



countdown

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Discovery rollover under review



◆ **Shuttle Update:** Rollover of space shuttle Discovery to the VAB will be no earlier than Thursday. The rollout date is under review.

◆ **ELV Update:** At Pad B on CCAFS Launch Complex 17, liquid oxygen leak checks of the first stage of the Delta II launch vehicle to be used to launch the Space Tracking and Surveillance System - Demonstrators Program (STSS-Demo). For this test, the first stage was filled with liquid oxygen during a simulated countdown. At the pad today, a simulated flight test will be conducted. This is an electrical and mechanical test of the Delta II that exercises all of the launch vehicle systems in the same manner as will occur during powered flight.

Meanwhile, at the Astrotech Payload Processing Facility, protective wrapping was removed on July 13 from around the Solar Dynamics Observatory to begin the spacecraft processing. The high-gain communications antenna was lowered to horizontal on July 15, providing access to the spacecraft's battery compartment. The flight battery was installed later and electrical connections are now under way.

NASA's Lunar Reconnaissance Orbiter, or LRO, has returned its first imagery of the Apollo moon landing sites. The pictures show the Apollo missions' lunar module descent stages sitting on the moon's surface, as long shadows from a low sun angle make the modules' locations evident. The Lunar Reconnaissance Orbiter camera, or LROC, was able to image five of the six Apollo sites, with

the remaining Apollo 12 site expected to be photographed in the coming weeks. The satellite reached lunar orbit June 23 and captured the Apollo sites between July 11 and 15. Though it had been expected that LRO would be able to resolve the remnants of the Apollo mission, these first images came before the spacecraft reached its final mapping orbit. Future LROC images from these sites will have two to three times greater resolution.

■ **What Is NCAD?** — The acronym stands for "NASA Consolidation of Active Directory." It is one of the sub-component initiatives in support of NASA's implementation of Homeland Security Presidential Directive 12 (HSPD-12). One of the goals of NCAD is to enable using "Smart Cards" to log in to NASA computer systems.

NCAD establishes a critical part of the infrastructure upon which the HSPD-12 Smart Card logon will rely. Smart Card logon means you will be able to log in to your computer by inserting your NASA Badge into a computer card reader and entering a Personal Identification Number, or PIN.

Another goal of NCAD is to centralize the "management" of computers across the entire agency. This allows NASA to deploy common policies and settings and to verify that users have access to the agency resources they need to do their jobs.

Lastly, NCAD will allow people moving from one center to another to use their Agency UserID (AUID) to log in to systems throughout the agency and get access to their files. Future e-mails will

Two spacecraft are processed for September, October launches

inform you of required actions you must take to ensure minimal impact. To learn more, visit:

<https://www.odin.lmit.com/ncad/>.

■ **NASA News** — Employees are invited to join Administrator Charles Bolden and Deputy Administrator Lori Garver **today** at noon for their first NASA Update with employees. The program will be broadcast live from NASA Headquarters in Washington. Employees may view the live broadcast on NASA TV or on the Web at: www.nasa.gov/ntv.

■ **NASA Science** — July 20, 1969: Why couldn't Neil Armstrong fall asleep on the moon? The answer is revealed in the suspenseful story from Science@NASA. Read the full story at: http://science.nasa.gov/headlines/y2009/16jul_wideawake.htm.

■ **Education Opportunity** — Florida Institute of Technology is now accepting applications for the fall 15-week term beginning Aug. 24. FIT offers M.S. degrees in space systems, space systems management, computer information systems, computer science and software engineering. All classes are held 5-8 p.m. one night a week at the Rockledge or KSC location. For more information go to <http://www.uc.fit.edu>.

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