



countdown

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STS-119 crew finishes TCDT with rehearsal countdown



◆ Shuttle Update:

Payload bay doors on space shuttle Discovery were closed Wednesday after the cargo was installed Saturday. Yesterday, the shuttle was the focus of activity for the simulated launch countdown with the STS-119 crew members. Work scheduled this week on Discovery includes inertial measurement unit calibrations.

◆ **ISS Update:** Science experiments and preparations for the arrival of Discovery in February filled the International Space Station Expedition 18 crew's time Tuesday.

Commander Mike Fincke worked out on the newly installed Advanced Resistive Exercise Device, or ARED, and reported it was functioning properly.

The ARED allows the station's residents to "pump iron," though they actually pump nothing at all. The ARED uses vacuum canisters to potentially create as much as 600 pounds of resistive force.

Flight Engineer Sandra Magnus spent much of her day configuring spacewalk tools and preparing spacesuits for use when space shuttle Discovery arrives in February. The STS-119 crew will conduct four spacewalks while Discovery is docked with the station, installing the final set of power-generating solar arrays. In the Zvezda service module, Flight Engineer Yury Lonchakov set up a plasma crystal experiment. He prepared its vacuum chamber, installed experiment software and did several pressure checks on the hardware throughout the day.

Tuesday also marked the start of a week of ground-controlled checkouts

with the Canadian Special Purpose Dexterous Manipulator robot that was assembled during the STS-123 mission almost a year ago.

■ **NASA Science News** — Sledgehammer-toting scientists are "bustin' rocks" to make the finest possible simulated lunar regolith (aka fake moon dust) in support of NASA's return to the Moon. You can read the full story at: http://science.nasa.gov/headlines/y2009/07jan_sixteentons.htm.

■ **Take the "WOW Team Challenge"** — The KSC Fitness Centers announced its lifestyle change program, W.O.W., or Wellness of the World. The five-month program begins in March and encompasses all aspects of wellness. Each week, teams of four will commit to completing a variety of health and wellness challenges, in order to accrue points and meet your lifestyle change goals.

Application packets will be available for pick up at the KSC Fitness Centers Jan. 30 through Feb. 12. They must be picked up at either the O&C or OSB facility in person and are due by close of business Feb. 13. If you have team members in mind, please turn in your applications together. We will inform the chosen applicants Feb. 18.

For more information, please e-mail Alycen LaBarca at: alycen.m.labarca@nasa.gov.

■ **Construction Update** — Under way is the construction of a coastal revetment of the Indian River along NASA Causeway. This construction will replace the function of the existing vertical concrete bulkhead and protect the causeway from

erosion near the Indian River Bridge.

Approximately 55,000 tons of stone riprap will be hauled to the site and placed in layers of increasing stone size, with the largest material on top to absorb the force of the waves in the Indian River.

The contractor also will remove several acres of Brazilian pepper trees along the causeway, as they are a non-native plant species to Florida. Brazilian pepper tree removal will have the added noticeable effect of opening up the southeast side of the causeway to views of the Indian River, similar to the project that opened up the northeast side several years ago.

■ **KEA Events January and February** — Coming events include:

- "You Do Need a Weatherman To Know Which Way the Wind Blows," 9 a.m. Jan. 27 in the OSBII/Room 5109.
- Columbia Crew Survival Investigation, 10 a.m. Feb. 4. in the KSC Training Auditorium.
- Mentoring and Protégé Update and Tool Demo, date to be determined.

Look for more information in *Countdown* in the coming weeks.

Countdown is published every Tuesday & Thursday for NASA KSC employees. Deadlines are 9 a.m. Mondays & Wednesdays. E-mail news to anita.l.barrett@nasa.gov. For questions or information, e-mail or call 867-2815. You can also find PDF editions of *Countdown* on the Web at: http://www.nasa.gov/centers/kennedy/news/countdown/countdown_toc.html.