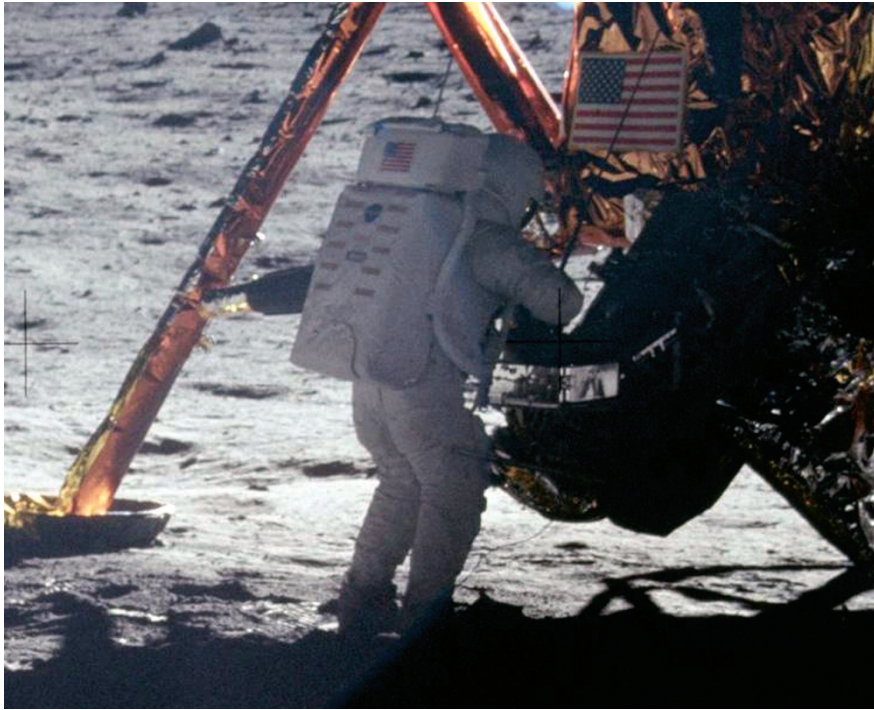




NASA

Neil Armstrong's "small step" off the lunar lander on to the surface of the Moon on July 20, 1969 fulfilled a dream of generations. It was, Armstrong always stressed, the dedicated work of hundreds of thousands of Americans, which made the first lunar landing possible.

in great upheaval; when the Constitutional foundations of this Republic, which were the foundation for the success of Apollo, were being buried under anti-science, anti-social anarchy, and political mediocrity. The very concepts that drove the Apollo program—that there are no limits to human creativity; that it is the responsibility of the Republic to provide for the “general welfare” of its citizens, and that this is realized through great national projects; that it is technological progress that is the measure of the health and wealth of our society—were all being challenged.

When, in May 1961, President Kennedy instructed NASA to “land a man on the Moon and return him safely to the Earth” by the end of the decade, knowledgeable people at the space agency thought there was a 50/50 chance that NASA could do it. When Neil Armstrong lifted off on July 16, 1969 to fulfill the President's Apollo mandate, he gave his mission the same odds for success.

But the President had given the nation a mission. He had announced it before a joint session of Congress, and before the American people. He said the mission would be dangerous, difficult, and costly. And he advised that if the Congress were not prepared to support the effort to go all the way, it were better not to go at all. The Apollo program succeeded because the nation had a mission.

All of the Apollo astronauts trained long and hard for their flights. Any one could have been given the privilege of

Neil Armstrong: 1930-2012

The Mission and the Man

by Marsha Freeman

The death of former Apollo astronaut Neil Armstrong, on Aug. 25, obliges us to remember who we are, and where we are going. His footprints on the Moon, made on July 20, 1969, were celebrated around the world as the greatest technological triumph of the 20th Century, and the fulfillment of the dream of past civilizations. It was the quintessential expression of what it means to be human.

The Apollo program was an expression of the optimism for the future of President John F. Kennedy, and of a generation which had defeated fascism in the Second World War, and saw the remainder of the 20th Century as an opportunity to take man to new heights. For Armstrong, it was not

his personal accomplishment, but a product of the tireless efforts of nearly a half million Americans who made the success of his mission possible, and whom he felt deserved the credit.

The Apollo 11 mission was watched with breathless anticipation by hundreds of millions around the world, some of whose governments had brought access to television to their nation, just so their people could see history in the making. The plaque that the Apollo 11 astronauts left on the surface of the Moon, announced that they had come, not for the greater glory of the United States, but “in peace for all mankind.”

But the first lunar landing also came at a time when American society was

being “the first man.” This assignment was given to Armstrong because he best symbolized what the first manned landing on the Moon would represent for all of human history.

Neil Armstrong had been fascinated by aviation as a youngster, and had his pilot’s license at the age of 16. In 1949, he signed up for Navy flight training, and after the Korean War, earned an aeronautical engineering degree at Purdue University. Six years later, he joined NASA’s predecessor, the National Advisory Committee for Aeronautics, and test-piloted an array of research planes. In 1962, he applied to become an astronaut.

Armstrong proved his mettle in the first in-space incident which could have ended in disaster, during the Gemini 8 attempt to rendezvous and dock with another spacecraft. Here was a man, having flown 78 combat missions in the Korean War, who could call upon what he knew to stay focused under stress.

But it was his “lack of ego,” as described by Apollo flight control director Chris Kraft, which was a decisive factor in NASA’s choice. For Armstrong, it was not his personal glory, it was the mission. After retiring from NASA, rather than seeking fame or fortune, Armstrong continued the mission. He had already inspired many thousands of young people around the world, who had seen him walk on the Moon, to follow in his footsteps. He became a professor of Aerospace Engineering at the University of Cincinnati, educating the next generation of scientists and engineers. He lent his expertise to smaller high-technology companies, to help them solve the engineering challenges they faced.

No one contributing to the Apollo program throughout the 1960s ever considered that the first handful of Moon landings would be the end of lunar exploration, but, instead, just the beginning. In his message to Congress in 1961, in addition to the lunar mission, President Kennedy had recommended increasing funding for the space nuclear power program, so



House Committee on Science, Space, & Technology

After decades of staying out of the public limelight, Neil Armstrong traveled to Capitol Hill, to protest President Obama’s cancellation of NASA’s manned space exploration program. Here Armstrong (speaking), and Apollo 17 Commander Gene Cernan, testify at a hearing Sept. 22, 2011, to consider the future of NASA’s human space flight programs.

man could go even farther than the Moon in the future.

In speeches in later years, Armstrong lamented the discarding of a long-range plan for space, beginning with the Nixon Administration’s cancellation of the follow-on lunar program in the early 1970s. Then, in 2004, there was hope that the Constellation initiative of President George W. Bush would reestablish the return to the Moon and later manned missions to Mars, as the nation’s goals for space exploration.

Former NASA Administrator Mike Griffin, upon learning of Armstrong’s death on Aug. 25, stated that the “real lessons from his life lie in how he behaved in the 43 years after Apollo 11. He showed us how to be famous with dignity, how to be celebrated without becoming a celebrity, and how to do it with a gracious modesty and the unyielding courage to do the right thing as he saw it.”

When President Obama cancelled the Constellation program in 2010, Armstrong had “the unyielding courage” to do what he did very rarely in public—speak out. Never one to

come to the nation’s capital seeking publicity, but generally at the behest of the White House to celebrate an Apollo anniversary, Armstrong traveled to Washington to “do the right thing,” and testify before Congress, in the Spring of 2010.

‘Descent into Mediocrity’

Campaigning for the Presidency in 2008, Barack Obama had proposed that NASA’s Moon-Mars Constellation program be “delayed”; that instead of a space mission, those billions of dollars be put into some undefined programs in education. Under pressure from Space Coast political figures and citizens in the electoral swing state of Florida, the campaign was forced to backtrack somewhat. But the incoming Obama Administration was determined to kill the manned space program.

In the February 2010 submission to the Congress of the White House’s proposed NASA budget for fiscal year 2011, the Constellation program was cancelled. The Congress was outraged. So was Neil Armstrong.

In April, Armstrong penned a letter to President Obama, also signed by Apollo 13 Commander James Lovell

and Apollo 17 Commander Gene Cernan, warning the President that his cancellation of Constellation was “devastating” to America’s leadership in space. Hiving off Earth-orbital space transportation to the private sector, and cancelling the Ares I rocket and Orion space capsule, meant that the U.S. “is far too likely to be on a long downhill slide to mediocrity,” they stated.

In extremely rare public appearances in front of television cameras, Armstrong testified before the Committee on Commerce, Science, and Transportation on May 12, and before the House Committee on Science and Technology two weeks later. In direct juxtaposition to the statements of his Apollo 11 crewmate, Buzz Aldrin, Armstrong ridiculed Aldrin’s statement, repeated by Obama, that there was no need to go back to the Moon, because we [meaning, Aldrin] had already “been there, done that.”

“Some question why America should return to the Moon,” Armstrong told Members of the House of Representatives on May 26. “I find that mystifying. It would be as if 16th-Century monarchs proclaimed that ‘we need not go to the New World, we have already been there.’ Or, as if President Thomas Jefferson announced in 1808 that Americans need not go west of the Mississippi, the Lewis and Clark Expedition has already been there.”

Americans have visited and examined six locations on Luna,” he stated. “That leaves more than 14 million square miles yet to explore.”

Armstrong challenged each specific proposed policy change of the Administration, explaining that the end result would be that America would be abandoning its half-century of leadership in space exploration. Putting his credibility on the line, for a cause that he felt passionately about, he would neither mince words, nor compromise.

Immortality

During the May 26, 2010 House hearing, Rep. Michael McCaul, Republican from Texas, addressing Armstrong, said: “One thousand years from now, no one in this room will be remembered, except for you.” While it is certainly the case that Armstrong has achieved a secure place in the history of civilization, there is no assurance that his immortal contribution will not be lost for generations into the future, without concerted action to change the present.

In 2005, actor Tom Hanks, an enthusiastic supporter of space exploration who had portrayed Commander Lovell in the film “Apollo 13,” produced and narrated a movie, “Magnificent Desolation: Walking on the Moon 3D.” His reason for making the film was his concern that the lunar landing, which he describes an “an

evolutionary step” in mankind’s development, and Neil Armstrong himself, were losing their immortal place in universal history.

Hanks makes this point clear in the opening scene of the film, where children at the California Science Center are asked to name the first man who stepped on to the Moon. The responses are disappointing.

Today, as Armstrong has eloquently insisted, the nation is on the verge of throwing away, not only a half-century of stunning breakthroughs in science and technology, but the promises for the future that were the fruit of those accomplishments.

In 2005, at the age of 75, Armstrong was asked by CBS’s Ed Bradley if a later mission to Mars was something he would consider, at this point in his life. “I don’t think I’m going to get the chance,” he responded. “But I don’t want to say that I’m not available.”

With the passing of Neil Armstrong, one is reminded of the words spoken by Secretary of War Edwin Stanton, early on the morning of April 15, 1865 as he left the bedside of the just-deceased President Abraham Lincoln: “Now, he belongs to the ages.”

And now is the time to take responsibility for ensuring that the accomplishments of Neil Armstrong and the Apollo program are but the stepping stones to the missions of exploration that lie in the future.

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by Laurence Hecht

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