

Discovery arrives at space station for last time

February 26 2011, By MARCIA DUNN , AP Aerospace Writer



In this frame grab from video taken from NASA television, space shuttle Discovery is seen moments after docking at the International Space Station, its final visit before being parked at a museum, Saturday, Feb. 26, 2011. (AP Photo/NASA)

(AP) -- Space shuttle Discovery arrived at the International Space Station on Saturday, making its final visit before being parked at a museum.

"What took you guys so long?" asked the space station's commander, Scott Kelly.

Discovery should have come and gone last November, but it was grounded by fuel tank cracks. It blasted off Thursday with just two seconds to spare after being held up by a balky ground computer.

"Yeah, I don't know, we kind of waited until like the last two seconds," said shuttle commander Steven Lindsey.

The linkup occurred 220 miles above Australia.

Discovery - flying on its final voyage - will spend at least a week at the orbiting outpost. It's carrying a closet-style chamber full of supplies as well as the first humanoid robot to fly in space.

The compartment will be attached permanently to the space station early next week.

Altogether, there are 12 people aboard the joined spacecraft, representing the United States, Russia and Italy. And in a historic first, four of the five major partners have vessels docked there right now, including cargo ships from Japan and Europe. The entire conglomeration has a mass of 1.2 million pounds, including the shuttle.

It took longer than usual for the hatches to open because of a slight misalignment between the shuttle and station that needed to be corrected. The two skippers shook hands when the doors finally swung open, and there were hugs all around.

It was a quick reunion. The astronauts rushed off to see how far they could get Saturday evening with the installation of a platform holding a spare radiator for the station. The giant shelf was carried up aboard the shuttle.

They worked late, but finally got the platform installed, eight hours after

the docking.

Earlier in the day, just before pulling up, Discovery performed a slow 360-degree backflip so space station cameras could capture any signs of launch damage. At least four pieces of debris broke off the fuel tank during liftoff, and one of the strips of insulating foam struck Discovery's belly.

NASA managers do not believe the shuttle was damaged. That's because the foam loss occurred so late in the launch, preventing a hard impact. The hundreds of digital pictures snapped by two space station residents should confirm that; experts on the ground will spend the next day or two poring over all the images.

As a precaution, every shuttle crew since the 2003 Columbia disaster has had to thoroughly check for possible damage to the thermal shielding, which must be robust for re-entering Earth's atmosphere.

Discovery - the first to perform the somersaulting maneuver, back in 2005 - is the first in the fleet to be retired this year. Endeavour and then Atlantis will close out the 30-year shuttle program by midsummer.

Discovery is the oldest of the three and the most traveled, with 143 million miles logged over 39 flights and 26 years.

The robot launched aboard Discovery - Robonaut 2 or R2 for short - will remain at the space station, all boxed up for at least another few months. It's an experimental machine from the waist up that will be tested before attempting simple jobs inside the orbiting complex. The idea is for R2 to eventually serve as an astronaut assistant.

"We're here!" Robonaut said in a Twitter update following Saturday's docking. It actually was posted by a human colleague on the ground.

"Home sweet home!"

More information:

NASA: <http://www.nasa.gov/mission-pages/shuttle/main/index.html>

Robonaut: <http://robonaut.jsc.nasa.gov>

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