



countdown

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Test finds problem area in Atlantis' external tank



◆ **Shuttle Update:** Tuesday's tanking test on space shuttle **Atlantis'** external tank yielded important information, according to Shuttle Program Manager Wayne Hale at a post-tanking press conference.

The data from the test indicates a problem in the feed-through connector that passes the wires from the interior of the tank to the exterior -- a multi-connector. The time domain reflectometry test equipment indicated that's where the open circuits occur.

The connector is a multi-part element with pins and sockets. The signals that go through this connector are five sensor circuits that have failed during the three tankings of this vehicle, including Tuesday. The only common element is the connector.

The connector goes through the wall of the tank;- part of it is inside and part of it is outside. The team is pleased to know that it's in the connector and not in the 100 feet or so of remaining wire and connectors.

NASA doesn't know exactly what's going on in the connector, so we have some work to do. But the team is not expecting this to be a long-term repair.

◆ **ISS Update:** Expedition 16 Commander Peggy Whitson and Flight Engineer Dan Tani completed their spacewalk at 11:46 a.m. on Tuesday. The spacewalkers inspected the starboard So-

lar Alpha Rotary Joint, or SARJ, and the Beta Gimbal Assembly, or BGA. They also removed a trundle bearing assembly, which moves along the race ring in the SARJ, and brought it inside the station for further examination. The spacewalk lasted 6 hours and 56 minutes. It was the 100th spacewalk in support of station assembly and maintenance and the 23rd spacewalk for 2007, which matches a record for the most spacewalks in a single year.



■ **Keep Center Safe Over Holidays** — With the holiday season around the corner and many taking additional leave, please remember that it takes commitment from everyone at the spaceport to help save energy dollars. Before going home for the day, please remember to:

- ◆ **Turn off displays and decorative lights.**
- ◆ Turn off your computer, monitor and printer (if not required to remain on).
- ◆ Turn off the lights in your office when you are the last person to leave.
- ◆ Turn off the hall and hall closet lights on your way out if you are the last person to leave your area in the building.
- ◆ Turn off or unplug any appliances in the office, such as coffee makers, desk lamps, fans, radios, etc.
- ◆ Turn off the copier machines (including those in hallways) and scanners.

Space station crew ties spacewalk records

Please do not turn off the new multifunction (copier/fax) machines like the Xerox Workcentre devices, which have their sleep mode enabled. Turning these machines off will prevent the office from receiving faxes.

◆ Please make sure that no objects interfere with the operation of the motion sensors. The KSC Energy Working Group has received information about air conditioning vents making objects move in the proximity of motion sensors (i.e., mission flags). Anything that can move around will prevent the motion sensors from shutting off the lights.

◆ Close the blinds on all windows.

■ **NASA News Update** — In December, NASA will begin testing core components of a rocket engine from the Apollo era. Data from the tests will help NASA build the next generation engine that will power the nation's new Ares launch vehicles on voyages that will send humans to the moon.

■ **NASA Science News** — A powerful jet from a supermassive black hole is blasting a nearby galaxy and possibly causing profound problems for planets in the jet's path. Read the full story at http://science.nasa.gov/headlines/y2007/18dec_assault.htm?list29875.

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