



KSC Countdown

Feb. 28, 2006

www.nasa.gov

Vol. 11, No. 15

Discovery's external tank arrives this week



◆ Shuttle

Update: The external fuel tank, designated ET-119, that will fly on the

STS-121 mission left the Michoud Assembly Facility in New Orleans last weekend, transported via the Pegasus barge to the Kennedy Space Center. It usually takes about five days to make the trip around the Florida peninsula, ending at the Turn Basin near the Vehicle Assembly Building.

◆ **ISS Update:** The Expedition 12 crew began preparations for the next shuttle mission, STS-121, targeted for launch to the ISS no earlier than May. Commander Bill McArthur made room in the storage racks inside the Destiny lab for new equipment scheduled to arrive on Space Shuttle Discovery. He cleared space in EXPRESS Rack 3 for a European Space Agency experiment facility called the European Modular Cultivation System. The facility will house biological experiments dealing with the effects of gravity on plant cells, roots and physiology.

Last week, McArthur continued science work, performing his third session with an experiment called Foot/Ground Reaction Forces During Spaceflight. The experiment investigates how muscles and joints of the legs and feet are used differently in

space than on Earth. To gather data, McArthur wore the instrumented Lower Extremity Monitoring Suit, which measured joint angles, muscle activity and forces on the feet as he exercised. The experiment measures the musculoskeletal system and may lead to a better understanding of bone loss during long-duration missions.

The SuitSat experiment, an unneeded Russian Orlan spacesuit-turned-satellite, has stopped sending signals. SuitSat was released by Flight Engineer Valery Tokarev during a spacewalk Feb. 3. It transmitted recorded voices of school children to amateur radio operators as it orbited the Earth. Hundreds of reports from individuals receiving the faint signal from all over the world were logged at the project's Web site. For SuitSat information, visit: <http://www.suitsat.org>.



■ Another Mars Explorer Arriving Soon

— As it nears Mars on March

10, a NASA spacecraft designed to examine the red planet in unprecedented detail from low orbit will point its main thrusters forward, then fire them to slow itself enough for Mars' gravity to grab it into orbit. Ground controllers for the Mars Reconnaissance Orbiter expect a signal shortly after 4:24 p.m. that day showing this mission-critical engine

ISS commander 'cleaning house' before STS-121 arrival

burn has begun. However, the burn will end during a suspenseful half hour with the spacecraft behind Mars and out of radio contact. A new podcast about the mission is available online at:

<http://www.jpl.nasa.gov/multimedia/podcast/mro-20060224/>. The podcast features Project Manager Jim Graf and Project Scientist Dr. Rich Zurek, both from NASA's Jet Propulsion Laboratory in Pasadena, Calif. Additional information about the Mars Reconnaissance Orbiter is available online at: <http://www.nasa.gov/mro>.

■ **NASA Update** — At 2 p.m. today, NASA managers will brief media about the Space Shuttle Program and mission STS-121 from the KSC press site. The event will air live on the Web and NASA TV. Questions will be taken from media at participating NASA locations. The conference participants are Wayne Hale, space shuttle program manager; Mike Leinbach, NASA launch director; Tim Wilson, STS-114 External Tank Tiger Team lead, NASA Engineering & Safety Center.

■ **Did You Know?** Astronaut Mike Mullane will appear at the KSC Visitor Complex to sign copies of his new book, "Riding Rockets: The Outrageous Tales of a Space Shuttle Astronaut," at 5 p.m. Saturday and 1:30 p.m., 3:15 p.m. and 5:15 p.m. Sunday.

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

E-mail news to Anita.Barrett@jbosc.ksc.nasa.gov. For questions or information, e-mail or call 321-867-2815.

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