



countdown

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NASA team to review STS-128 launch readiness



◆ Shuttle Update:

In the Flight Readiness Review today, NASA managers will assess preparations for shuttle Discovery's STS-128 mission to the International Space Station and confirm the launch date. The mission is targeted for launch Aug. 24 at 1:58 a.m. EDT.

Discovery's seven astronauts are planning to fly to KSC in T-38 aircraft on Wednesday between 7 and 8 p.m. EDT. NASA TV will provide live coverage of the arrival at the Shuttle Landing Facility.

◆ **NASA News:** A successful NASA flight test Monday demonstrated how a spacecraft returning to Earth can use an inflatable heat shield to slow and protect itself as it enters the atmosphere at hypersonic speeds.



The Inflatable Re-entry Vehicle Experiment (left), or IRVE, was vacuum-packed into a 15-inch diameter payload

"shroud" and launched on a small sounding rocket from NASA's Wallops Flight Facility on Wallops Island, Va., at 8:52 a.m. EDT. The 10-foot diameter heat shield, made of several layers of silicone-coated industrial fabric, inflated with nitrogen to a mushroom shape in space several minutes after liftoff.

The Black Brant 9 rocket took about four minutes to lift the experiment to an altitude of 131 miles. Less than a minute later it was released from its cover and started inflating on schedule at 124 miles up. The inflation of the shield took less

than 90 seconds.

About six and a half minutes into the flight, at an altitude of about 50 miles, the aeroshell re-entered Earth's atmosphere and experienced its peak heating and pressure measurements for a period of about 30 seconds.

Inflatable heat shields hold promise for future planetary missions, according to researchers. To land more mass on Mars at higher surface elevations, for instance, mission planners need to maximize the drag area of the entry system. The larger the diameter of the aeroshell, the bigger the payload can be.

For images and more information about the experiment, visit: <http://www.nasa.gov/topics/aeronautics/features/irve.html>.

■ **NASA Science** — A powerful cosmic ray detector to be installed on the International Space Station will search for antimatter galaxies and other exotic phenomena in the universe. Read the full story at: http://science.nasa.gov/headlines/y2009/14aug_ams.htm.

■ **NCAD Is Coming** — The "NASA Consolidation of Active Directory," or NCAD, is one of the sub-component initiatives in support of NASA's implementation of Homeland Security Presidential Directive 12 (HSPD-12). What does this mean? With NCAD, every NASA worker's log-in process will be identical. Instead of logging into your computer using the KSC domain, you will log into the NDC domain.

NCAD will allow people moving from one center to another to use their

IRVE flight test in Virginia bodes well for planetary missions

Agency User ID (AUID) to log into systems throughout the agency and get access to their files.

To learn more about NCAD, visit: <https://www.odin.lmit.com/ksc/kscncad.html>.

■ **Finding the Source of Pain** — RehabWorks presents its latest topic, "Frozen Shoulder And Referred Pain Patterns," **today** from 11 a.m. to 12:30 p.m. in the O&C/Room 1055. Rachael Waddle, from Southeast Missouri State University, will talk about "What is the source of your pain: The breakdown of trigger points and referred pain patterns."

Allyson Connally, from High Point University, will talk about "Frozen Shoulder: Complications of common shoulder injuries."

For more information, please contact Erik Nason at 867-7497.

■ **SpaceOps 2010 Call For Papers Deadline Extended** — The SpaceOps 2010 Conference, Delivering on the Dream, hosted by the Marshall Space Flight Center is scheduled for April 25-30 in Huntsville, Ala. The due date for abstracts has been extended to Aug. 21. Be sure to check with Export Control before submitting your abstract. For more details, please visit: <http://www.spaceops2010.org/>.

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