

Why shuttles are being retired, what's next

July 8 2011

Thirty years of flight by NASA's space shuttles will end once Atlantis returns home from this last mission. The space agency will be looking to deeper space exploration, but the future is still somewhat unclear.

NASA is looking to private companies to develop a new [space](#) vehicle and it will be at least three years, maybe longer, before one is ready. Some basics about the [shuttle program](#) and why it is ending:

Q: Why are the shuttles retiring?

A: The shuttles are aging and expensive and their chief task of building the [International Space Station](#) is essentially done. Now NASA wants to do something new.

Q: Who decided to stop flying the shuttles?

A: President George W. Bush made the decision in 2004. He wanted astronauts to go back to the moon, and eventually to Mars. But President [Barack Obama](#) dropped the [moon mission](#). His plan has NASA building a giant rocket to send astronauts to an asteroid, and eventually Mars, while turning over to private companies the job of carrying cargo and astronauts to the [space station](#).

Q: Why were the shuttles built?

A: It was supposed to make getting into space cheap, simple and safe, flying into low orbit virtually every week. It didn't accomplish that. But

it was the best way to get big items - such as satellites and the [Hubble Space Telescope](#) - into orbit and fix them if needed. For the space station, it was a combination moving van and construction crane. What made the shuttle unique was its ability to do all kinds of things.

Q: What happens to the space shuttles?

A: They'll be on display across the country. Endeavour goes to the California Science Center in Los Angeles and Atlantis will stay at [Kennedy Space Center](#) for its visitor complex. Discovery's new home will be the Smithsonian Institution's hangar near Washington Dulles International Airport. Enterprise, a shuttle prototype used for test flights, goes to New York City's Intrepid Sea, [Air and Space Museum](#).

Q: What about the space station?

A: The life of the space station has been extended to at least 2020 and it could continue on even longer. It's now big enough for six people. They conduct science research, from astronomy to zoology, and help scientists understand the effects of people spending long periods of time in space.

Q: What about the astronauts? Do they still have jobs?

A: Some will. More than a dozen astronauts will still go to space and live on the space station. Others will wait around for slots on still-to-be-built spaceships, including the ride to an asteroid. Others will leave the program. The same thing happened after the Apollo program ended nearly 40 years ago.

Q: How will astronauts get to the space station?

A: NASA will continue to buy seats on Russian Soyuz capsules to ferry space station residents. The \$56 million price per head will go up to \$63

million, which is still cheaper per person than the [space shuttle](#).

Q: Is there any other way to get into space?

A: Not from U.S. soil once the shuttles retire. NASA could eventually use the commercial rockets and capsules being developed by private companies. Two companies predict they could fly astronauts to the space station within three years. NASA is under orders to build a giant rocket to go beyond Earth orbit.

More information: NASA: <http://www.nasa.gov/shuttle>

©2011 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.

Citation: Why shuttles are being retired, what's next (2011, July 8) retrieved 20 April 2024 from <https://phys.org/news/2011-07-shuttles.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--