



countdown

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STS-124 spacewalk team completes planned activities and "get-ahead" tasks



◆ Mission Update:

On Sunday, STS-124 Mission Specialists Ron Garan and Mike Fossum replaced a nitrogen tank on the International Space Station's starboard truss with a new one. Garan worked from the end of the station robotic arm, operated by astronauts Karen Nyberg and Akihiko Hoshide.

From there the spacewalkers moved onto separate tasks. Fossum returned to the port Solar Alpha Rotary Joint that he had inspected during the second spacewalk. He took samples of particulate matter from inside the joint, using a strip of tape that will be returned to Earth for engineers to analyze. Later, Garan removed a launch lock on the starboard SARJ. Three of four locks were removed during this mission's spacewalks.

Fossum removed thermal insulation from the Kibo robotic arm's wrist and elbow cameras and launch locks from one of the Kibo windows. He deployed debris shields on Kibo and, while in the area, tightened a bolt holding a television camera in place because Japanese flight controllers had noticed unexpected movement while operating the camera.

Garan retrieved a video camera that had been removed from the port truss

KSC Speak — Acronyms are a way of life at Kennedy, especially the many buildings around the center. Here are the ones frequently used by *Countdown*.

OPF – Orbiter Processing Facility

OSB III – Operations and Support Building

SSPF – Space Station Processing Facility

VAB – Vehicle Assembly Building

during the second spacewalk. It was repaired Saturday and Garan re-installed it. Video from the camera was sent to the Mission Control Center almost immediately. Finally, Fossum installed a thermal cover to connectors on the outside of Harmony and relocated a foot-restraint aid.

Space shuttle Discovery is scheduled to undock from the station Wednesday.

◆ **ELV Update:** Loading of the hypergolic propellants into GLAST's Delta II second stage was completed on Saturday. On launch day, Wednesday, the mobile service tower will be retracted from around the rocket at 2 a.m. The terminal countdown sequence will begin at 9:15 a.m. by loading the first stage with RP-1 fuel, a highly refined kerosene. This will be followed at 10:15 a.m. by cryogenic fueling, loading the first stage with liquid oxygen. This will lead to a liftoff targeted for 11:45 a.m. EDT.

■ **Summer Camp** — Camp Kennedy Space Center, called Camp KSC, offers children entering second through ninth grade an out-of-this-world experience to explore space as never before. Weekly summer camp sessions are available now through Aug. 15. Regular tuition is \$295 per child, per session. There is a 15-percent discount for badged employees and contractors of Kennedy Space Center, Cape Canaveral Air Force Station, Patrick Air Force Base and retired KSC personnel.

Camp KSC is based at the U.S. Astronaut Hall of Fame. Summer camp hours are from 9 a.m. to 4:30 p.m., with extended early drop-off and late pick-up hours, free for badged employees.

GLAST set to launch 11:45 a.m. Wednesday

Campers receive a complimentary Visitor Complex annual pass, lunches and afternoon snacks, an official Camp KSC T-shirt, four complimentary admission tickets to the U.S. Astronaut Hall of Fame, a Camp KSC graduation ceremony and a certificate of completion.

For more information and registration details, call 321-449-4444 or visit www.KennedySpaceCenter.com.

■ **NASA Science** — Imagine a billion-ton cloud of gas launching itself off the surface of the sun and then doing a cartwheel. That's exactly what happened on April 9 when a coronal mass ejection, or CME, pirouetted over the sun's limb in full view of an international fleet of spacecraft. The cartwheel set off a chain of events that amazed even veteran solar physicists. You can read the full story at: http://science.nasa.gov/headlines/y2008/27may_cartwheelcme.htm?list947891.

■ **If You Bag It - Then Tag It!** — Unidentified briefcases, gym bags, equipment bags, backpacks or similar items arouse concerns for explosive devices. To alleviate these concerns, all such items should have an identification tag. Free identification tags at Kennedy may be obtained at the Headquarters Building/VRC Badging Office/Room 1470; VAB/F Gate Badging Station; PIDS 1; PIDS 3; and SSPF/Room 1473.

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