

NASA: Fuel test a success, shuttle launch day set

July 1 2009, By MARCIA DUNN , AP Aerospace Writer



In this image provided by NASA the afternoon sun creates shadows on space shuttle Endeavour's external fuel tank as workers remove the seal from the Ground Umbilical Carrier Plate on the tank Wednesday June 24, 2009. A hydrogen leak at the location during tanking for the STS-127 mission caused the launch attempts to be scrubbed on June 13 and June 17. NASA plans a fueling test Wednesday July 1, 2009 of shuttle ahead of July 11 launch attempt. (AP Photo/NASA)

(AP) -- To NASA's relief, a fueling test on space shuttle Endeavour uncovered no hydrogen gas leaks Wednesday and paved the way for another launch attempt late next week for the delayed mission.

Last month, potentially dangerous leaks of hydrogen gas thwarted back-

to-back launch attempts.

"Nothing in this business is ever guaranteed, but this one I feel really good about, that we got that problem licked and we're not going to see a ... leak again on the next launch attempt," said Mike Moses, a launch manager.

"And there's wood around somewhere here I can knock on," he said, tapping the news conference table.

Because of the successful test, NASA is now shooting for a launch attempt July 11. Endeavour is set to deliver one last piece of a Japanese space station lab.

Earlier Wednesday, launch controllers filled Endeavour's external fuel tank to see if repairs plugged the leak. No abnormal leakage was detected during the three-hour test.

During two launch attempts in mid-June, significant amounts of hydrogen gas escaped from around a plate on the fuel tank that attaches to a vent line. Engineers discovered a slight misalignment of the plate, and a different, more pliable type of seal, with a spring, and special washers were installed to correct the problem.

The same plate on the [fuel tank](#) that will be used to launch Discovery in mid-August also is slightly misaligned, and similar repairs will be conducted, Moses said. Engineers are still trying to figure out how the plates were installed ever so slightly tilted.

Commander Mark Polansky, who monitored the test from Houston, was pleased with the results. He said he and his crew will return to Kennedy Space Center on Tuesday for the start of the [launch](#) countdown.

The seven shuttle astronauts will deliver and install the Japanese lab section at the international space station. They will spend nearly two weeks working with the six space station residents. It will be the largest number of people together in orbit ever. The entire shuttle flight will last 16 days.

Shuttle managers are now focused on another technical issue.

An inner window pane in Atlantis' cockpit may have been damaged when a knob for a work light got wedged between the window and control panel during the Hubble Space Telescope repair mission in May.

NASA had to pressurize the cockpit and use dry ice to get the knob out earlier this week. Engineers are making a mold of the window pressure pane - the innermost one of three - to determine whether it is free of dangerous defects. Some nicking has been observed.

If the window pane needs to be replaced, it would take four to five months - possibly as long as eight months - to complete all the work, Moses said.

Atlantis is supposed to fly to the [international space station](#) in November.

"It could take a very long time. It sounds very scary," Moses said. "But then again, I've learned this team is really good at re-sequencing and coming up with some creative ways."

If damaged badly enough, a window could break apart in space, resulting in a fatal depressurization for the crew.

On the Net:

NASA: <http://spaceflight.nasa.gov>

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