

NASA's Discovery Rolls to Major Return To Flight Milestone

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NASA's Space Shuttle Discovery is one important step closer to launch. Discovery was rolled from its hangar early this morning to the Vehicle Assembly Building (VAB). Discovery will be attached to its propulsion elements, a redesigned External Tank (ET) and twin Solid Rocket Boosters (SRBs), at NASA's Kennedy Space Center, Fla.

"This is a tremendous accomplishment for the Space Shuttle Program," said Bill Parsons, Space Shuttle Program Manager. "This effort has taken a talented team dedicated to meticulously preparing the vehicle and implementing all the modifications for a safe Return to Flight," he added.

Discovery's launch window is from May 15 to June 3. Its mission, designated STS-114, will take Commander Eileen Collins and six crew members to the International Space Station. The mission is the first of two test flights to check out new inspection and repair techniques, as well as to deliver supplies to the Station. It is the first Shuttle mission since the Columbia accident in February 2003.

Discovery's journey began as it was moved from its hangar to the VAB. In the VAB, a lifting sling was attached to the orbiter in preparation for attachment to the ET and twin SRBs. Work on Discovery in the VAB includes installation of a new digital camera, testing electrical and mechanical attachments between the orbiter and ET and umbilical checks.

"I could not be more proud of the team that spent the last two years working on Discovery. We are extremely excited to reach this point in the processing for flight," said Stephanie Stilson, NASA Vehicle Manager for Discovery. "Seeing the orbiter roll to the VAB is the culmination of all of that hard work. We look forward to a safe Return to Flight," she said.

While in the Orbiter Processing Facility, Discovery underwent 41 modifications in response to the Columbia accident and the recommendations of the Columbia Accident Investigation Board. They included addition of the new Orbiter Boom Sensor System; equipping the orbiter with cameras and laser systems to inspect the Shuttle's Thermal Protection System (heat shield) while in space; sensors in the leading edge of the Shuttle's wings, a new safety measure that monitors the orbiter's wings for debris impacts; and a new digital camera to view the ET during launch.

Discovery also completed its Orbiter Major Modification (OMM) period that began in September 2002. Technicians completed 107 additional

modifications to Discovery, 17 will be flying for the first time. OMMs are scheduled at regular intervals to enhance safety and performance and to infuse new technology.

Source: NASA

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