

**From Sputnik to the Moon: How Focusing Events
Transformed American Government ¹
An Introductory Essay by Don Wolfensberger
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Congress and America's Future in Space:
Pie in the Sky or National Imperative?
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As Congress and the Executive debate where America should be going with its space program in the 21st Century, we would do well to consider how we got where we are since the first orbiting space satellite, Sputnik, was launched by the Soviet Union just fifty years ago in October 1957. At the height of the Cold War, it was one of those focusing events that grabbed the attention of every American, indeed, of the entire world, but especially of American policymakers in Congress and the Executive Branch who were responsible for our national defense and security in such a perilous time.

There is no question that America would not have acted in the same way it did if it had been an ally such as Great Britain who had made the first breakthrough in outer space. But the combination of nuclear weapons and long range ballistic missiles on both sides of the Cold War divide made the stakes all the higher and more compelling. It was the conventional wisdom at the time that the nation that controls space would in a position to control the world. It was not the kind of challenge the U.S. could ignore, no matter what the cost in national resources and changed priorities. This raises the question of whether any similar impetus exists today for further pushing back the frontiers of space, or whether America may again turn inward as it has before in so many inter-war periods.

This paper will explore just how the American political system reacted to the Sputnik challenge in the 1950s and 1960s, how Congress held up as a co-equal branch at a time when the country naturally turns in times of crisis to the President for national leadership, and what lessons, if any, we can draw from the past as we face an uncertain future.

¹ This essay is taken in part from Donald R. Wolfensberger, "Reorganizing Congress and the Executive in Response to Focusing Events: Lessons of the Past, Portents for the Future," presented at the Annual Meeting of the Southern Political Science Association Meeting, New Orleans, Louisiana, January 8-10, 2004.

Focusing Events and Policymaking

The term “focusing event” is taken from John Kingdon’s *Agendas, Alternatives, and Public Policies*, in which the author says that problems are not always self-evident and sometimes need a push to get the attention of people in and around government. “That push,” he goes on, “is sometimes provided by a focusing event like a crisis or disaster that comes along.... Sometimes crises come along that simply bowl over everything standing in the way of prominence on the agenda.”¹

Crises, disasters, and other focusing events rarely carry a subject to policy agenda prominence by themselves, continues Kingdon, but must be accompanied by something else. They may reinforce a preexisting perception of a problem that was already in the back of people’s minds. They may serve as an early warning of something that could be considered a problem if subsequent attention reveals there was a widespread condition that needs to be addressed. And third, they may affect problem definition in combination with similar events. As an example of the latter, Kingdon cites the issue of energy in which there was a flurry of interest after the 1973 Arab oil embargo, but a waning of interest in the mid-1970s when President Carter was trying to sell his energy program. Then, in the spring of 1979, interest suddenly reappeared with the focusing event of long gas lines resulting from the cutoff of Iranian oil in the wake of its revolution and taking of U.S. hostages.²

Kingdon views policy innovation as an almost random coming together of separate streams of problems, politics, and solutions, abetted by policy entrepreneurs adept at exploiting narrow windows of opportunity before they slam shut again. Crises or focusing events are one factor that help to propel the problem onto the policy agenda.

Building on Kingdon’s model of agenda setting, Frank Baumgartner and Bryan Jones develop the theory of “punctuated equilibrium” to explain how and why policy issues sometimes suddenly appear on the policy agenda and result in significant policy and structural changes in political subsystems--sometimes becoming a system-wide disruption. The crux of their theory of agenda setting is that the generation of new ideas make many policy monopolies unstable as disadvantaged policy entrepreneurs succeed in convincing others that their view of an issue is more accurate than the views of their opponents. Sometimes their success is rapid in altering public policy arrangements, even if they have been in place for decade. “In the end,” they write, “we depict a political system that displays considerable stability with regard to the manner in which it processes

issues, but the stability is punctuated with periods of volatile change.” Any study of the dynamics of American political institutions, they conclude, “must be able to account for both long periods of stability and short, violent periods of change....”³

But critical to the success of moving an issue onto the policy agenda is getting the attention of the public, which in turn gets the attention of public officials. “Issues have a way of grabbing headlines and dominating the schedules of public officials when they were virtually ignored only weeks or months before,” write Baumgartner and Jones. “Focusing events, chance occurrences, public-opinion campaigns by organized interests, and speeches by public officials are seen to cause issues to shoot high onto the agenda in a short period.... The intermittent nature of high-level attention to a given problem builds into our system of government the possibility not only of incrementalism, but also of periodic punctuations to these temporary periods of equilibrium.” The result of all this, the authors conclude, is that the American political system “lurches from one point of apparent equilibrium to another, as policymakers establish new institutions to support the policies they favor or alter existing ones to give themselves greater advantage.”⁴

With these perspectives on agenda-setting and institutional change in mind, we will proceed to look at the focusing event mentioned in the introduction, the Sputnik launch, and determine to what extent it succeeded in producing major policy and structural changes in the government.

The Sputnik Shock

On October 4, 1957, the Soviet Union successfully launched Sputnik --the world’s first man-made satellite to orbit the earth. The 184-pound, black steel ball, blasted skyward in the space shot heard round the world, had the symbolic thrust of a bullet ripping a hole in America’s inflated self-confidence. The technological triumph was seen by many not only as a propaganda victory for the Soviets in their competition with America at the height of the Cold War, but as a serious threat to U.S. military supremacy. Nuclear scientist Edward Teller claimed of the launch that the U.S. had lost “a battle more important and greater than Pearl Harbor.”⁵

It is little wonder, then, given such expert opinion, that the public reaction to the Soviet space shot was variously described as one of panic, shock, hysteria, and fear. MIT President James R. Killian, soon to become the White House science adviser, wrote that Sputnik caused “a crisis of confidence” among the American people.⁶

By contrast, President Dwight D. Eisenhower was apparently nonplused by the event, continuing a golf holiday in Gettysburg that he had begun the previous day. His press spokesman, James Hagerty, briefed the press, telling them that the Soviet feat had not come as a surprise to the administration, and that the president was being kept informed of it as a matter of “great scientific interest.”⁷

At his first press conference after the launch, on October 9, Eisenhower conceded that Sputnik gave the Soviets a psychological advantage around the world, and perhaps, in hindsight, the U.S. should have tried harder to be the first into space, though we had never viewed ourselves in a race with the Soviets to be first. And, in response to further questioning, the president conceded that the Soviet launch demonstrated they had rockets powerful enough to send warheads thousands of miles across the earth, though problems of re-entry and accuracy had not yet been resolved. He said the U.S. program was moving forward as planned, with a test launch planned in December, and the first fully instrumented satellite shot scheduled for the following March.⁸

Eisenhower was genuinely puzzled by the strong public reaction to Sputnik: “I can’t understand why the American people have got so worked up over this thing,” he told his Science Advisory Committee (SAC) on October 15. “It’s certainly not going to drop on their heads.” His science advisor, James Killian, said the President had no idea that the American public was “so psychologically vulnerable.” In a speech to a NATO group on October 11, the president said, in reference to Sputnik, “We must have faith not to get hysterical, and we must not get complacent.” Above all, Eisenhower wanted to prepare the American people to support programs for the long haul (“for years, even decades”) instead of succumbing to “hasty or extraordinary effort under the impetus of sudden fear.” As he wrote to one correspondent, “We face, not a temporary emergency, such as a war, but a long term responsibility.”⁹

Members of Congress, though, were not reassured by the president’s reactions to Sputnik. Like their constituents, they were more visceral in their responses to the event. Senator Henry “Scoop” Jackson (D-Wash.) called Sputnik “a devastating blow to the prestige of the United States as the leader in the scientific and technical world.” Senator Stuart Symington (D-Mo.) asked the president to call a special session of Congress, saying that the Soviet launch was “proof of growing Communist superiority in the all-important missile field.” Senate Armed Services Committee

Chairman Richard Russell (D-Ga.) told his constituents on October 5, “We now know beyond a doubt that the Russians have the ultimate weapon—a long-range missile capable of delivering atomic and hydrogen explosives across continents and oceans.”¹⁰

The situation was further exacerbated by the Soviet’s launch of Sputnik II on November 3 with a dog (“Laika”) aboard, and by the explosion on liftoff December 6 of a U.S. Vanguard-C rocket carrying the first American satellite. The Russian successes and the U.S. failure led to a rash of congressional inquiries. Four House and Senate subcommittees launched studies of the problems. The House Post Office and Civil Service Committee held hearings November 4-8 on the government’s use of scientists and engineers. The House Defense Appropriations Subcommittee looked at defense spending in closed hearings November 20-21. The House Government Operations Subcommittee on Information held hearings November 18-19 on complaints that excessive secrecy had led to a U.S. missile lag. Senate Majority Leader Lyndon Johnson (D-Tex.), chairman of the Senate Armed Services Committee’s Subcommittee on Preparedness, held hearings from November 1957 through the following January on reasons for the slow progress in American missile and space programs.¹¹

The Johnson subcommittee hearings were the most extensive, revealing that the U.S. lag in missile development was caused by a failure to assign ample priorities and funds to programs for missile and satellite development, and a conflict between the armed services over missile programs. On January 23, Johnson outlined his subcommittee’s findings along with 17 recommendations. The subcommittee concluded that the Soviets led the world into space, led the U.S. in missile development, in the speed of development of new weapons, and in the rate of producing scientists and technicians. At current rates, the subcommittee concluded, the Soviets would soon surpass the U.S. in manned air power.¹²

By early February, pressures were mounting on the administration from Democrats in Congress to develop a space policy. Senators Albert Gore (D-Tenn.) and Clinton Anderson (D-N.M.) introduced bills to put all the space programs under the Atomic Energy Commission. At the time, the satellite programs were being run by the military, but separate from the IRBM and ICBM programs. Senators Hubert Humphrey (D-Minn.) and Estes Kefauver (D-Tenn.) introduced legislation to put the space program under a new Department of Science and Technology.

Creation of Select Committees on Space

On February 6, 1958, the Senate adopted a resolution introduced by Majority Leader Johnson to create a Senate Select Committee on Space and Astronautics, which the majority leader would chair.¹³ The House followed suit on March 5, adopting a resolution to create a 13 member Select Committee on Astronautics and Space Exploration. As an indication of the importance he attached to the select committee, House Speaker Sam Rayburn (D-Tex.) appointed Majority Leader John McCormack (D-Mass.) to chair the panel, while ranking Armed Services Committee Democrat, Overton Brooks (D-La.) was appointed the ranking Democrat. Minority Leader Joe Martin (R-Mass.) was appointed ranking Republican, followed by Republican Whip and ranking minority member on the Armed Services Committee, Les Arends (R-Ill.). The rest of the panel reflected Rayburn's determination that it be a top caliber, blue-ribbon cross-section of the best members from key committees.

Although there was little debate on the House resolution establishing the House select committee and it was adopted by voice vote, several weeks before the House acted Representative Kenneth Keating (R-N.Y.), who would later be appointed to the select committee, offered several reasons why its creation was necessary. "Various bills have been introduced concerning the multitude of unresolved questions deriving from man's venture into space," he said, and "no single committee is now constituted to deal comprehensively and in a coordinated fashion with these measures."¹⁴

In many instances, he went on, a single bill "cuts across the lines of interest of a number of our standing committees." Consequently, a number of committees want to duplicate hearings on the same subject matter, and, "we may witness the unappetizing sight of committee chairmen fighting for the first crack at a bill." Moreover, Keating concluded, department and agency heads "could well spend all their working hours trudging up to the Hill to testify before a plethora of committees considering outer space problems."¹⁵

The select committee was charged by its authorizing resolution "to conduct a thorough and complete study and investigation with respect to all aspects and problems relating to the exploration of outer space, and of the control, development, and use of astronautical resources, personnel, equipment, and facilities." It was given until June 1, 1958, to report its findings and

recommendations by bill or otherwise.¹⁶

In response to the spate of space proposals in Congress, the administration made public that the secretary of defense had been working on plans since December to put all the military space programs under a newly formed Advance Research Projects Agency (ARPA), including the development of rockets, satellites, and other space-related projects. At the same time, however, the administration was considering a separate civilian agency for the nonmilitary aspects of space exploration.

At a February 3 staff level meeting, it was decided to task the President's Science Advisory Committee with conducting a study and preparing a plan for space program organization. The following day, however, Eisenhower told a group of Republican congressional leaders that he favored keeping all the space programs in the Defense Department since the only practical application in the foreseeable future would be a reconnaissance satellite. "That's military, that's the big thing," Ike said. That set off a lively discussion in which Killian and Vice President Nixon argued strongly for a civilian program, both for the sake of science and world opinion. Eisenhower grudgingly agreed to let Killian and the PSAC develop a plan for a civilian space agency, even though he saw it leading to unnecessary duplication. The decision was made public that same day, and Eisenhower confirmed it at his press conference the following day.¹⁷

On March 5, Killian reported back to the president with the recommendation that the existing National Advisory Committee for Aeronautics (NACA) be converted into the National Aeronautics and Space Administration (NASA), headed by a presidentially appointed director who would report directly to the White House and not to the board, which would remain strictly advisory in nature. Killian also recommended "an all-out attempt" to draft legislation in the next few weeks so that "the full civil space program...can be launched this year." Eisenhower enthusiastically embraced the plan and asked Killian to work with the Bureau of the Budget to get legislation to Congress prior to the Easter recess in April.¹⁸

Killian's other assignment from the president had been to develop an overall space policy. On March 6 PSAC completed its work and presented to the National Security Council its proposals for a space program grounded in the scientific value of space travel and exploration. Again, the president welcomed and endorsed the report, and on March 25 a public version, "Introduction to

Outer Space,” was released.¹⁹

Killian worked tirelessly with the Bureau of the Budget to develop the bill creating the new civilian space agency. On March 27 he circulated a final draft to other government agencies, giving them little time to suggest any final changes. Lyndon Johnson would later remark that the legislation had “whizzed through the Pentagon on a motorcycle.” On April 2 the president submitted the measure to Congress, stressing his commitment to a civilian space program centered on exploring outer space and “devoted to peaceful and scientific purposes.” Editors of the *New Republic* enthused that, “President Eisenhower has overtaken Lyndon Johnson in the race to outer space,” arguing that the president had retaken the initiative from Johnson with a “well thought-out program.”

The ball was now in Congress’s court. The May 15, 1958 Soviet launch of Sputnik III gave further impetus to Congress’s moving the president’s space policy and organization legislation. The latest satellite was a large, cone-shaped object that weighed one and one-half tons, and had been boosted into orbit by a rocket with over a half-million pounds of thrust—far more than anything the U.S. had under development.²⁰

By May both the House and Senate select space committees were in full swing at revising the legislation sent to the Hill in early April. The two sticking points were how much of the military space programs should come under NASA control, and the second was over the size and power of the governing board of the new agency. Lyndon Johnson favored revising the administration’s draft to give the Pentagon full freedom to develop all military uses of space, separate from the civilian agency’s purview. Senate Republican leaders told Eisenhower they backed Johnson’s position on Pentagon freedom from NASA. The division of authority between ARPA and NASA made critical the issue of who would determine space policy. The House committee favored the administration’s plan of a 17 member advisory committee, while the Senate favored a smaller board with responsibility for actually developing overall space policy. Notwithstanding the president’s efforts to strike a compromise, the House and Senate proceeded to pass bills very different in nature.²¹

The House committee reported its bill on May 24, and on June 2 the House passed the measure after only two hours of debate. The bill emphasized civilian control over space policy and sharply limited the military role. The Senate committee’s bill, reported on June 11, passed by voice vote on June 16. It exempted all space related weapons and military applications from NASA’s

authority, and created a smaller, seven member policy board charged with overseeing all aspects of the nation's space ventures. The policy board was to serve as a coordinating mechanism between the civilian and military aspects of space activity. Killian and other advocates of civilian control were worried about this attempt to place a high-level body between the director of NASA and the president. The president thought it would be a "tragedy" if the president could not have the power to decide who handles what subject.²²

In the conference committee between the two houses, it was a face off between the two Democratic majority leaders who had chaired their respective select committees. Eisenhower met with McCormack to reaffirm their mutual support for civilian control. Johnson was equally adamant in wanting to preserve a separate military role in space. The impasse was broken when the president invited LBJ to a private dinner at the White House on July 7. Ike said he would accept the Senate's policy board if it were renamed, the Space Council, but only if it were modeled after the National Security Council, with the president as chairman. Johnson agreed to the arrangement if the council was expanded to nine members, with three from outside the government. At the same time, the conference report would retain Senate language exempting military space ventures from NASA control, and would give the president the power to transfer space projects between government agencies without congressional approval prior to December 31, 1958.²³

Once these differences were worked out to the satisfaction of the president and Johnson, the conference committee moved quickly to approve the final version on July 15, and on July 16 it was adopted by voice vote in both houses. Historian Robert Divine notes of the achievement that, "President Eisenhower had every right to take satisfaction in the final shape of the space legislation. He had proved far more skillful at parliamentary maneuvering than on defense reorganization [which passed in August 1958], playing off the House against the Senate to get a measure that delegated surprisingly broad powers to the president in this new field." Despite the lack of public attention to the creation of NASA, just a few months after the uproar over Sputnik, Lyndon Johnson said that, "In the long view of history," the creation of an agency to guide America's effort in the exploration of space, was "possibly the most important step we took during this session..."²⁴

From Select to Standing Space Committees

Another matter to be ironed out in the conference committee on the NASA bill was how

Congress would organize itself in the future for dealing with outer space issues. Both select committees had recommended the creation of a Joint Committee on Aeronautics and Outer Space, drawing on the demonstrated expertise and experience of the Joint Committee on Atomic Energy. Although it was known that Speaker Sam Rayburn opposed a joint committee, it was written into all the early drafts of the space legislation, and was reported as part of the final House bill on May 24 with a glowing committee report endorsement. However, before the bill was taken up on the floor on June 2, a resolution introduced by Democratic Whip Carl Albert on May 27, to create a standing House Committee on Science and Astronautics (H. Res. 580), sailed through the Rules Committee two days later. As McCormack explained on the House floor in taking up the space bill on June 2, because the Rules Committee had reported a resolution creating a standing House Committee on Science and Astronautics, “which gives it a broad base of legislative action,” he was going to move to strike the joint committee provision from his bill.²⁵

As House Science Committee historian and former member Ken Hechler (D-W.Va.) observes, “There was some speculation that the early House support for a joint committee stemmed from the feeling that it might be easier to wrest new jurisdiction away from existing committees toward a joint committee rather than toward a new standing committee.” However, looming larger, says Hechler, “Was the fact that many House members feared the Senators on a joint committee might ‘hog’ the limelight.”²⁶

In any event, when the matter was brought up in conference committee, and, when Majority Leader Johnson said he assumed everyone was agreed on the need to have a joint committee, he looked around and saw McCormack was just sitting there shaking his head. “We’re not going to have a joint committee?,” Johnson asked. “No.” “Why not?” “Mr. Sam says so.” McCormack added, “If you want to negotiate further, you’ll have to settle that at the Texas level.”²⁷ The joint committee idea was dropped.

On July 21, 1958, just five days after the NASA conference report cleared the Congress, the House adopted the Albert resolution creating a permanent, 25- member Committee on Science and Astronautics, and three days later the Senate followed suit by creating its own, 15-member Committee on Aeronautical and Space Sciences.

The House resolution and report had been drafted by Rules Committee member Thomas P.

“Tip” O’Neill, Jr. (D-Mass.) and was managed on the floor by the more junior committee member, Richard Bolling (D-Mo.). The resolution amended House rules by establishing the new, 25 member committee, laying out its jurisdiction, and reconfiguring the jurisdiction of the Interstate and Foreign Commerce Committee to reflect matters transferred to the new committee. The primary purpose of the new committee was to oversee NASA and the non-military national space program. It was also given jurisdiction over the Bureau of Standards, the National Science Foundation, science scholarships, and scientific research and development—much broader than its Senate counterpart committee’s jurisdiction.

The reason for the broader jurisdictional mandate, according to Hechler’s account, is that the leadership wanted it to be a major committee. In order to appease Armed Services Committee Chairman Carl Vinson (D-Ga.), Speaker Rayburn had agreed to appoint Representative Overton Brooks as chair of the new science committee, instead of his first choice, Carl Albert. Vinson did not want Brooks to succeed him as chairman of Armed Services under any circumstances, because, “He’s a troublemaker, a griper, and a groucher.” Only by making Brooks chair of a major committee could Rayburn remove Brooks from the Armed Services Committee.²⁸

After calling up the resolution, Bolling offered an amendment that added to the specified jurisdiction both NASA and the space council, explaining the changes were made to reflect the agency names designated in the National Aeronautics and Space Act which was about to be signed into law. He also explained that certain functions were being transferred from the Interstate and Foreign Commerce and Armed Services committees, including the Bureau of Standards, the National Advisory Committee for Aeronautics, and the National Science Foundation, but that these transfers had been agreed to by the chairmen of the two committees.²⁹

According to Hechler’s account, Rayburn had commissioned Albert to button-hole Commerce Committee Chairman Orren Harris (D-Ark.) about giving up some of his jurisdiction to the new Science Committee. “He gave in,” recalled Albert, “but he didn’t do it very easily. He twitched around a little bit about it, but he had Rayburn and McCormack on his neck so he had to do it.”³⁰ Armed Services did not require further pressure, in part because it retained jurisdiction over the military applications of space; but also in part because Chairman Vinson had received a side-payment from Rayburn in return supporting the new committee—kicking of Brooks upstairs to be its

chairman.

The precedents indicate that the Bolling amendment and resolution were adopted after a brief discussion. The same precedent also indicates that, “After the new standing committee was created, no members were elected to it nor were any bills referred to it during the remainder of the second session of the 85th Congress. The members appointed to the select committee continued to serve on that committee until the end of the session.”³¹ This would seem to indicate that the leadership wanted to firmly establish its strong support for a standing committee in the immediate aftermath of the passage of the NASA law, and not risk losing momentum by waiting to include it in the resolution adopting House rules for the new Congress the following January. Moreover, the separate vote to establish the standing committee helped to highlight for the public and the administration the House’s intention to be an active partner in the development of America’s space policy.

When viewed from the perspective of theories for institutional change, it is clear that there was both an institutional and partisan motivation at work in creating both the select committees and their successor standing committee, and leaders are both responsible for institutional maintenance and party maintenance. For the institution of Congress, the space challenge was a largely new issue, though growing out of the decade running Cold War. Neither the Congress nor the Executive were properly organized to meet this new challenge. The Sputnik shock would force both branches to reexamine their priorities and reorganize their structures both to catch-up with the Soviets scientifically and technologically, and to recapture lost prestige around the world.

But there was obviously a political dimension as well that would affect partisan politics because the Soviet success had traumatized the American people, and politicians were quick to sense this and respond. The Democrats wisely used the occasion to highlight the lag in U.S. missile development through the Johnson preparedness subcommittee and other venues in Congress. Republican leaders meantime were prodding the president to take the challenge more seriously and take decisive action to reposition the U.S. militarily and in space. It is not surprising in retrospect that both parties placed their top leaders on both the select committee and its successor. Johnson appointed himself chairman of the new Senate standing Committee on Aeronautical and Space Sciences, and House majority and minority leaders McCormack and Martin remained for another Congress on the new House Science and Astronautics Committees (though Martin was deposed as

minority leader by Charles Halleck of Indiana shortly after his appointment to the committee).

An October 1, 1958, the Gallup Poll asked Americans what they thought was the most important problem facing the country. Whereas a March 23 poll revealed that 40 percent of the people thought the economy was most important, with keeping peace second at 17 percent, and “Sputniks [and] other space problems” third at 7 percent, by the October poll, a month before the elections, the “East-West fight, keeping peace” ranked first in concern at 42 percent, unemployment, integration, and cost of living came in as the next, three most important at 11, 9, and 8 percent respectively. The difference may have been the refocusing event in April of the Soviets putting the first man into space and successfully bringing him back to earth.³²

While the economy was still a major factor in the 1958 elections (even though the recession was receding), the Cold War competition was still a powerful factor in the minds of voters, and the Democrats used the “missile gap” issue to clobber the administration and its Republican cohorts in Congress (just as Democratic presidential candidate John F. Kennedy would against Republican nominee Richard Nixon in the 1960 presidential elections). The Democrats picked up 48 seats in the House in 1958, to command a 282 to 154 majority over Republicans, and picked up 15 seats in the Senate for a new, 64 to 34 margin over Republicans. The partisan rationale for change had paid off for the Democrats.

Kennedy and the New Frontier of Space

As mentioned above, the so-called missile gap between the Soviets the U.S. was a winning strategy for congressional Democrats in 1958, and was the gift that kept on giving in the 1960 presidential campaign when both Senators John F. Kennedy and Lyndon B. Johnson continued to hit Republicans over the head with it (never mind that it would mysteriously disappear shortly after Kennedy was inaugurated).

Kennedy based his winning appeal to primary voters on the need to “get the country moving again,” and to restore America’s slipping prestige in the world. What was needed, he argued, was a new generation of leaders willing to try bold new approaches to solving the nation’s problems. He encapsulated his overall campaign theme in the term “New Frontier,” echoing past Democratic presidential candidates’ campaign themes: Woodrow Wilson’s “New Freedom;” Franklin Delano Roosevelt’s “New Deal;” and Harry Truman’s “Fair Deal.” Kennedy countered those who thought

America's best days had passed because we had reached our last frontier with the settlement of the west, by pointing to new avenues for American imagination and innovation.

In his acceptance speech at the Democratic National Convention in Los Angeles, standing on the edge of the Old Frontier, Kennedy worked the frontier of outer-space into his overall vision: "For the problems are not all solved and the battles are not all won—and we stand today on the edge of a New Frontier—the frontier of the 1960s—a frontier of unknown opportunities and perils—a frontier of unfulfilled hopes and threats." And he continued: "Beyond that frontier are the uncharted areas of science and space, unsolved problems of peace and war, and unconquered pockets of ignorance and prejudice, unanswered questions of poverty and surplus." The "times demand new invention, innovation, imagination, decision....Can we carry through in an age where we will witness not only new breakthroughs in weapons of destruction, but also a race for mastery of the sky and th rain, the ocean and the tides, the far side of space and the inside of men's minds."³³

The Democratic Platform took two occasions to raise the space issue. First, in its section on "National Defense," the platform lambastes the Republicans who they say, "admitted that the Soviet Union leads in the space race—and that they [the Republicans] have no plans to catch up." The section goes on: "Our military position today is measured in terms of gaps—missile gap, space gap, limited war gap."

Then, in the Democratic Platform's section on "Science," four paragraphs are devoted to "space." Charging the Republican Administration with being 'incredibly blind to the prospects of space exploration,' and lacking any "sense of urgency at all" to the importance of space programs to the future of the world," the platform goes on to make the incredible claim that the Administration "*has allowed the Communists to hit the moon first, and to launch substantially greater payloads.*" [emphasis added] The platform pledges that the new Democratic Administration will press ahead with a national space program that recognizes its importance to national security and international prestige, reorganizing the program "to achieve both efficiency and speedy execution," while bringing "top scientists into positions of responsibility."³⁴

In his Inaugural Address on January 20, 1961, President Kennedy downplayed America's space program as a contest with the Soviet communists—pointing instead to future cooperation in space: "Let both sides seek to invoke the wonders of science instead of its terrors. Together let us

explore the stars, conquer the deserts, eradicate disease, tap the ocean depths, and encourage the arts and commerce.”³⁵ (This foreshadowed the first of several joint ventures with the Soviets years later, beginning with the joint, Apollo-Soyuz Test Project in 1975 involving the docking of an unmanned U.S. command service module and a Soviet Soyuz spacecraft, and continuing in later years with joint partnership on the International Space Station.)

In his State of the Union Address to Congress ten days later, Kennedy broadened his appeal for international exploration of space: “I now invite all nations—including the Soviet Union—to join with us...in preparation for probing the distant planets of Mars and Venus, probes which someday may unlock the deepest secrets of the universe.” Zeroing in on the Soviets, the President acknowledged that while the U.S. was ahead in the science and technology of space, “the Soviet Union is ahead in the capacity to lift large vehicles into orbit.” And he went on: “Both nations would help themselves as well as other nations by removing these endeavors from the bitter and wasteful competition of the Cold War.” He called on the Soviets to join with the U.S. and scientists of all nations “in a greater effort to make the fruits of this new knowledge available to all.”³⁶

Despite that vague call to conquer the heavens and share scientific knowledge in peaceful harmony, Kennedy did not take any bold initiatives to accelerate the American space program at the outset of his Administration, though he did approve increased funds for accelerating NASA’s large booster program. But he was leery of making the enormous financial commitment that would be required for undertaking a larger space program than that already underway.³⁷

That is not to imply that the U.S. had been sitting on its hands with only small, unmanned ventures contemplated. Project Mercury, the name of the first U.S. manned spaceflight program had been in existence since 1959, and the Mercury Seven Astronauts would become household names once they began to rocket into space. But the program was necessarily incremental, beginning with 20 robotic launches, four of which included non-human primates, before any human passengers would be allowed in the small, one-person capsule.

But before that could happen, the Soviets scored another historic first in space by successfully sending Cosmonaut Yuri Gagarin into space on April 12. The House Science and Astronautics Committee convened an emergency meeting the very next day at which many Members of Congress expressed their full support for a crash program to put America back in front of the Soviet Union in

space. The new President, however, moved cautiously and deliberately, avoiding any immediate response as to what the U.S. would do to counter the Soviets. On April 20, Kennedy asked Vice President Johnson, who also served as chairman of the President's chairman of the National Space Council (which had been created by statute in the 1958 National Aeronautics and Space Act) to look into the matter and report back. Johnson replied by memo to Kennedy the next day saying, "we are neither making maximum effort nor achieving results necessary if this country is to reach a position of leadership." He concluded that a manned landing on the moon was far enough distant in time that America could get there first.³⁸

Meantime, on May 5, 1961, Alan Shephard became the first U.S. of the Project Mercury Seven astronauts to make a suborbital space flight—less than a month after Gagarin's historic flight. Twenty days later, President Kennedy addressed a joint session of Congress. No longer did he make vague appeals to joint endeavors with the Soviets. The race into space was now viewed as an integral part of the Cold War competition for international power and prestige:

If we are to win the battle that is now going on around the world between freedom and tyranny, the dramatic achievements in space which occurred in recent weeks should have made clear to us all, as did the Sputnik in 1857, the impact of this adventure on the minds of men everywhere, who are attempting to make a determination of which road they should take.³⁹

Kennedy went on to explain that since early in his term, the Administration had been conducting "a review of our efforts in space" through the Space Council under Vice President Johnson, to determine "where we are strong and where we are not, and where we may succeed and where we may not. Now it is time to take longer strides—time for a great new American enterprise—time for this nation to take a clearly leading role in space achievement, which in many ways may hold the key to our future on earth."

Kennedy went on to caution that "while we cannot guarantee that we shall one day be first, we can guarantee that any failure to make this effort will make us last." He then called on Congress to "provide the funds which are need to meeting the following national goals," the first of which resonates with us still as one of the great American visionary challenges:

I believe that this nation should commit itself to achieving the goal, before this decade is out, of landing a man on the Moon and returning him safely to the Earth. No single space project in this period will be more impressive to mankind, or more important in the long-range exploration of space; and none will be so difficult or expensive to accomplish.⁴⁰

Kennedy continued that the ball was clearly in Congress's court, that it was "a judgment that Members of Congress must make" and a firm commitment that Congress and the country must accept that will cost seven to nine billion dollars over the next five years. "If we are to go only half way, or reduce our sights in the face of difficulty, in my judgment, it would be better not to go at all."⁴¹

Although Kennedy mentioned to his speech writer, Ted Sorensen, on the way back to the White House after the speech that he thought the applause had sounded "something less than enthusiastic," and that he was sure Members of Congress could think of much better ways to spend \$20 billion," Congress nevertheless, by a nearly unanimous vote, agreed with the President on the need for the mission, in part, according to presidential historian Michael Beschloss, due to the "intense consensus building by Johnson and other politicians." And Beschloss continues: "Project Apollo became the dominant component of the U.S. space program. The U.S. budget for space was increased by 50 percent in 1961," and the following year "it exceeded all pre-1961 budgets combined."⁴²

Not everyone, though, was enthusiastic about Kennedy's decision. Former President Dwight D. Eisenhower, in a letter to a friend, termed called it "almost hysterical and a bit immature." And Eisenhower's former NASA administrator, T. Keith Glennan, echoed these sentiments, calling it "a very bad move" that would be "exceedingly costly" and take up a large portion of the budget that was controllable, while expressing doubts that a manned race to the moon with the Soviets could produce important benefits."⁴³

Some Republicans began using the term "moon-doggle" and "science fiction stunt,"

according to Beschloss, while some scientists were critical that the money could have been used on more important scientific projects. When Kennedy learned in 1962 that the Soviets did not intend to compete with the U.S. in getting to the moon first, the President asked Johnson what justification would be used to justify the Apollo program other than cold war prestige. Johnson's response was that "the space program has an overriding urgency that cannot be calculated solely in terms of industrial, scientific or military development. The future of society is at stake."⁴⁴

Beschloss weighs-in with this analysis of the President's decision:

It is a measure of Kennedy's aversion to long-term planning and his tendency to be rattled by momentary crises that one may conclude that in the absence of the Gagarin triumph and the Bay of Pigs fiasco in April 1961, he might never have gone to the length of asking Congress to spend \$20 billion on a crash program. Kennedy's desire for a quick, theatrical reversal of his new administration's flagging position, especially just before a summit with Khrushchev, is a more potent explanation for his Apollo decision than any other.⁴⁵

And Beschloss concludes that Kennedy's decision was ultimately a political decision made in terms of cold war strategy that does not stand up now that the Cold War is over. "The tens of billion of dollars spent in the 1960s on what Kennedy essentially thought of as world propaganda could probably have been better devoted to U.S. defense or American domestic economy, and might have convinced the Soviets more quickly of the fruitlessness of the tragic conflict with the United States."⁴⁶

Conclusion

The total cost of the Mercury program was \$1.5 billion, involving between May of 1959 and May 1963, and included 20 robotic launches, four of which included non-human primates, followed by six manned flights, the third of which by John Glenn in February 1962, was the first American orbital space flight (the seventh and last scheduled flight was cancelled in June 1963).

By contrast, the total cost of the Apollo program between 1961 and 1975 is estimated at \$135 billion (in 2006 dollars). Kennedy's goal was achieved in July 1969 with the first manned landing

on the moon with the Apollo 11 mission. Toward the end of the program, three additional missions to the moon were eliminated due to drastic cutbacks in NASA's budget and to make room for the follow-on Space Shuttle program. Whereas funding for NASA was \$5.25 billion at its peak in 1965, by 1969 it had dropped to \$3.99 billion. Even the first lunar landings later that year did not reverse continued cuts in successive years.

As we have seen from our review of the early years of the American space program, the commitment was largely a product of the Cold War competition with the Soviets for international prestige and preeminence in science and technology as symbolized by the race into space. This race was accelerated in the U.S. by the focusing events of the Soviet firsts of the first satellite and first man in space in 1957 and 1961. While focusing events can give new impetus and direction to policy innovations and advances, they can also cause tunnel vision and shortsightedness at the expense of the long-term goals and needs. Whether our race into space with the Soviets is an example of such misdirection is still a matter for lively debate. But perhaps more important is the ongoing debate about the future and how much of America's resources and energies should be directed at continuing to expand our exploration of outer space. Reaching for the stars while still keeping our feet on the ground is a difficult feat and balancing act in a new global age in which more urgent problems seem to emerge on planet earth. Is it enough to believe that when we stop dreaming about the heavens our spirit dies?

Endnotes

1. John W. Kingdon, *Agendas, Alternatives, and Public Policies* (Ann Arbor: University of Michigan Press, 1984; second edition, 1995), 94-96.
2. *Ibid*, 98-100.
3. Frank R. Baumgartner and Bryan D. Jones, *Agendas and Instability in American Politics* (Chicago: The University of Chicago Press, 1993), 4.
4. *Ibid*, 10, 12.
5. Robert A. Divine, *The Sputnik Challenge* (New York: Oxford University Press, 1993), xv-xvi.
6. *Ibid*, xv.

7. Ibid, xiv.
8. Ibid, 7-8.
9. Ibid, 12, 17.
10. Ibid, xv.
11. *Congress and the Nation, 1945-1964* (Washington: Congressional Quarterly Service, 1965), 296, 1745. It wasn't until January 31, 1958, that the U.S. launched its first successful satellite, Explorer I, aboard a Jupiter rocket.
12. Ibid, 1745.
13. Divine, 99-100.
14. U.S. House of Representatives, Committee on Rules, Subcommittee on the Legislative Process, "Guidelines for the Establishment of Select Committees," February, 1983, 51.
15. Ibid.
16. Lewis Deschler, *Deschler's Precedents of the U.S. House of Representatives* (Washington: Government Printing Office, 1975), volume 4, chapter 17, sec. 6. The authorizing resolution, H. Res. 496, was adopted by voice vote.
17. Divine, 100-101.
18. Ibid, 104.
19. Ibid, 106.
20. Ibid, 144.
21. Ibid, 145-146.
22. Ibid, 146-147.
23. Ibid, 148.
24. Ibid, 148-49.
25. Ken Hechler, *Toward the Endless Frontier: History of the Committee on Science and Technology, 1959-79* (Washington: Government Printing Office, 1980; U.S. House of Representatives, Committee Print), 16.

26. Ibid, 17.

27. Ibid.

28. Ibid, 15.

29. Deschler, Volume 4, chapter 17, sec. 47.1. Indeed, the select committee issued two further reports on January 7, 1959, according to the Rules Committee's history of select committees, "Guidelines for the Establishment of Select Committees," February 1983, 51.

30. Hechler, 15.

31. Ibid.

32. *The Gallup Poll: Public Opinion, 1935-1971* (New York: Random House, 1972; volume two, 1949-1958), 1545-46; 1570. By a margin of 62-38 percent in the October poll, respondents thought the Democrats could best handle the problems they named; and by a margin of 40-37 percent, they thought the Russians had the lead over the U.S. in long range missiles and rockets.

33. John F. Kennedy, "Presidential Nomination Acceptance Speech," July 15, 1960, accessed at: <http://en.wikisource.org/wiki/John_F._Kennedy%27s_Presidential_Nomination_Acceptance_Speech> on May 2, 2007.

34. The Democratic Party Platform, 1960, *The Encyclopedia of the Democratic Party*, George Thomas Kurian, editor (Armonk, N.Y.: Sharpe Reference, 1997), 583, 600.

35. John F. Kennedy, Inaugural Address, Friday, January 20, 1961, *Inaugural Addresses of the Presidents of the United States: From George Washington, 1789 to George Bush, 1989* (Washington: Government Printing Office, 1989; Senate Document 101-10), 307.

36. John F. Kennedy, "Annual Message to the Congress on the State of the Union," January 30, 1961, *Public Papers of the Presidents of the United States: John F. Kennedy, 1961* (Washington: Government Printing Office, 1962), 26-27.

37. "Project Apollo," Wikipedia, accessed at <http://en.wikipedia.org/wiki/Project_Apollo> on April 26, 2007.

38. Id.

39. John F. Kennedy, "Special Message on Urgent National Needs," May 25, 1961 [Delivered in person before a joint session], *Public Papers of the Presidents of the United States: John F. Kennedy, 1961*, [205] 403.

40. Id., 404. The other three goals related to specific requests for sums to accelerate development of various components needed for the moon mission, plus a satellite for world wide weather observation.

41. Id.

42. Michael R. Beschloss, "Kennedy and the Decision to Go to the Moon," in *Spaceflight and the Myth of Presidential Leadership*, Roger D. Launius and Howard E. McCurdy, editors (Urbana, Ill.: University of Illinois Press, 1997) 61.

43. Id., 61-62.

44. Id., 64.

45. Id., 63.

46. Id.