



The space shuttle Discovery took its last flight Tuesday from Florida's Kennedy Space Center to Washington, where its final destination will be the Smithsonian.

The shuttle was mounted on top of a specially-modified Boeing 747. As it left Florida at first light, it saluted the past and all those who were part of the U.S.'s shuttle program, flying over launchpad 39A, down the beach and over the space center's visitor complex before heading north.

As Discovery arrived, it circled Virginia's Dulles Airport before conducting a fly-by over the National Mall.

Crowds turned out at Dulles to see the shuttle, including some families who had camped in the parking lot for a couple of hours, according to CNN's Lizzie O'Leary. As the shuttle came into view, flying low, cheers could be heard.

Many people were also waiting at the National Mall to see the shuttle as it passed by.

The spacecraft is the oldest of the three orbiters and clocked more than 148 million miles on its missions.

Its last commander, Steve Lindsey, and five others who flew on mission 133 in February, 2011, came out to say goodbye.

"Bittersweet is an overused word, but it is sad," Lindsey said.

With every step toward retirement, the shuttle fleet becomes more a part of history. In 30 years of flying, there were grand accomplishments and heart-wrenching tragedies. A space flying machine with wings, it was like nothing ever built.

But dwelling in that past would be a mistake, Lindsey said.

"We've got to move on; we've got to make sure that spaceflight doesn't die in this nation," he said. "We still have (the) space station going, but if we don't get ourselves heavy lift, get going with exploration or part of what I'm working on - the commercial program - then we risk losing this as a nation, and I don't want to do that."

In some ways, the past is meeting the future. Just a few miles to the south at Cape Canaveral, Space X is in its final preparations to launch its Dragon spacecraft. It is a hugely crucial test scheduled for the end of April. Space X hopes to be the first commercial company to rendezvous and then berth with the International Space Station.

Next year, Space X plans to start ferrying cargo to the station and in four years, U.S. astronauts.

Alvin Drew, a mission specialist on Discovery, said these companies vying to pick up where the shuttle left off are taking a leap of faith.

"These guys who run the commercial companies will tell you with the money, they could have been there in 2015 if the money was there," Drew said. "You tie yourself to government funding, you are making a tough deal, because there's no guarantee the succeeding administrations or congresses are going to continue your funding."

Commercial companies say their new vehicles will be many times safer than the shuttles. It has to be that way now, Drew said.

"We had bigger budgets and a bigger tolerance for failure and loss of life back in the '60s and early '70s than we have in this particular generation," Drew said. "So the shuttle was built for that generation of explorers, and I'm not sure it fit well in our current society or current culture. The risks you would take for the shuttle, I think, are higher than most people are willing to accept in 2012."

Discovery will replace Enterprise, which now sits in the Smithsonian. Enterprise, a test shuttle that never flew in space, will go to New York and eventually into its new home at the Intrepid Museum.

The shuttle Endeavour will, by the end of the year, be heading to the California Science Center in Los Angeles. Atlantis will take up permanent residence at the Kennedy Space Center Visitor Complex, a final exclamation point to the end of an era of space exploration.

<http://lightyears.blogs.cnn.com>