



Does Obama Deserve Credit for Elon Musk’s SpaceX Triumph? Yes and No

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About 44 miles south of Pensacola, Florida, two astronauts on Sunday splashed into the Gulf of Mexico. Within minutes recovery boats were on the scene to haul in Bob Behnken and Doug Hurley, who NASA officials later said were in perfect health. It was the first water landing by astronauts since the Ford Administration.

“What an amazing day. Today we really made history,” NASA Administrator Jim Bridenstine said following the splashdown.

The first astronaut space orbit launched by a private company had been a sparkling success, “a triumph of the private sector in space.”

Yet within hours of the return something happened.

President Obama congratulated the astronauts on Twitter and noted that it was his administration that “launched the Commercial Crew program to strengthen our U.S. space program.”

Many Twitter users were not happy.

Wasn’t it Obama who dismantled the US space shuttle program? Wasn’t it Obama who gave the Russians “a monopoly on space flight”? How could he claim credit for the triumph of Elon Musk, the rebel engineer and SpaceX founder who did what NASA said could not be done?

Musk is no doubt the hero of America’s new dawn in space exploration, but it’s also true that his achievement would not be possible without the radical and unpopular actions Obama took in 2010 that changed the paradigm of US space flight.

Bucking his central planning instincts, Obama embraced a surprisingly laissez-faire approach to space flight that angered political allies and opponents alike.

In doing so, however, he tapped a reservoir of ingenuity and innovation that has ushered in a new age of space flight and exploration.

A New Era in Space Exploration

When Behnken and Hurley splashed into the sunlit Gulf waters on Sunday, it marked a new beginning in space flight.

The successful return of SpaceX's Crew Dragon capsule, which had been sent into orbit with its Falcon 9 rocket, was a milestone in a commercial crew program that began a decade earlier.

In her forthcoming book *Bureaucrats and Billionaires*, former NASA deputy administrator Lori Garver and reporter Michael Sheetz trace the origins of NASA's commercial crew program, a revolutionary human spaceflight program that joins private aerospace manufacturers such as SpaceX and Boeing with NASA's astronauts.

Garver writes that this hybrid allows space flight "at a fraction of the cost of previous government owned and operated systems." A decade ago, however, the program faced opposition seemingly from every side.

The saga began early in 2010 when President Obama announced his intention to abort NASA's Constellation program—NASA's crew spaceflight program—correctly pointing out it was "over budget, behind schedule, and lacking in innovation."

The decision angered almost everyone. As Garver and Sheetz write, the program was "extremely popular with Congress, and the contractors who were benefiting from the tax dollars coming their way." An impressive array of stakeholders from aerospace companies, trade associations, and astronauts to lobbyists, Congressional delegations, and NASA pushed back.

The resistance was immense.

NASA chief Charles Bolden, while choking back tears, compared the decision to "a death in the family." Pulitzer Prize winning columnist Charles Krauthammer ominously noted the move would give the Russians "a monopoly on rides into space." Congressman Pete Olson (R-Texas) called the decision "a crippling blow to America's human spaceflight program."

Few commentators seemed to even notice the \$6 billion in spending over five years to support commercially built spacecraft to launch NASA's astronauts into outer space.

Why NASA Needed a New Look

NASA is one of the great stories in America's tale. From the Space Race to the Moon Landing and beyond, its achievements are part of the American story and ethos.

But by 2010 the agency's space flight program had grown bloated, tired, and sclerotic. There was no grand vision like the Apollo program of the 60s. There was no awe-inspiring goal. The agency suffered from confusion, delays, and a budget formula that incentivized cost and waste.

Obama wasn't slashing NASA's budget—his ask of \$19 billion was \$700 million more than the previous year—but he was intent on scrapping the Constellation program.

The answer he received was a rare display of bipartisanship: Hell no. Contractors had little intention of losing the contracts they had already won, and they lobbied Democrats and Republicans hard. As concessions, that spring Obama announced the US would send astronauts to an asteroid by 2025 (and a later Mars mission) and restored part of the Constellation program, the Orion capsule. The concessions did little to appease those who held interests in Constellation, however.

A Ride to Capitol Hill

In the summer of 2010, Garver, the NASA Administrator, rode to Capitol Hill in the back seat of the president's town car. She, along with two White House officials, had been summoned by US Senators Republican Kay Bailey Hutchinson and Democrat Bill Nelson who were responsible for oversight of NASA.

She got a good look that day at how Washington sausage making works. It later occurred to her that she was witnessing "the relentless momentum of the status quo in government spending."

When she arrived at the meeting with OMB Director Jack Lew, she greeted Senators Hutchinson and Nelson. She was told they would agree to fund commercial crew "if and only if the Administration agreed to have NASA build their own large rocket and capsule—keeping the existing multi-billion-dollar contracts intact."

Garver had her doubts about the arrangement, but the White House agreed to the proposal. Everyone seemed happy. Obama was able to scrap Constellation and lay the groundwork for Commercial Crew. The Senators had protected their interests. The contractors got paid.

It was a win for everyone, except American taxpayers. They were left on the hook for \$50 billion of Constellation's contracts to build a rocket (at five times the cost) that NASA apparently had no intention of using for decades.

Capture the Flag

The following year, in 2011, Obama called the crew of the Space Shuttle Atlantis, whose flight marked the conclusion of NASA's 30-year shuttle program. During the call, the president referenced a "'capture the flag' moment" for private space companies seeking to reach the International Space Station (ISS).

"I understand Atlantis also brought a unique American flag up to the station, one that was flown on the very first shuttle mission and one that will reside on the ISS until an American commercial space company launches astronauts to the station," Obama said.

"Yes Mr. President," Commander Chris Ferguson responded. "I know there's a lot of competition out there, a lot of people are fervently working towards this goal to be the first one to send a commercial astronaut into orbit, and we look forward to seeing them here soon."

Whether he knew it or not, Obama's flag comments reflect a fundamental change in American space flight: A new space race had begun.

By pulling the plug on Constellation, Obama had unleashed the power of markets and competition. While many associate competition with dog-eat-dog and survival of the fittest tropes, competition is a healthy and productive force.

"The competitive process allows for constant testing, experimenting, and adapting in response to changing situations," writes Cato's David Boaz. "It keeps businesses constantly on their toes to serve consumers. Both analytically and empirically, we can see that competitive systems produce better results than centralized or monopoly systems."

Those who doubt these words need only look to NASA. By the agency's own admission, they had "not been good at maintaining schedule. And we have not been good at maintaining cost."

As Elon Musk and others have observed, NASA suffers from an incentive structure “that is all messed up.” As John Stossel recently pointed out, the agency covers contractors’ developmental costs and then slaps on 10 percent. This discourages innovation and incentives cost maximization.

Private companies, on the other hand, have incentives to innovate and control costs. In the case of the commercial crew program, SpaceX and Boeing are on the hook for cost overruns (and they have picked up the tab on multiple occasions).

Because of market forces, SpaceX is doing something NASA officials said was impossible a decade ago: sending people to space *affordably*. As Stossel points out, an Obama era committee concluded a decade ago that it would take 12 years and cost \$26 billion to do what Musk did in 6 years—for less than \$1 billion.

In the committee’s defense, they probably weren’t wrong. It *would* have taken NASA 12 years and \$26 billion to do what SpaceX did, if everything went right.

They simply could not have done what Musk did.

Obama’s Greatest Legacy?

There’s no question Obama played a key role in bringing life back to America’s space flight future. By pulling the plug on NASA’s fossilized and bureaucratic shuttle program, he paved the way for private investment, innovation, and vision.

By doing so, Obama radically transformed America’s space shuttle future and ushered in a new era of space exploration.

Yet it’s SpaceX who ultimately deserves the credit for the Crew Dragon mission. NASA is involved in commercial crew flights; they provide the astronauts and certify the flights. But it’s SpaceX and Boeing who’ve shown they are capable of providing two spacecraft at one-fourth the price of NASA’s single spacecraft. The space shuttles are not just less expensive, they are superior and can be reused. While most of the funding to build the shuttle came from a \$2.6 billion NASA contract, Musk has shown he can stay on budget while delivering.

“What this heralds fundamentally is a new era in space flight,” a clearly excited Musk told reporters at a press conference following the return of Crew Dragon. “We’re gonna go to the moon. We’re gonna have a base on the moon. We’re gonna send people to Mars and make life multi-planetary.”

Ironically, the rebirth of the US space shuttle program may prove to be the most lasting and impactful achievement of Obama’s presidency.

It’s no coincidence that it was achieved by doing something the 44th president often was reluctant to do: reduce government and harness the power of private enterprise.