

Chapter 14

“We Choose to Go to the Moon” JFK and the Race for the Moon, 1960-1963

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Space Exploration on the Eve of the Kennedy Presidency

At the time of John F. Kennedy's election to the U.S. Presidency on November 8, 1960, the Space Age was three years old. The Soviet Union had launched it with a successful orbiting in October 1957 of Sputnik I, an aluminum ball measuring 23 inches in diameter and weighing 184 pounds. It was not until the following January in 1958 that the United States orbited its first satellite, Explorer I.

Meanwhile, the Soviet Union continued its high-profile thrust into space, capturing the world's imagination with a series of “firsts” – orbiting the first living creature, a female dog named Laika (in Sputnik II, November 3, 1957); sending the first manmade probe to impact another world, in this case, the Moon (Luna II, September 12, 1959); and taking the first photographs of the far side of the Moon (Luna III, October 4, 1959).

Space, JFK and the 1960 Campaign

A key theme in Kennedy's race for the White House was his claim that the country's prestige had declined under the Eisenhower Administration, principally because of its record in space.

During the campaign, Kennedy pounded hard about what he perceived as America's failures in space. Yet he remained silent about what he had in mind for his own program. He was not at all convinced that manned space flight should play a role in his Administration.¹

As U.S. Senator from Massachusetts from 1953 to 1960, Kennedy had displayed a marked lack of interest in space. Aerospace pioneer Dr. Charles Draper of the

¹ Murray, Charles and Cox, Catherine Bly, *Apollo: The Race to the Moon*. Simon & Schuster Inc., New York, 1989, 60.

Massachusetts Institute of Technology remembered when, a few years before the 1960 election, he met Kennedy and his brother, Robert, at a Boston restaurant, hoping to get them interested in space exploration. The Kennedy brothers, said Draper, had treated his pitch with good-natured ridicule. According to Draper, JFK and RFK "could not be convinced that all rockets were not a waste of money and space navigation even worse."² And *Life* Magazine's White House correspondent, Hugh Sidey, observing Kennedy in his first months as President, thought that space was JFK's weakest area. In Sidey's view, Kennedy understood less about space than any other issue when he assumed office. Said Dr. Jerome Wiesner, the President's science adviser, "He hadn't thought much about it."³

Kennedy brought to the Presidency a world view that the Western and Communist nations were in a constant struggle for advantage with the so-called Third World emerging nations.

Once Kennedy perceived that space accomplishments played a decisive role in the competitive relationship between the Communist and non-Communist worlds, he put aside his initial hesitant approach and embraced exploration with extraordinary enthusiasm and articulation. It was in this geopolitical context that JFK decided in May 1961 to go before Congress and make his dramatic announcement about sending a man to the Moon "before this decade is out."

Spring 1961 and Events Leading Up to the Moon Speech

Kennedy was inaugurated as the 35th President of the United States on January 20, 1961. On April 12, Soviet cosmonaut Yuri Gagarin became the first human in space, orbiting the Earth one time.⁴

Less than a week after Gagarin's space spectacular came the Bay of Pigs fiasco, in which a U.S.-supported attempt to overthrow the Cuban dictatorship of Fidel Castro was routed. Kennedy was also preparing for an early June summit meeting with Soviet leader Nikita Khrushchev in Vienna.

Against this backdrop of pressing events, JFK turned to his Vice President, Lyndon B. Johnson, a longtime space advocate and chairman of the newly revived and reorganized Space Council. On April 19, the President asked Johnson for recommendations on how to accelerate the space program, following it up with a memorandum to the Vice President the next day, which included this question:

Do we have a chance of beating the Soviets
by putting a laboratory in space, or by a trip around
the Moon, or by a rocket to land on the Moon, or by a

² Ibid.,61.

³ Ibid.

⁴ Swenson, Loyd S., Jr., Grimwood, James M., and Alexander, Charles C., *This New Ocean: A History of Project Mercury*. The NASA History Series, Scientific and Technical Information Division, Washington, D.C., 1966, 332-334.

rocket to go to the Moon and back with a man? Is there any other space program which promises dramatic results in which we could win?

On April 28, Johnson sent Kennedy a five and a half page memorandum which included this answer to the question about the feasibility of sending men to the Moon:

. . . As for a manned trip around the Moon or a safe landing and return by a man to the Moon, neither the United States nor the U.S.S.R. has such a capability at this time, so far as we know. The Russians have had more experience with large boosters and with flights of dogs and man. Hence they might be conceded a time advantage in circumnavigation of the Moon and also in a manned trip to the Moon. However, with a strong effort the United States could conceivably be first in these accomplishments by 1966 or 1967...⁵

The Commitment to Go to the Moon

Armed with Johnson's information and astronaut Alan Shepard's successful sub-orbital flight on May 5, President Kennedy went before the Congress May 25 and called upon the nation to 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." Kennedy also emphasized the importance of the space race on the perceptions of people in the Third World:

... if we are to win the battle that is going on around the world between freedom and tyranny, if we are to win the battle for men's minds, the dramatic achievements in space which occurred in recent weeks should have made clear to us all, as did the Sputnik in 1957, the impact of this adventure on the minds of men everywhere who are attempting to make a determination of which road they should take...⁶

Prior to Kennedy's speech, a debate had taken place in Administration circles about whether to specify the targeted date for a lunar landing. Budget plans were based on a 1967 goal, and the first draft of Kennedy's speech mentioned that year specifically.

⁵ Johnson, Lyndon B., *The Vantage Point: Perspectives of the Presidency, 1963-1969*. Holt, Rinehart and Winston, New York, 1971, 281.

⁶ Lewis, Richard S., *From Vinland to Mars: A Thousand Years of Exploration*. The New York Times Book Company, New York, 1976, 153-154.

However, NASA officials, realizing the difficulty of meeting distant target dates because of their work on Project Mercury, the first program to put Americans into space, recommended JFK generalize it by announcing an effort at a lunar landing within the decade. The President agreed to that.

Kennedy's decision to make the commitment was based on more than Johnson's recommendation, Shepard's triumphant flight and JFK's perception of a West-versus-Communist ideological struggle. The President also had solid technological reasons for promoting the Moon shot, also called Project Apollo. In mid-1959 NASA planners, given the responsibility of choosing a goal that would best utilize American potential in space, selected a manned lunar landing as their agency's second-generation manned space flight effort. As John Logsdon emphasizes in his comprehensive study of the Apollo Project, *The Decision to Go to the Moon*, "almost two years before the Kennedy political decision to attempt a manned lunar landing program, NASA had chosen such a program on technological grounds as the logical successor to Project Mercury . . ."⁷

Kennedy's Moon Commitment Draws Criticism

Critics did not accept the Kennedy Administration's argument that international and ideological rivalry demanded a multi-billion dollar response to Soviet space spectaculars. Instead, many considered the Moon target "madness," no more than a display of national machismo between the U.S. and U.S.S.R.⁸

Former President Eisenhower also joined in the attack. In August 1962, he asked in the *Saturday Evening Post*, "Why the great hurry to get to the Moon and planets?" He supported space research, but not a "fantastically expensive crash program." And if prestige was the true goal, asked Eisenhower, then "point to our industrial and agricultural productivity; why let the Communists dictate the terms of all the contests?"⁹ He again lambasted Kennedy's program in June 1963, when he called spending \$40 billion to reach the Moon "just nuts."¹⁰

Eisenhower continued to believe the Moon commitment a major mistake long after Kennedy was dead. Astronaut Frank Borman wrote Eisenhower about his view in June 1965 and received this reply, dated June 18:

...What I have criticized about the current space program is the concept under which it was drastically revised and expanded just after the Bay of Pigs fiasco. . . it immediately took one single project or experiment out of a thoughtfully planned and

⁷ Logsdon, John M., *The Decision to Go to the Moon: Project Apollo and the National Interest*. The MIT Press, Cambridge, Massachusetts, 1970, 40.

⁸ Lewis, *From Vinland to Mars: A Thousand Years of Exploration*, 174.

⁹ McDougall, Walter A., *...The Heavens and the Earth: A Political History of the Space Age*. Basic Books, Inc., New York, 1985, 391.

¹⁰ *Ibid.*, 394.

continuing program involving communications, meteorology, reconnaissance and future military and scientific benefits and gave the highest priority, unfortunate in my opinion, to a race, in other words, a stunt...¹¹

Kennedy used a variety of forums to answer his critics, from news conferences to public speeches. To those critical of concentration on a lunar landing, he pointed out that it represented a broad-based scientific effort and that some 60 other unrelated projects also comprised 25 percent of NASA's total budget.

In the late summer of 1962, Kennedy delivered his most revealing speech on space exploration, as he explained the whys of his policy and attempted to quiet the growing chorus of critics. He told a September 12 audience at Rice University in Houston, Texas:

. . . We set sail on this new sea because there is new knowledge to be gained, and new rights to be won, and they must be won and used for the progress of all people. For space science, like nuclear science, has no conscience of its own. Whether it will become a force for good or ill depends on man, and only if the United States occupies a position of pre-eminence can we help decide whether this new ocean will be a sea of peace or a new, terrifying theater of war...

But why, some say, the Moon? Why choose this as our goal? And they may well ask why climb the highest mountain? Why, 35 years ago, fly the Atlantic? Why does Rice play Texas?

We choose to go to the Moon. We choose to go to the Moon in this decade and do the other things, not because they are easy, but because they are hard, because that goal will serve to organize and measure the best of our energies and skills, because that challenge is one that we are unwilling to postpone, and one which we intend to win...

It is for these reasons that I regard the decision last year to shift our efforts in space from low to high gear as among the most important decisions that will be made during my incumbency in the Office of the Presidency...

The growth of our science and education will be enriched by new knowledge of our universe and environment, by new techniques of learning and

¹¹ Ambrose, Stephen E., *Eisenhower. Volume Two: The President*. Simon and Schuster, New York, 1984, 640-641.

mapping and observation, by new tools and computers for industry, medicine, the home as well as the school. Technical institutions, such as Rice, will reap the harvest of these gains.

And finally, the space effort itself, while still in its infancy, has already created a great number of new companies, and tens of thousands of new jobs... During the next five years, the National Aeronautics and Space Administration expects to double the number of scientists and engineers in this area, to increase its outlay for salaries and expenses to \$60 million a year; to invest some \$200 million in plant and laboratory facilities; and to direct or contract for new space efforts over \$1 billion from this Center in this City...

Many years ago the great British explorer George Mallory, who was to die on Mount Everest, was asked why did he want to climb it. He said, "Because it is there."

Well, space is there, and we're going to climb it, and the Moon and the planets are there, and new hopes for knowledge and peace are there. And therefore, as we set sail, we ask God's blessing on the most hazardous and dangerous and greatest adventure on which man has ever embarked.¹²

Kennedy Privately, Publicly Debates and Defends the Commitment

Two months later, Kennedy met with his advisors to discuss the space program. Among those at that White House meeting on November 21, 1962 were NASA Administrator James Webb, Science Advisor Dr. Jerome Wiesner, Director of the Bureau of the Budget David Bell and several of Webb's chief NASA administrators.

Kennedy called the meeting because of several developments, including media reports that NASA was not devoting sufficient attention to the Apollo lunar landing program, and whether a supplemental appropriation of \$400 million to NASA's current budget was needed.

This meeting was recorded, but the tape was not released until August 2001. At the meeting, Kennedy made it clear how much the Cold War rivalry with the Soviet Union was a factor in his commitment to go to the Moon. He also talked about his desire that NASA publicly emphasize that the lunar landing initiative was its top priority:

¹² Kennedy, John F., *Public Papers of the Presidents of the United States, 1962*. U.S. Government Printing Office, 1963, 669-671.

... I do think ... that the policy ought to be that this is the top priority program of the Agency, and one of the two things, except for defense, the top priority of the United States government. I think that is the position we ought to take. Now, this may not change anything about that schedule, but at least we ought to be clear, otherwise we shouldn't be spending this kind of money because (my emphasis) *I'm not that interested in space.*¹³

Only moments before, Kennedy had said, "And the second point is the fact that the Soviet Union has made this a test of the system. So that's why we're doing it."¹⁴

In a revealing analysis of this meeting, U.S. space historian Dwayne A. Day makes the case that Kennedy's comments:

... were perfectly consistent with his decision to establish the lunar goal in the spring of 1961. He made that decision in response to Yuri Gagarin's April 1961 flight around Earth and possibly – although this is less clear – in response to the humiliation he and the country suffered at the Bay of Pigs at the same time. Apollo was a political decision to achieve a political goal, to demonstrate the technological and organizational power of the United States and thereby demonstrate that democratic capitalism was superior to Soviet-style communism as a form of societal organization ... as President, he viewed space as merely an extension of political competition – and potentially cooperation – between the superpowers. Kennedy showed no other enthusiasm about space exploration outside of this political context.¹⁵

Publicly, Kennedy continued to vigorously defend his lunar commitment during the last year of his life. However, criticism continued to grow in 1963. The tone was set on January 29 by *The New York Times*, when it questioned the wisdom of making a manned lunar landing the top U.S. space priority. In its lead editorial that day, the *Times* wondered about its worth:

...The achievement of a manned lunar landing within this decade is sometimes justified on grounds

¹³ Day, Dwayne A., "A Historic Meeting on Spaceflight ... Background and Analysis," <http://history.nasa.gov/JFK-Webbconv/pages/backgnd.html>, accessed August 21, 2008.

¹⁴ Ibid.

¹⁵ Ibid.

of national prestige. This argument is based on the doubtful assumption that if we do not place a man on the Moon in this decade, Russia will get there first. But the question remains whether the prospective gain in prestige outweighs the loss in development of scientific and human resources in other directions...

Whether the \$20 billion (or \$40 billion) race to the Moon is justified on scientific, political or military grounds, we do not think the matter has been sufficiently explained or sufficiently debated. We hope it will be in the present Congress.¹⁶

Conservative columnist William F. Buckley, Jr., on June 1 proposed conceding an initial lunar landing to the Soviets with the argument, "Very well, you have reached the Moon, but meanwhile here in America, we have been trying, however clumsily, to spread freedom and justice."¹⁷

Just as conservatives urged Kennedy to shift space priorities to other areas, including defense, many liberals called for more of the space funding to be allocated for social programs. Democratic Senator William Fulbright of Arkansas on June 3 urged that Project Apollo be cancelled. Senator William Proxmire, a Wisconsin Democrat, minced no words. In a speech November 4, 1963, he blasted Kennedy's space program as "corporate socialism."¹⁸

Throughout the news conferences of his last year in office, Kennedy defended his space policy. On March 21, 1963, he told reporters, "We are expending an enormous sum of money to make sure that the Soviet Union does not dominate space. We will continue to do it..."¹⁹ On October 31, the President called his program "essential to the security of the United States, because... it isn't a question of going to the Moon. It is a question of having the competence to master this environment..."²⁰ At his last news conference, November 14, 1963, JFK noted the space program's contribution to U.S. defense: "We spend \$5 billion on space, of which at least a good percentage has a military implication in the sense of our national security..."²¹

In the fall of 1963, the Grumman Aircraft Engineering Company, the prime contractor for the lunar module that would eventually take men to the Moon's surface, had a poll conducted about the Apollo Project. Most opinion leaders were skeptical about the advantages of a lunar landing by 1970. However, among the general public almost 50 percent said they were satisfied with the space program and its lunar goal, and

¹⁶ "Reaching For the Moon," *The New York Times*, January 29, 1963, 1:6.

¹⁷ McDougall, *...The Heavens and the Earth: A Political History of the Space Age*. 392.

¹⁸ *Ibid.*, 393.

¹⁹ *Public Papers of the Presidents of the United States, 1963*, 277.

²⁰ *Ibid.*, 832.

²¹ *Ibid.*, 847.

25 percent wanted to speed up the timetable. Less than one-third thought it should be slowed down or demoted on the list of national priorities.²²

Efforts at U.S.-Soviet Cooperation in Moon Expedition

As part of an attempt to temper criticism that he was not doing enough to promote the possibilities of U.S.-Soviet cooperation in space, Kennedy went before the United Nations on September 20, 1963 – five days before his visit to the University of North Dakota -- and proposed a joint expedition to the Moon.

After praising U.N. actions to prohibit sovereign claims in outer space, Kennedy asked:

...Why, therefore, should Man's first flight to the Moon be a matter of national competition? Why should the United States and the Soviet Union...become involved in immense duplications of research, construction and expenditure? Surely we should explore whether the scientists and astronauts of our two countries — indeed of all the world — cannot work together in the conquest of space, sending someday in this decade to the Moon not the representatives of a single nation, but the representatives of all our countries.”²³

Kennedy historian Arthur M. Schlesinger, Jr., in his memoir of JFK's Presidency, *A Thousand Days*, writes that Kennedy had initially made such an offer to Soviet Premier Khrushchev at their June 1961 summit meeting in Vienna, almost two and a half years before the U.N. proposal.²⁴

Kennedy's last public comment on this issue came at his news conference of October 31, 1963, when he said the Soviets had not responded to his U.N. proposal.²⁵

However, Sergei Khrushchev, the son of the Soviet Premier, says that his father *did* seriously consider Kennedy's proposal. He writes in *Nikita Khrushchev and the Creation of a Superpower* that:

The last time Father returned to this subject was in November, about a week before Kennedy's tragic death. He said that when Soviet ambassador Anatoly Dobrynin met with the U.S. President (on

²² Lewis, *From Vinland to Mars: A Thousand Years of Exploration*, 178.

²³ *Public Papers of the Presidents of the United States, 1963*, 695.

²⁴ Schlesinger, Arthur M., Jr., *A Thousand Days: John F. Kennedy in the White House*. The Riverside Press, Cambridge, Massachusetts, 1965, 919.

²⁵ *Public Papers of the Presidents of the United States, 1963*, 832.

August 26, 1963), Kennedy referred to the lunar program ... and asked Dobrynin to assure Father that his proposal to associate the lunar projects of our two countries was a serious one and that he would like to discuss it in detail in the future. 'I must think about it,' said Father pensively, adding: 'It's very tempting. We would save lots of money, not to speak of everything else.'²⁶

Kennedy's proposal drew a mixed response in the United States. There had long been opposition in Congress about the idea of cooperating in space with the Soviet Union. Some members feared that if it happened, the Soviets would manage to get the better of the deal. In the fall of 1963, both houses of Congress attached amendments to NASA's appropriations bill for FY 1964, opposing Kennedy's proposal. The House amendment prohibited the use of any money for a manned lunar landing attempted in cooperation with a Communist country. The Senate amendment was designed to bar a joint effort with any other country without the consent of Congress.²⁷

Kennedy continued to pursue the idea of a joint Moon mission until the very end of his Presidency. On November 12, 1963, ten days before his death, he ordered a comprehensive Administration review of its feasibility.²⁸

Kennedy's Final Days in Office

In the fall of 1963, U.S. space policy was a dominant theme in Kennedy's public statements and activities. In addition to his speech calling for a joint U.S.-Soviet lunar effort, he defended the rising costs of his policy. He also talked about the peaceful use of space, dismissed rumors that the Soviets had abandoned the Moon race, and pointed out the economic advantages his space effort was bringing the United States.

On November 16, he visited Cape Canaveral, where he examined the construction sites that would build and launch the Saturn V that would take men to the Moon's surface 68 months later. He also received a detailed briefing on the progress toward that goal and reviewed models of the space hardware needed to make it a reality.

Four days later, the Senate chopped \$612 million from Kennedy's NASA budget request for FY 1964. The next day *The New York Times* commented editorially about the cut, saying it raised "a serious question of whether the Administration can count on the budgetary support necessary to achieve a lunar landing by the 1969 deadline."²⁹

²⁶ Khrushchev, Sergei, *Nikita Khrushchev and the Creation of a Superpower*. The Pennsylvania State University Press, University Park, Pennsylvania, 2000, 696.

²⁷ Van Dyke, Vernon, *Pride and Power: The Rationale of the Space Program*. University of Illinois Press, Urbana, 1964, 246.

²⁸ Personal correspondence from space historian John M. Logsdon to author, July 23, 1991.

²⁹ Murray, Charles, and Cox, Catherine Bly, *Apollo: The Race to the Moon*. Simon & Schuster, Inc., New York, 1989, 161.

That same day, November 21, 1963, Kennedy spoke at the dedication of the Aerospace Medical Health Center in San Antonio, part of a three-day political swing he was making through Texas in preparation for his 1964 re-election campaign. It would be his last extensive public statement about space, coming less than 24 hours before his assassination. Kennedy talked about his recent trip to Cape Canaveral, where he had seen the Saturn C-I booster rocket, and was upbeat about its scheduled launch that December, when it would carry the largest payload ever sent into space. And he reiterated his commitment to the exploration of space:

... Frank O'Connor, the Irish writer, tells in one of his books how, as a boy, he and his friends would make their way across the countryside, and when they came to an orchard wall that seemed too high and too doubtful to try and too difficult to permit their voyage to continue, they took off their hats and tossed them over the wall — and then they had no choice but to follow them.

This Nation has tossed its cap over the wall of space, and we have no choice but to follow it. Whatever the difficulties, they will be overcome. Whatever the hazards, they must be guarded against. With the vital support of this Aerospace Medical Center, with the help of all those who labor in the space endeavor, and with the help and support of all Americans, we will climb this wall with safety and with speed — and we shall then explore the wonders on the other side.³⁰

Conclusion

In conclusion, John Kennedy's goal of landing an American on the Moon by the end of the 1960s was not an unrealistic one, despite charges that it was an unnecessary waste of the nation's resources.

The Moon commitment made much sense, and looks better as time goes on. Kennedy's move accomplished several important things. It revived a sagging aerospace industry, bringing it back to its cutting-edge lead in international technology. It established the permanent presence of a manned space program within the context of U.S. space exploration efforts. It once and for all established NASA as a viable civilian space agency, strong enough to stand on its own and free of dominance by the military; and it accelerated by many years development of equipment needed for a Moon mission, which in turn provided spinoffs on Earth that otherwise would not have been available to consumers until years later, from major advances in health care to the use of personal computers and much more.

³⁰ *Public Papers of the Presidents of the United States, 1963*, 883.

Certainly, there was a downside to his Apollo commitment — the massive gutting of the space bureaucracy after the goal had been accomplished and the resulting thousands of personnel laid off as a result of the project's fallout. But it is unfair to blame Kennedy for that.

Kennedy's commitment to land Americans on the Moon symbolizes the best of his space policy. The goal struck a deep chord with the American people — many remembered President Kennedy on July 20, 1969, as Neil Armstrong landed the lunar module, the Eagle, on the surface of the Moon.

That same day, Kennedy was also remembered at his resting place in Arlington National Cemetery. A note placed on his grave, by an unknown person, notified JFK that his dream had been realized. It read: "Mr. President, the Eagle has landed."

Kennedy speculated he might not live to see the Moon landing become reality. That's according to his brother-in-law, R. Sargent Shriver, who related the story to *The Miami Herald* the day Armstrong, Aldrin and Collins left for the Moon. The President, said Shriver, had told him and other family members that "if I die before it is (accomplished), all of you here now just remember when it happens I will be sitting up there in Heaven in a rocking chair just like this one, and I'll have a better view of it than anybody."³¹

³¹ Lewis, Richard S., *Appointment On the Moon: The Full Story of Americans in Space. From Explorer I to the Lunar Landing and Beyond*. The Viking Press, New York, 1969, 5.