

NASA delays shuttle Discovery launch

August 27 2009



The space shuttle Discovery sitting on launch pad 39-A, at the Kennedy Space Center in Florida. NASA on Thursday delayed the launch of the space shuttle Discovery until 0359 GMT Saturday because mission specialists wanted more time to review tests on a faulty valve.

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until 0359 GMT Saturday so mission specialists could review tests on a faulty valve, the US space agency said.

The decision to make the launch attempt nearly 24 hours later than planned was issued after experts reviewed tests on a [liquid hydrogen](#) fill-and-drain valve that malfunctioned earlier in the week in Discovery's main propulsion system.

"It was announced at today's mission management team meeting that the teams need another 24 hours to review data from yesterday's fill-and-drain test before pressing forward with launch of [space shuttle Discovery](#)," NASA said.

"Liftoff now is targeted for 11:59 pm (Friday, 0359 GMT Saturday).

NASA earlier Thursday had begun the countdown to launch Discovery on Friday at 12:22 am (0422 GMT) with astronauts preparing for a 13-day mission to supply and repair the [International Space Station](#) (ISS).

The hydrogen fuel tank valve functioned normally in tests conducted by NASA engineers, who now believe that problems encountered when filling the shuttle's [external fuel tank](#) were due to false readings, NASA said.

But NASA then put back the launch almost 24 hours after a review of the results to give teams extra time "to work on options in case the problem with the valve occurred again," said Allard Beutel, a NASA spokesman.

The launch, if it goes ahead, would be NASA's fourth scheduled attempt after liftoff was also delayed Wednesday and thunderstorms led NASA officials to scrub the first bid early Tuesday.

At the space station, a key task during the three scheduled spacewalks on Discovery's mission will be to replace an old liquid ammonia coolant tank, which will be substituted with a new, 1,760-pound (800-kilogram) replacement.

The new freezer will store samples of blood, urine and other materials that will eventually be taken back for studies on the effects of zero-gravity.

The astronauts were also to retrieve experimental equipment from outside the ISS and return it to Earth for processing.

They will also be delivering a treadmill named after popular US comedy talk show host Stephen Colbert -- the second aboard the ISS. Exercise is important for astronauts spending long periods of time in [space](#), because zero-gravity can result in muscle atrophy.

The Discovery will bring astronaut Nicole Stott to take the place aboard the ISS of Tim Kopra, who will ride the shuttle back to Earth.

The shuttle commander is to be veteran astronaut Rick "C.J." Sturckow. Other astronauts on the crew include pilot Kevin Ford and mission specialists Patrick Forrester, Jose Hernandez, John "Danny" Olivas, and Christer Fuglesang of Sweden.

Once the Discovery mission is complete, just six more shuttle flights remain before NASA's three shuttles are retired in September 2010.

The ISS is a project jointly run by 16 countries at a cost of 100 billion dollars -- largely financed by the United States.

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Citation: NASA delays shuttle Discovery launch (2009, August 27) retrieved 15 May 2024 from <https://phys.org/news/2009-08-nasa-shuttle-discovery.html>

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