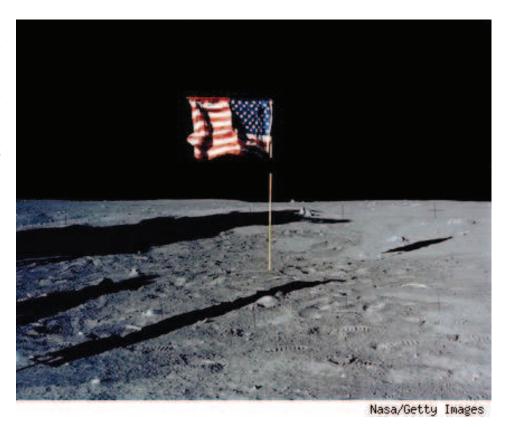
Earth to Moon to Mars: Yes, We Can (and Should)

"Yes, We Can" was an imprecise political slogan, but it was certainly optimistic – and in keeping with Barack Obama's basic approach. With few exceptions, he ran an upbeat presidential campaign that appealed to Americans' can-do spirit. Unfortunately, space exploration was one of those exceptions. In fact, early in the going, Obama proposed cutting NASA's budget in a way that would delay, if not cripple, the space agency's long-anticipated manned mission to Mars.

As president, Obama's first budget proposal revealed that he feels stuck with his NASA naysaying, or, even more ominously, that he really doesn't believe in the space agency's mission. If the past is any prologue, this is a decidedly unpresidential conclusion. Nearly all of Obama's predecessors came to office with explorers' mentalities. And they championed the concept — and accepted the costs — of boldly going where no one has gone before. Moreover, Obama's stance put him at odds with the modern president he seems to admire most.

In 1961, the year Obama was born, John F. Kennedy publicly committed the United States to putting astronauts on the moon by the end of the decade. Initially, President Kennedy framed this challenge as a way for the United States to demonstrate the superiority of the American way of life over the Soviet system. The following year, however, in an acclaimed speech at Rice University, Kennedy offered his fellow citizens a loftier sense of purpose for the endeavor he was proposing. That day, Sept. 12, 1962, the architect of the "New Frontier" invoked the famous words of explorer George Mallory, who replied after being asked why he wanted to climb Mount Everest, responded, "Because it's 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," Kennedy added that day in Houston. "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."

(For those who already love space travel and need no convincing, there is a Web site you might enjoy. The John F. Kennedy Presidential Library is recreating the 1969 Apollo 11 mission to the moon online, and invites you to follow the entire voyage, in real time, beginning July 16 at 8:02 a.m. It will "take off" at 9:32 a.m., 40 years to the minute after the historic launch. Powered by AOL, this site will recreate Apollo 11's entire lunar mission, minute by minute, in an interactive experience that might change the way you view your home computer, let alone space travel.)

My own hope is that someone at the White House will log on to the site. In contrast to President Kennedy, Sen. Obama essentially

told voters in November 2007: Forget all that talk of returning to the moon and pushing onto Mars; we really can't afford it. The event that day, covered in her blog by my Politics Daily colleague Lynn Sweet, was a campaign rally at Manchester Central High School in Manchester, N.H. There, Obama unveiled the outlines of \$18 billion in annual federal spending on early childhood education and kindergarten through 12th grade programs, expenditures, he promised, that would "fix the failures of No Child Left Behind." Deep in the fine print was where this money would come from: unspecified savings from winding down the war in Iraq, various notions of reducing government waste, and delaying the NASA Constellation Program for five years.

Well, as the intrepid Lynn Sweet pointed out, the Constellation program is the "stepping stone" to manned exploration of Mars. Identifying it for future budget cuts may have been a safe position to take on the campaign trail during the Democratic primaries by a candidate who was trying to appeal to teachers' unions and other liberal interest groups, but it was a jolt to the space community. It was also a disquieting contrast not only to the previous two presidents, but to Obama's eventual general election opponent.

* * * * *

In 2008, a group called Science Debate 2008 sent questionnaires to both Barack Obama and John McCain. The questions were specific and thoughtful, and each campaign chose to answer them in detail. The 11th query asked whether the candidates believed the United States could afford to study Earth from outer space and the "manned space travel (that) can help us inspire new generations of youth to go into science." Obama answered with the kind of pleasant-sounding generalities often typical of campaign talk, and which left him maximum maneuverability. Not McCain. "The real question," he replied, "is whether we can afford not to."

If McCain was the more hopeful and forward-looking candidate regarding NASA's plans to return to the moon, and then on to Mars, there was an explicit reason why this was so. In 1972, McCain and his fellow prisoners held in the "Hanoi Hilton" learned, almost by accident, that NASA had fulfilled Kennedy's promise of reaching the moon. That summer, "Hanoi Jane," the official Voice of Vietnam, repeated a snippet of a speech by Democratic presidential nominee George McGovern, who used a familiar formulation: The United States could put a man on the moon, but it couldn't bring an end to the war in Vietnam.

McCain and the American POWs knew damn well the war hadn't ended, but they knew nothing about the 1969 Apollo 11 mission to the moon. News of this success bolstered the Americans' spirits, the exact opposite effect their captors intended. "It was wonderful," McCain told me in a 2003 interview. "We were happy as hell."

If McCain's was a unique experience, his attitude toward space exploration – toward any kind of exploration – is typical of past

presidents, and of many of the Americans we tend to regard as heroic. One of the drawbacks, it turns out, of employing a 20-something chief speechwriter — as Obama did in the campaign and continues to do in the White House — is that some of this history is lost in the mist. "You know a few years ago, a little girl at Earhart Elementary in Chicago was asked the secret to her academic success," Obama said that November 2007 day in New Hampshire. "She said, 'I just study hard every night because I like learning. My teacher wants me to be a good student, and so does my mother. I don't want to let them down."

And so, a sweet, if unoriginal expression from a student at Amelia Earhart Elementary is used to justify cutting a program designed to fly us to unknown frontiers. *Amelia Earhart*, for God's sakes.

Obama also employed the obligatory Thomas Jefferson quote in that speech. Not to be unkind, but this is yet more blasphemy. Jefferson is the presidency's original futurist. Upon witnessing the ascent of an early hot air balloon in 1793, Jefferson immediately foresaw long-distance air travel and wrote of those visions to his daughter, Martha. In 1802, Jefferson contemplated the recently invented steam locomotives – and envisioned automobiles. And TJ, of course, dispatched those two great intrepid junior officers, Meriwether Lewis and William Clark, on their western trek, which he named *Corps of Discovery*.

To Jefferson, such missions were not a diversion from the problems of everyday democracy; they were an integral component of it. In a letter he wrote late in life to John Adams, Jefferson referred to the patriots of '76 – he and Adams included – as "Argonauts," an allusion to the dangers that declaring freedom entailed, which were every bit as daunting as those faced by Jason and his fellow explorers in Greek mythology – or by Lewis and Clark.

"The story of the *Corps of Discovery* began with a rigorous formulation of questions," Michael Umphrey, director of the Montana Heritage Project, noted. "But the big question, of course, was: 'What was out there?'"

To be sure, there were always skeptics who pointed out that such travel took a terrific toll on the nation's time and treasure, and for whom a litany of earthly needs begged the question asked of McCain and Obama: Can we afford it? Long before George McGovern raised the issue, a Boston newspaper decried the distant western lands Lewis and Clark were to visit as "a great waste, a wilderness." It added, in a foreshadowing of some doubters' view of space travel, "We are to give money of which we have too little, for land of which we already have too much."

This is the refrain of the earthbound mind, which finds itself worried about very real life and death issues here on this planet we already inhabit, and have made such a Godawful mess of. It's understandable. By 1969, in fact, the joy of the moon landing had been tempered by awful and less ephemeral events. John Kennedy himself had been killed; so had his brother, and Martin Luther King Jr. The cities had gone up in flames; college campuses had followed with their own unrest. Vietnam, where John McCain and the POWs were held virtually incommunicado, had revealed itself to be a war virtually without end. It became a cliché, that McGovern line, but one with a sadly solid logic. "We can put a man on the moon, but we can't (fill in the blank.)"

Those who utter such sentiments march under no particular political banner. They range from socially liberal Democrats to fiscally conservative Republicans - and include practical centrists as well. Perhaps spending trillions on space travel is a kind of Rorschach test. When George W. Bush began talking publicly about NASA's longplanned mission to Mars, the Cato Institute, a libertarian think tank, claimed that the mission couldn't succeed unless NASA was privatized. Rep. John M. Spratt Jr. of South Carolina, then the ranking Democrat (now the chairman) of the House Budget Committee, dismissed Bush's vision as having "an element of escapism about it." Sen. Joe Lieberman, a Democratic presidential contender at that time, set the bar the highest. Lieberman expressed rhetorical support for future space travel, but suggested it might have to wait until we've balanced the budget, eliminated our dependence on foreign oil — and conquered disease.

Fortunately, those who have actually attained the presidency have tended to see things differently. "The hallmark of the American adventure has been a willingness - even an eagerness - to reach for the unknown," Gerald Ford observed in a 1976 speech commemorating the nation's bicentennial. And celebrating exploration was, for Ford, at the very heart of things. "In the early 17th century, a few fragile vessels like the Discovery in 1607 and the Mayflower in 1620 - sailed across 3,000 miles of unfriendly sea," Ford added. "Their passengers and crew knew far less about their destination than the American astronauts knew at liftoff about the lunar landscape, a quarter-million miles away."

* * * * *

President Kennedy had reminded Americans that Mallory had died pursuing his quest. It was his way of preparing us for the worst. On Lyndon Johnson's watch, the worst came - or so we thought. Virgil "Gus" Grissom, Edward H. White II, and Roger Chaffee died when a fire broke out in their Apollo I capsule while it was on the runway. In 1986, disaster struck again, this time after liftoff. Six astronauts and a fellow Argonaut named Christa McAuliffe, a New England schoolteacher, perished. In the aftermath, President Reagan gave one of the most uplifting speeches of his presidency. Then, on Feb. 1, 2003, George W. Bush was thrust into the same role.

Bush, too, gave a lyrical eulogy, and he spoke for more than Captain David Brown and the six other crew members aboard Space Shuttle Columbia. "This cause of exploration and discovery is not an option we choose; it is a desire written in the human heart," Bush said at a memorial service in Houston. "The cause in which they died will continue. Mankind is led to the darkness beyond our world by the inspiration of discovery and the longing to understand. Our journey into space will go on."

It's obvious where my sympathies lie in this great debate. America, it seems to me, is at a place where it needs to do something grand and do it right — and, preferably, something that doesn't entail waging war. On a policy level, here is where things stand: NASA still has plans to send astronauts to the moon by 2020, this time in a spaceship called the Ares I rocket with a crew capsule known as Orion, along with a lunar landing craft called Altair.

Obama has not backed away from this plan - directly. His budget request in February was supplemented by an additional request in stimulus package money, meaning that the administration has asked Congress for \$18.7 billion for 2010, an increase of five percent over the existing budget. True to his word in New Hampshire in 2007, however, future projections currently call for NASA to operate on \$3.5 billion less from 2011-2013 than the Bush administration had envisioned. This is not a trivial difference. As NASA's John Olson told The New York Times recently: "No bucks, no Buck Rogers." The House of Representatives cut the administration's request even more, although the most recent vibes out of the Senate are that Obama's numbers will pre-

Will these decisions ultimately ground mankind? Will we never set foot on the moon again - or on Mars ever? That doesn't seem likely. If we don't go, someone else surely will. It's human nature, and Americans are hardly the only ones on this planet: We've been cooperating in space for years with astronauts from other nations, including Russians, the people who got Kennedy's attention. Meanwhile, Obama has ordered a review of NASA's entire human space flight program, which is due out later this summer. I don't know what that report will say, but I would mention three small words to the man in the Oval Office who will receive it. Yes. We. Can.