

Boeing Contribution to Shuttle Mission Includes Troubleshooting, Payload Prep

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KENNEDY SPACE CENTER, Fla., April 2, 2010-- The Boeing Company [NYSE: BA] has been providing NASA with a wide variety of hardware and services -- including troubleshooting a stuck valve -- to ensure Space Shuttle *Discovery* launches as scheduled on April 5.

One of two helium isolation valves in the shuttle's starboard Orbital Maneuvering System (OMS) pod failed in the open position on March 13 during helium tank preparations prior to OMS pod propellant loading. High-pressure helium is used to push propellants from storage tanks into small rocket motors used for routine orbital maneuvers.

"As the original equipment manufacturer for the space shuttle and a major subcontractor on the program, Boeing engineers were a part of a NASA-led problem resolution team that analyzed the complex data and provided recommendations," said John Mulholland, Boeing Space Shuttle Program vice president and program manager. "The team concluded that given the redundancy in the system, the space shuttle is safe to fly with the valve in this configuration."

Shuttle mission STS-131 will transport four experiment racks to the International Space Station (ISS), along with one systems rack, seven resupply stowage platforms, and four resupply stowage racks. Boeing engineers in Huntsville, Ala., designed and built two of the four experiment racks -- the Expedite the Processing of Experiments to Space Station (EXPRESS) Rack 7 and the Window Observational Research Facility (WORF).

EXPRESS Rack 7 is a multipurpose payload rack system that will store and support science experiments aboard the ISS. Experiments can be easily integrated into the system, which includes structural interfaces, power, command/data, video, cooling, nitrogen, vacuum exhaust, and other items needed to operate experiments in space.

The WORF fits over the U.S. Destiny lab window and will maximize the use of the window via attachments for cameras, camcorders, and other instruments to capture imagery of the Earth and space.

The mission also will deliver an Ammonia Tank Assembly (ATA) that Boeing refurbished at Kennedy Space Center. The ATA works in conjunction with the station's External Active Thermal Control System to help cool the exterior and interior components of the ISS.

The Boeing Checkout, Assembly and Payload Processing Services (CAPPS) team prepared the entire mission payload for launch. The services and support Boeing provides under its CAPPS contract include planning for and receiving payloads, maintaining associated ground support systems, integrating payloads with the space shuttle, launch support, and space shuttle post-landing payload activities.

Boeing is the prime contractor to NASA for the ISS. In addition to designing and building all the major U.S. elements, Boeing also is responsible for ensuring the successful integration of new hardware and software -- including components from international partners -- as well as for providing sustaining engineering work for the ISS.

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