

EIRBooks

The leadership that landed men on the Moon

by Marsha Freeman

Powering Apollo: James E. Webb of NASA

by W. Henry Lambright

Johns Hopkins University Press, Baltimore, 1995
271 pages, hardbound, \$35.95

Thirty-five years ago on May 25, President John F. Kennedy, speaking before a joint session of Congress, committed the United States to “land a man on the Moon, and return him safely to the Earth.” Telling the story years later, some of the specialists who worked on the Apollo program would joke that they thought, in 1961, that they knew how to get a man to the Moon, but that the second half of the mandate posed the real challenge: returning him safely to the Earth.

The challenge of Apollo would require the mobilization of the nation’s scientific and engineering capabilities, its fledgling aerospace industry, colleges and universities, and, most importantly, its political will. In order to accomplish the President’s goal—even after he was no longer there, and although there were setbacks and a fatal fire—leadership was required that was firmly rooted in a tireless commitment to see this country accomplish great tasks. Without James Webb at the helm of NASA, few would argue that the goals of Apollo would have been reached.

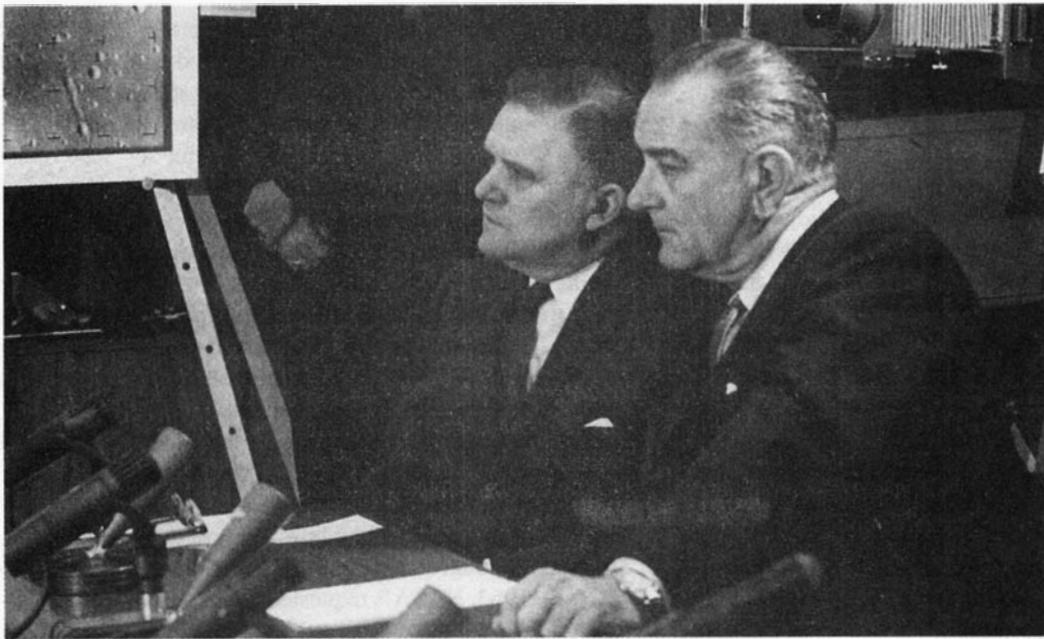
James Webb was not a scientist, engineer, college professor, elected politician, or industry mogul. He was a manager and civil servant. Even though he was appointed to be NASA administrator by President Kennedy, and, therefore, served at the pleasure of the President, he did not hesitate to argue with his President over the policy direction, and future, of the space

program. He understood, as politicians rarely do, that man’s exploration of space was not just a “program,” or a line-item in the budget, and fought with the elected officials in the Congress on that issue. As biographer Henry Lambright aptly states, “While Apollo had its critics then and now, it stands as a symbol of what the United States can do when it decides on a course and puts the necessary resources behind it.” It was James Webb who made sure that the United States stayed the course.

Today there is a fight being waged within the Democratic Party, led by congressional leaders, and informed by the dirigist economic proposals of Lyndon LaRouche, to return to the policies that created the industrial mobilization to win World War II and, later, to achieve the goals of the Apollo program. These center upon the understanding that it is the responsibility of the federal government, through its control and direction of credit, monetary, and investment policies, to create the prerequisites for economic growth.

Whatever areas of economic growth the United States has sustained over the past 30 years has been largely a result of the brief but dramatic investments made during the few years of President Kennedy’s Apollo program, in education, basic infrastructure, and the new technologies required to take man into space.

While increasing wages, improving health care, rebuilding infrastructure, and “corporate responsibility” are necessary to halt the draconian cuts in standards of living that have taken place since the end of Apollo, such catch-up cannot provide any long-term stimulus to the economy. As Webb saw it, the space program was the perfect vehicle, the “science driver,” through which the nation could be brought into an era of economic prosperity. This is even more true today.



NASA Administrator James Webb attends a briefing with President Lyndon Johnson on NASA's Deep Space missions, Feb. 26, 1965. Webb's vision for a continuing mission orientation after Apollo fell to pressure on the budget, including from the war in Vietnam.

From Tally Ho to Washington

James Webb was born on Oct. 7, 1906 in Tally Ho, North Carolina. In 1932, after two years in training as a Marine Corps aviator, Webb joined the staff of North Carolina Rep. Edward W. Pou in Washington. Through his work in the Washington of FDR, Webb became a "Roosevelt Democrat," according to Lambricht, or "one who saw the federal government as having responsibility to lead and change the nation." Two years later, he entered George Washington Law School.

At the age of 30, Webb left Washington to become personnel director and assistant to the president at Sperry Gyroscope Company in New York, whose president, Tom Morgan, also hailed from rural North Carolina. This position allowed Webb to hone his exceptional interpersonal skills, in which "he saw leading as persuading," in a company that was developing a new technical capability for an industry involved with an interest of his—flying. Lambricht reports that Webb recalled in interviews that from the time he joined Sperry to the beginning of World War II, the company grew from 800 employees, to 36,000. Webb saw his job as "putting things together and getting a team that could play the ball game."

On the weekends, Webb worked to enlarge the National Aeronautical Association, an organization of amateur fliers and aviation enthusiasts. He believed that the government should do more to promote aviation, so periodically Webb "went to Washington to lobby for changes in procurement policy and incentives to industry to invest in research and development" to improve aviation technology. He became the treasurer of the aviation exhibit at the 1939 New York World's Fair.

After the war, Webb was asked to become the director of the Bureau of the Budget. At a commencement address at

Harvard in 1947, Secretary of State George C. Marshall called for a large-scale program of economic assistance to Europe, and as budget director, Webb was responsible for the studies that would contribute to the plan's implementation. Lambricht reports, "He commissioned studies of wartime agencies and how they operated to achieve huge, urgent tasks, of institutional models that might serve to help organize the Marshall Plan." Webb's Depression/FDR-era belief that dirigist government policies are needed to solve economic problems was given its first real challenge; it was good training for Apollo.

In President Truman's second term, Webb was asked to be undersecretary of state under Dean Acheson, with whom he did not agree (Acheson was "the very model of the Eastern Establishmentarian"). Acheson believed other agencies should be "crowded out" of foreign policy deliberations. Webb also disagreed with George Kennan's policy of "containment" of the Soviet Union, and had to battle with Paul Nitze ("a New England Brahmin" who had come to Washington "from a successful career on Wall Street"), deputy director of the Policy Planning Staff, who opposed Webb's idea of bringing other agencies into having a closer foreign policy interest.

Due to internal resistance, there was little Webb could accomplish at the State Department in terms of the reorganization he thought was necessary, but he made one important and lasting contribution to its functioning, on the advice of his friend, scientist Lloyd Berkner. Webb created a science office under him at State, and established the system of science attachés at U.S. embassies abroad.

On Jan. 19, 1952, after a confrontation with Nitze, Webb wrote the President a letter of resignation. Webb returned

to industry, sitting on the board of directors of McDonnell Aircraft, and then spent eight years in Oklahoma with Republic Supply and Kerr-McGee Oil Industries. He used this opportunity to become involved in the upgrading of science education in Oklahoma, setting up the Frontiers of Science Foundation. He also accepted appointments to national advisory committees, including director of the Oak Ridge Institute for Nuclear Studies, and maintained contact with Berkner, head of the National Academy of Sciences Space Science Board, and others in the scientific community. Then, the October 1957 launch of the Soviet Sputnik satellite put space exploration at the center of U.S. science policy.

‘Great issues of policy involved’

When James Webb returned to Washington to be interviewed for the job of administrator for the National Aeronautics and Space Administration (NASA), in January 1961, he found that “perhaps 19 different people had been considered and rejected or had turned the offer down,” Lambright reports. The primary reason was the disagreement, within President Kennedy’s cabinet, over the mission of the infant space program. Science adviser James Wiesner complained that NASA was putting too much emphasis on the manned space program, and not enough on “science.” Some in the military thought that it should be the lead agency on the new frontier.

President Kennedy told the new NASA administrator that he did not want a “technical man” for the job. “There are great issues of national and international policy involved in this space program,” he said. “I want you because you have been involved in policy at the White House level, the State Department level,” the President said, according to Lambright. Webb had his work cut out for him. In the face of opposing “counsel” from the President’s science adviser, the Air Force, and others, Webb maintained a belief that “NASA had to take technical and political risks to get the U.S. space program moving forward,” writes Lambright. He supported the technical NASA leadership in accelerating the timetable for manned missions to the Moon. And it was his job to help convince the President.

President Kennedy’s decision, announced on May 25, 1961, to land a man on the Moon before the end of the 1960s, rested on the assurance by the NASA administrator that the space agency could do it. Webb’s condition, as he explained to Vice President Lyndon Johnson, was that “there’s got to be political support over a long period of time, like ten years, and you and the President have to recognize that we can’t do this kind of thing without that continuing support.”

When President Kennedy announced the Apollo initiative, there were elements included to make sure that the space program would not end with the Moon landing. The acceleration of the development of the Rover nuclear rocket for possible future manned missions to Mars was part of the “Apollo” announcement, which reflected Webb’s personal agenda, as well as that of the President.

As Lambright describes it, “the mission” that Webb brought to NASA was “to use science and technology, and now Apollo, to strengthen the United States educationally and economically.” Space writer Walter McDougall described Webb’s concept as a program for a “Space Age America.” That concept would today be disparaged as part of a national “industrial policy.”

Webb did not have any illusions that political support for Apollo would last out the decade needed to accomplish it. He felt, he recalled to Lambright, that President Kennedy had not made a “commitment,” but “had given us the authority to start. It was up to [us] to go as far and as fast as we could, and bid for his support by doing a good job.”

Few in Congress could grasp the idea that NASA could be used as a vehicle to “move the whole nation to a ‘new frontier’ of enhanced technology-based education and economic development,” as Lambright describes Webb’s vision. The congressional consensus behind Apollo lasted barely two years. By 1963, NASA’s requested budget was debated heatedly, and while NASA received more money than in 1962, it obtained far less than Webb had sought.

The fight to reach Apollo’s goal

NASA was reorganized under Webb’s leadership, primarily to “pull power upward from the centers to headquarters.” Like the various branches of the Armed Forces, the individual NASA centers had become well known for inter-service warfare, and for Apollo to succeed, strong centralized leadership was necessary, in order to fight the upcoming technical and political battles. To do this, Webb had to rein in not only the NASA centers, but the industrial contractors, and even the astronauts; neutralize the opposition in the President’s cabinet; and, at times, disagree with the President himself.

Near the end of 1962, President Kennedy called a meeting at the White House to resolve a dispute between Webb and Office of Manned Space Flight Director D. Brainerd Holmes, on the priorities for the space agency. Webb’s view was that Apollo was only a part of the space program. Lambright states that Webb wanted a space program that was balanced. When he was finished, Kennedy expressed concern that “he and his NASA administrator might not be in accord on Apollo’s priority. He said that the manned lunar landing was the most important U.S. objective. Webb said, no, the objective was to be ‘preeminent in space.’ ”

In the end, Kennedy wisely placed his trust in the judgment of the NASA administrator, who also had to do battle with Defense Secretary Robert McNamara, in order to hold on to the civilian space program.

‘Spectacular vision of the national interest’

Shortly after Kennedy’s murder, congressional cuts in the NASA budget in 1963 had nearly put the Apollo goal at risk, but Webb could count on backing from President Lyndon

Johnson. In return, Webb, a southerner like Johnson, was able to help organize southern support for the President's civil rights legislation. Webb went so far as to threaten that NASA would move the Marshall Space Flight Center—Wernher von Braun and all—out of Alabama, if there were not a change in the “hate federal government doctrine” espoused by Gov. George Wallace.

By 1965, however, Webb could no longer count on the President's support for his long-term vision for NASA. Johnson, while committed to finishing the Apollo program that his slain predecessor had begun, was too consumed with his new Great Society initiative, the escalation of the war in Vietnam, and the budget deficit, to be interested in the space program after Apollo. And this was a fight that Webb could not win.

In a May 1966 interview with the *New York Times*, Webb “risked his relation with the President” by stating publicly that the nation faced a “crisis in space planning.” He explained that the decision on post-Apollo programs had to be made within a year, “long before the actual Moon landing attempt,” in order to maintain momentum in space exploration. By that time, there were already manpower cutbacks beginning at the Marshall Space Flight Center, as the development work on the Saturn V rocket to take men to the Moon was nearing completion.

Webb knew that no U.S. space program could be undertaken unilaterally by NASA, but had to have the support of the President. Webb argued with Johnson, and tried to make clear that achieving the stated goal of Apollo, without plans for the future, would lead to a dead end. Johnson was not entirely convinced. In fact, 1965 was the peak funding year for NASA, in real dollars.

Webb was able to secure \$45.7 million for the follow-on Apollo Applications Program in the FY 1968 budget, to keep the manned space program in business after the lunar landings. The plans included two-week stays for astronauts on the Moon, and an orbiting laboratory.

Then, on Jan. 27, 1967, hopes of reaching President Kennedy's goal for Apollo itself nearly came to an end. A fire in the capsule on the launch pad at Cape Canaveral, killed three astronauts, giving front-page column inches to every critic the space agency and the space program ever had. The *New York Times* virtually called for Webb's resignation. And in Congress, as Lambright states: “Northern liberals looking for money for social programs were joining fiscal conservatives anxious to reduce expenditures in an alliance aimed at NASA.”

Although even former supporters, such as the editor of *Aviation Week and Space Technology* magazine now questioned the speed of the effort and proposed that the goal of reaching the Moon “within this decade” be scrapped, Webb was able to only convince President Johnson to fund the Apollo program. In 1967, needing the votes from fiscal conservatives for a tax increase to finance the Vietnam War buildup, Johnson went along with a half-billion-dollar cut in

the NASA budget. Because both Johnson and Webb considered Kennedy's Apollo deadline non-negotiable, what suffered was the post-Apollo program. Webb's “balanced” program was no longer a possibility.

In 1968, after Johnson had announced that he would not seek reelection, Webb became concerned about the potentially disruptive effect of the Presidential transition on the space agency. A new President could choose a new NASA administrator, and could decide to interfere in a program then on a break-neck schedule, Webb feared. Rather than wait until after the election, Webb chose to try to depoliticize the change in the top management at NASA, and announced that he would retire from government service on Oct. 7, when he turned 62. His able deputy, Dr. Tom Paine, took the helm.

Two months after Webb's resignation, the organization he formed and nurtured sent three astronauts out of the Earth's orbit, for the first time in history, and around the Moon. Nixon kept Paine on as NASA administrator, after being counseled to keep him if he wanted to meet the Apollo deadline. On July 16, 1969, three Apollo 11 astronauts headed out for the first manned landing on the Moon. The Kennedy mandate had been met.

In the “conservative” Nixon era, government itself was depicted as part of the problem. As Lambright describes it: “Big technology, which Webb embraced, was also suspect in the wake of Vietnam, a counterculture movement, and the rise of environmentalism. The long-standing partnership between federal officials and scientific and technical experts, forged in World War II, was shattered.” Although there were six successful lunar landings, after the first, the Apollo program was essentially over. This was not because there were no plans to build an Earth-orbiting space station, reusable transportation system, and then send men to Mars, but because there were economic and budget-balancing policies that precluded such plans from being carried out. The far-sighted Tom Paine, realizing that the Nixon administration would not promote a visionary space program, resigned as NASA head in September 1970.

At the time of the lunar landing, names such as Neil Armstrong and Wernher von Braun were household words. But as Lambright remarks, “Despite his leadership of one of the most extraordinary technological achievements in history, Webb is not well known. . . . Webb was more interested in NASA's aggrandizement than his own.”

Although Webb suffered with Parkinson's disease, which was diagnosed in 1975, he continued to “keep alive the message of Apollo,” until his death on March 27, 1992. Lambright explains that Webb considered his legacy, not the accomplishment of the spectacular lunar landing, but NASA as a management model that showed that “if a nation could put a man on the Moon, it could manage its other large public problems.” Webb had, as Lambright puts it, “a spectacular vision of the national interest,” which has been lacking since, and which is needed today.