

Juno processing continues in Florida

July 20 2011, By DC Agle and George Diller



Technicians use an overhead crane to lower NASA's Juno spacecraft onto a fueling stand at Astrotech's Hazardous Processing Facility in Titusville, Fla. Credit: NASA/KSC

(PhysOrg.com) -- Processing on NASA's Juno spacecraft continues with the spacecraft being inserted into its payload fairing yesterday, (July 18, 2011). The payload fairing acts as a protective cocoon that will shield Juno from the elements during the first 205 seconds of the spacecraft's

ascent to orbit. The encapsulation process is expected to take about four days.

On Friday, July 15, the Juno team used a process called gamma-ray radiography to inspect solder connections leading to a heater element aboard one of Juno's two magnetometers. The results of the inspection indicated there was an ample amount of solder connecting wire leads to the heater, enabling it to operate effectively during its mission.

The Juno spacecraft carries two redundant Flux Gate Magnetometer instruments that will measure Jupiter's powerful magnetic environment. Lab testing of heaters similar to ones on Juno, designed to keep the Flux Gate Magnetometer instruments warm in space, had indicated a small probability that wire connections might not operate as expected. As a precaution, NASA and Juno mission personnel had decided to inspect the Juno heater elements and, if necessary, repair solder joints connecting the heaters' electrical wires to their mounting surfaces to ensure mission success.

"This test gave us confidence that our [magnetometer](#) will work as advertised in just about the harshest environment you could find in the solar system," said Scott Bolton, Juno's principal investigator from the Southwest Research Institute in San Antonio.

The launch period for Juno opens Aug. 5 and extends through Aug. 26. For an Aug. 5 liftoff, the [launch window](#) opens at 8:34 a.m. PDT (11:34 am EDT) and remains open through 9:43 a.m. PDT (12:43 p.m. EDT).

NASA's Jet Propulsion Laboratory, Pasadena, Calif., manages the [Juno mission](#) for the principal investigator, Scott Bolton, of Southwest Research Institute at San Antonio, Texas. [Lockheed Martin Space Systems](#), Denver, is building the spacecraft. The Italian Space Agency in Rome is contributing an infrared spectrometer instrument and a portion

of the radio science experiment. JPL is a division of the California Institute of Technology in Pasadena.

Provided by JPL/NASA

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