this case does not completely support the beliefs predictions of his behavior, the evidence does show that Eisenhower's public opinion beliefs influenced his perceptions of policy.

Dulles's beliefs indicate that he would attempt to lead public opinion. Indeed, at first, Dulles focused on national security, worked to calm the public with reassuring statements, and saw an opportunity to build broader support for foreign policy. Later, he recommended to Eisenhower that he appeal to the public to avoid increased defense spending at the expense of other, less popular national security programs. He also pressed for deploying missiles in Europe because of the allies' reactions, voicing his strong opinions on national security in regard to defense spending, the Gaither report, and missile acceleration. In these cases, Dulles explicitly discussed public opinion and his fear that public attitudes might undermine the policies he believed best for national security. To remedy this potential problem, he suggested a public information program.

Although the influence of beliefs remained apparent throughout all decision stages, the beliefs model receives mixed support. Despite the fewer data for Dulles, his behaviors were consistent with the prediction that he would attempt to lead public opinion. Throughout these decisions, he discussed public opinion in line with his beliefs, which points to its *causal* influence.

For many decisions, Eisenhower's actions also were consistent with the prediction that he would try to influence public opinion. His initial policy responses were determined by his perception of the national interest, and he tried to mollify the public's concern. Since he thought about public opinion in reference to his powers of persuasion, these initial views suggest a *causal* influence of public opinion. During the policy selection and implementation stages, Eisenhower took a series of actions that yield a mixed coding. Although he continued to lead the public on some aspects of policymaking (with both a *consistent* and a *causal* influence), he did relent to public pressures on defense and space policy, which was *inconsistent* with beliefs predictions.

Coding the Influence of Public Opinion

Public opinion's influence in the *Sputnik* case study receives a mixed coding overall. This case is coded in the *lead category*, with a lesser *follow*

(moderate) category coding. Decision makers tried to lead public opinion throughout the case. The administration's initial efforts were directed at developing the correct policy response to the threat (special adviser, education improvements, defense reorganization), generating support for those options, and calming the public with an education campaign. These persistent attempts suggest that the primary influence of public opinion is in the *lead category*. The *follow category* describes decision making in two policy areas: defense policy and space policy. Eisenhower eventually relented to the counsel of his advisers, who recommended he increase defense spending, accelerate IRBM programs, and create a civilian space agency, largely because of perceived public pressure. He also took action to speed the satellite program in late 1957 because of public opinion. The follow category influence is strong for defense spending during policy selection, moderate for satellite policy during policy selection, and moderate and mild for space policy during policy selection and implementation, a mixture that results in a ranking at the *moderate* level.

Realist views that decision makers should attempt to lead public opinion to support the policies they see as best for national security are supported by this case (see table 5.2). Eisenhower's decisions reflected this behavioral pattern, since he based his positions on his assessment of the national interest and tried to generate support for those policies on a range of issues. Although he reacted in the most minimal way he felt possible under the circumstances, his choices of defense and space policies do not support the realist perspective. On the other hand, Dulles's actions were consistent with realist predictions throughout the case.

TABLE 5.2 **Influence Coding: Innovative Case**

Predicted Public Influence			**Actual Public Influence**	**Influence of Beliefs**
Realist	Wilsonian Liberal	Beliefs		
Lead	Follow	DDE: Lead / *Constrain*	Lead/with lesser Follow (moderate)	DDE: Supportive/ Inconsistent
		JFD: Lead		JFD: Causal

Note: Italics indicate conditional predictions.

This case also supports the Wilsonian liberal view that decision makers are responsive to the public's concerns and choose policies the public prefers. Although Eisenhower initially resisted his advisers' recommendations to increase defense spending and bolster the space program because of public opinion, he eventually gave in to the public's demand. Given the magnitude of the perceived public concern (which historian John Lewis Gaddis suggests was surpassed only by Pearl Harbor and Korea in terms of surprising revealed threat), the fact that Eisenhower gave way only after considerable pressure confirms the strength of his desire to formulate policy based on national interests.[152]

Given the level of attention to public opinion and the range of information about it, linkage processes can be found in a number of avenues. Anticipated opinion affected projections of public support for several policies (education bill, defense reorganization, defense spending). Perception of the opinion context was perhaps the strongest component of public opinion, with decision makers developing strong views about the state of public opinion ("hysterical" and "panicked"). Specific indicators of opinion also appeared in decision making, with references to newspaper articles and congressional viewpoints seen as representative of public opinion.

Despite all the information and examination of public opinion, perhaps the most striking aspect of decision makers' perceptions of the opinion context is the disjuncture between these perceptions and the polling data, especially immediately after the launch of *Sputnik*. Although newspapers were filled with comments bordering on the "hysterical," the polling data suggest that the public remained fairly subdued. The people largely accepted the administration's explanation and ranked other concerns higher, but the media and elites became obsessed with *Sputnik*, and newspapers portrayed an agitated public. This media sentiment, disconnected from the public's view, filtered into the decision-making process by creating the impression of a much greater public opinion problem than actually existed, at least right after *Sputnik*.

As a result, the decision makers' perceptions did not accurately reflect the public's views, as the people became concerned about national security only after the relentless onslaught of media attention. It is not that objective indicators of public sentiment were not available—they were. But in this instance, the government's reaction to public opinion stemmed from its reading of elite sentiments, which were assumed to reflect the public mood.

Only Eisenhower's resolve, shaped in part by his public opinion beliefs, in the face of constant political pressure, prevented a more costly and potentially damaging response to *Sputnik*. Eisenhower's shortcoming lay not in his policy response to *Sputnik*—which adequately addressed the nation's security concerns—but in his failure, over time, to quell the mounting media and subsequent public apprehension regarding national security. His failure to do so stems directly from his confidence in his own ability to lead public opinion to support his view of the foreign policy problem—a view attributable to his public opinion beliefs. In the end, his ineffective leadership effort on this general front forced him to compromise on several issues in response to a more developed public concern. Unlike the case of *Sputnik*, in which Eisenhower's perception of public opinion pushed him to adjust his policies, the next case, regarding the New Look defense policy, reveals that Eisenhower's perceptions of the steps necessary to get public support for a new strategic policy eventually caused him to adopt a major new strategic policy that he had initially opposed, in order to justify his efforts to reshape defense spending.