

## Losing the space race ex post facto

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The United States is conceding the space race...43 years after winning it. The Space Shuttle's ignominious retirement closes the door on an engineering marvel and an American institution. And the public didn't bat an eyelash.

How did we get to this point? How did space travel become blasé? When Neil Armstrong took **one small step for (a) man**, half a billion people tuned in around the world. July 20, 1969 punctuated one of the most concerted national efforts in American history, unofficially "winning" the space race. In case you weren't keeping score, the Soviets never landed on the moon.

**Apollo 11** electrified the nation. It achieved the impossible — land a human on another celestial body and return him safely to earth. And now the excitement is gone. For the last 30 years, NASA attained its greatest notoriety via high-profile disasters - **Challenger** in 1986 and **Columbia** in 2003. And during that time, we haven't left low-Earth orbit. Instead, we've launched satellites, conducted zero-G experiments, and built and serviced the International Space Station (ISS) - all noble endeavors, to be sure, but not enough to excite the public.



*The Shuttle Discovery on its final "flight" to the Smithsonian National Air and Space Museum*

Given the Shuttle's legacy, it was almost guaranteed to be a PR dud. When President Nixon approved the Shuttle in 1972, he chose the cheapest of three alternatives — the priciest option would have landed us on Mars by now. And he made his fiscal priorities well known. In March, 1970, Nixon made the [following remarks](#) [1]:

"Having completed that long stride into the future which has been our objective for the past decade, we now must define new goals which make sense for the Seventies. We must build on the successes of the past, always reaching out for new achievements. But we must also recognize that many critical problems here on this planet make high priority demands on our attention and our resources."

Compare that to JFK's immortal clarion call:

"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 willing to accept, one we are unwilling to postpone, and one we intend to win."

One is a call to action. The other is a meek acceptance of a distasteful reality.

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The Space Shuttle was oversized, overhyped, and underwhelming. NASA designed the Shuttle to be a reusable orbitable spacecraft, and Nixon ludicrously envisioned a weekly launch schedule. Fifty launches became 24, then nine, and in 2007, it hit an all-time low of three.

The Shuttle's erstwhile successor — Project Constellation — was overbudget and years behind schedule. But it would have returned us to the moon by 2020 and established an extended human presence there (from which to launch a manned Mars mission in the following decade). President Obama wasn't so optimistic, nor was Jim Kohlenberger, chief of staff at the White House Office of Science and Technology Policy (OSTP).

Kohlenberger [criticized the attempt](#) [2] to "recreate the Moon landings of 40 years ago using largely yesterday's technology..."

Instead, China will use "yesterday's technology" to land on the moon by 2025. And between the retirement of the Space Shuttle in 2011 and the retirement of the ISS in 2020, we'll lack the ability to independently ferry astronauts into space. Meanwhile, we'll pay \$55.8 million a pop to hitch rides on Russian Soyuzs. Irony, defined.

Former NASA administrator Michael Griffin, [bluntly criticized](#) [3] the administration's decision to scuttle Constellation:

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"It means that essentially the U.S. has decided that they're not going to be a significant player in human space flight for the foreseeable future."

Jim Lovell, Gene Cernan, and Neil Armstrong penned a column for USA Today (USA Today ("[Is Obama grounding JFK's space legacy?](#)" [4])), where they remarked that "America's leadership in space is slipping. NASA's human spaceflight program is in substantial disarray with no clear-cut mission in the offing."

Obama's space policy relies heavily on the private sector. The Stimulus Act earmarked \$50 million toward the development of orbital spacecraft. SpaceX and Orbital Sciences have contracts (worth a combined total of \$3.5 billion) to build and launch unmanned cargo ships to the ISS.

The administration has also invested in "heavy-lift rockets and advanced propulsion systems" and envisions a manned asteroid mission by 2025 and a trip to Mars by the mid 2030's. But with naught to support such a lofty vision but hopes and dreams, the manned space program is on permanent life support. Meanwhile, the administration has cut funding for the second straight year.

And why not? In these troubled economic times, we can ill afford lavish expenditures. But as political columnist Charles Krauthammer [astutely points out](#) [5], "We've had exactly five balanced budgets since Alan Shepard rode *Freedom 7* in 1961. If we had put off space exploration until these earthbound social and economic conundrums were solved, our rocketry would be about where North Korea's is today."

Instead, we've regressed to pre-Apollo days. We no longer have the ability to reach the moon, and we have no clear plan for the future. NASA is no longer a top national priority.

As a lifelong geek weaned on Science Fiction and dreams of fantastic voyages into outer space, I take this as a personal affront. 43 years after "winning" the space race, we're waving the white flag, conceding to China, Russia, and any other nation bold enough to follow in our footsteps.

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### Links:

[1] <http://history.nasa.gov/SP-4221/ch9.htm>

[2] <http://news.bbc.co.uk/2/hi/science/nature/8489097.stm>

[3] <http://www.washingtonpost.com/wp-dyn/content/article/2010/01/31/AR2010013101058.html>

[4] <http://www.usatoday.com/news/opinion/forum/2011-05-24-Obama-grounding-JFK->

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[5] <http://www.nationalreview.com/articles/296541/idiscoveryi-s-final-flight-charles-krauthammer>