

Shuttle Discovery approaches Earth for last landing

March 9 2011



The space shuttle Discovery(C) leaves the International Space Station (ISS) seen in this March 7 NASA TV image. The US space program's oldest and most traveled shuttle, Discovery, was on track to make its final Earth landing Wednesday after a near-perfect last mission at the International Space Station.

The oldest and most traveled space shuttle, Discovery, is headed for its last landing on Earth Wednesday before becoming the first of three to retire in a US museum.

The landing was on track for 11:57 am (1657 GMT), and wind gusts at Kennedy Space Center were not expected to be strong enough to push the landing back to its next possible window, 1:34 pm (1834 GMT), NASA said.

The flight crew, wrapping up a 13-day mission to the International Space



Station, made final preparations after being woken up at around 1:00 am (0830 GMT) to the country song "Coming Home," sung by actress Gwyneth Paltrow.

The aging space shuttle has flown more than any other in the fleet during its 27-year career, and NASA heaped praise on its final performance toting a crew of six American astronauts to the orbiting research lab.

"The entire <u>space shuttle</u> system just performed outstanding on this entire mission," the chair of NASA's mission management team Leroy Cain told reporters on Tuesday.

"We have had an awesome display here of the capabilities of the team and the hardware."

NASA said winds in landing area were six knots, peaking to 12 knots, within the end-of-mission weather flight rules that set a top limit for daylight crosswinds at 15 knots.

The shuttle was to begin its deorbit burn for re-entering Earth's atmosphere at 10:52 am (1552 GMT), about an hour before the actual landing.

Discovery's mission was initially scheduled to last 11 days but was extended to 13 so that astronauts could work on repairs and install a spare room to add 21 by 15 feet (6.5 by 4.5 meters) of extra room for storage and experiments.

Astronauts also brought the first <u>humanoid robot</u> to the <u>International</u> <u>Space Station</u> (ISS), though it spent most of its time wrapped in packing materials and will not become fully operational for some time.

When the shuttle lands, it will have spent a total of 365 days in space,



logging about 150 million miles (241 million kilometers).

Hours after Discovery touches down, NASA plans to roll out the shuttle Endeavour to launch pad 39A in preparation for its final journey to the orbiting space lab on April 19.

Endeavour is to be commanded by astronaut Mark Kelly, whose lawmaker wife Gabrielle Giffords is recovering from a bullet to the head, after a gunman went on a deadly rampage at a political meeting she was holding at a grocery store.

Kelly has said his wife is undergoing a grueling schedule of rehabilitation exercises and he hopes she will be well enough to attend the launch next month at Kennedy Space Center.

The shuttle Atlantis is scheduled for its final flight on June 28, which would mark the last shuttle mission ever.

After that, the sole method of transport to and from the ISS will be via Russia's Soyuz space capsules, which can carry three people at a time.

Discovery has broken new ground multiple times since it first launched in 1984.

It transported the Hubble Space telescope, was the first shuttle to be commanded by a female astronaut and the first to rendezvous with the Russian Mir Space Station.

The shuttle was also the first to return to space after two major disasters, the Challenger explosion in 1986 and the Columbia disaster in 2003 when the shuttle broke up on its return toward Earth.

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