KSC COUNTDOWN

July 28, 2005 *NASA: Explore. Discover. Understand.* Vol. 10, No. 52

STS-114 crew to photograph tiles on Discovery

▲ **Shuttle Update:** Less than nine minutes after launch Tuesday, the STS-114 crew members were in orbit and ready to open the payload bay doors and unstow their gear in the crew compartment. Moments after main engine cutoff, Mission Specialists Soichi Noguchi and Andrew Thomas used handheld video and digital still cameras to document the External Tank after it separated from the Shuttle. That imagery, and photos from cameras in the Shuttle's umbilical well where the tank was connected, will also be downlinked for review by mission managers and engineers in the ongoing analysis of the tank's condition following ascent.

The crew planned unberthed and tested Discovery's robot arm before beginning an eight-hour sleep period. The arm was used Wednesday to collect imagery of the clearances between the Shuttle's Ku-band dish antenna that provides high data rate telemetry and television, and the end of a new 50-foot boom moored to the starboard sill of the spaceship. The boom will be used today while grappled to the robot arm for a day-long inspection of the leading edges of Discovery's wings. That survey will help to ensure that the wings did not incur any damage during launch.

When Discovery nears the Station early today, Krikalev and Phillips will use digital cameras and high-powered 800-mm and 400-mm lenses to photograph Discovery's thermal protective tiles and key areas around its main and nose landing gear doors.

Mars spacecraft moves closer to Aug. 10 launch date

▲ **ELV Update:** The mate of the Mars Reconnaissance Orbiter (MRO) spacecraft to the launch vehicle payload adapter should be completed this week. The MRO was encapsulated into the Atlas fairing Monday. Today, the MRO is being transported from the Payload Hazardous Servicing Facility to the Vertical Integration Facility at SLC-41, where it will join the Atlas V for the last phase of launch preparations. This is the first government-civil launch of an Atlas V. NASA technical efforts for certification of the Atlas V 401 launch vehicle are in the final stages.

A second countdown wet dress rehearsal with the launch vehicle fully fueled was conducted July 19.

Launch is scheduled for Aug. 10.

■ **Road Repairs in LC-39 Area, Saturn Causeway —** The milling and resurfacing of several roads in the LC-39 area is scheduled to begin on Monday. The VAB road, Utility Annex road (Saturn to Annex), "F" Gate road (Saturn to "F" Gate) and Saturn Causeway (Kennedy Parkway to Pad "A" Gate), will be milled to a 1.5-inch depth and resurfaced with 1.5 inches of new asphalt. There will be uneven surfaces in the construction area and workers on foot around the equipment.

Please reduce your speed and pay attention to those with flags, workers or other possible problem situations encountered in work zones. The plan is to complete the project as quickly as possible to avoid as much inconvenience as possible. If there are any questions or concerns, please contact Tommy Sizemore at 867-3689, or Jim Lorence at 867-9293.

■ **Did You Know?** Dr. Richard Zurek, project scientist for the Mars Reconnaissance Orbiter, will present a free public lecture on the mission at 7 p.m. Friday at Brevard Community College Astronaut Memorial Planetarium and Observatory located on BCC's Cocoa Campus at 1519 Clearlake Road. Zurek will describe the next mission to Mars, in which the new orbiter will examine details as small as a coffee table with the most powerful telescopic camera ever sent to orbit another planet. The orbiter is scheduled to launch on an Atlas V rocket Aug. 10 from Cape Canaveral. The Mars Reconnaissance Orbiter will lay the groundwork for future Mars surface missions, including the Phoenix Lander planned for 2007 and a Mars Science Laboratory rover planned for 2009.

For more information, call Suzanne Leslie at 433-7372 or visit the Web site at **http://www.brevardcc.edu/planet.**

KSC Countdown **is published every Tuesday & Thursday. Deadlines are 10 a.m. Mondays & Wednesdays.**
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