



# countdown

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## Mission managers ponder means to repair array

◆ **Mission Update:** The flight control team has informed the STS-120 crew that the mission's fourth spacewalk is now targeted for Friday. The spacewalk will be focused on the damaged solar array wing. Under that scenario, the astronauts would forego any immediate inspection of a contaminated solar array rotary joint, deferring that work to a later mission, and delay a spacewalk by station commander Peggy Whitson and flight engineer Yuri Malenchenko until after the shuttle Discovery departs.

When asked how astronauts might gain access to the damage site, which is well away from any point the station's robot arm can easily reach, STS-120 Mission Specialist Scott Parazynski said the array could be retracted far enough to give the repair team access.

"We actually have pretty good work site access from the bottom," he said. "We have (equipment) that allows us to basically place our foot restraint a little bit higher above the P6 structure. So we can reach about 8 to 10 feet, I think, and get up above the level of the blanket box and make some repairs fairly low in. So if there were a need to effect a repair out where the damage occurred, we'd have to retract that array and do the repair close into the lower blanket box."

Deployed 80 percent, the P6-4B array can generate 97 percent of the electricity of a fully extended wing. The station is not yet using power from the torn array, but engineers say tests confirm no major damage to its internal wiring.

The immediate concern is figuring out a way to fully extend the P6-4B wing to provide necessary structural rigidity.

## DAAWG seeks mentors for Disability Mentoring Day

Positioned on the far left end of the main power truss, the P6 solar array wings extend beyond the reach of the space station's robot arm. Engineers are studying the possibility of using the shuttle's 50-foot-long heat shield inspection boom to give the station arm additional reach, and it may be possible to retract the damaged wing far enough for an astronaut to reach the damaged section.

◆ **Mentors Needed for the 2007 Disability Mentoring Day:** On Nov. 30, KSC will host the seventh annual Disability Mentoring Day. Students from local high schools and job seekers who will be participating in this program will spend time with and job shadow their mentors for the day in order to explore careers at KSC. The Disability Awareness and Action Working Group, or DAAWG) is in need of mentors for this event. If you are interested in participating, please verify with your supervisor that you are authorized to participate. For additional information and to sign up, visit the DAAWG Web site at: <http://nasa.ksc.nasa.gov/DAAWG/index.htm>.

■ **Next KSC Engineering Academy Event** — A lessons-learned technical talk will be held by Dr. Gena Henderson and Michael Bell on Nov. 8 from 9 to approximately 10:30 a.m. at the KSC Training Auditorium. The focus of this tech talk will be recognizing and recording lessons learned. This presentation will also introduce new features of the Lessons Learned Information System on the NASA Engineering Network.

■ **Road Closures Friday** — In support of the Air Force Thunderbirds air show taking place over the Banana River south of NASA Causeway, the **NASA Causeway** between Static Test Road (west side of Banana River) and the Cape Canaveral Air Force Station west boundary (east side of Banana River) will be **closed to all traffic** from 10 a.m. to approximately 5:30 P.M.

Badged employees with an Air Show car pass will be permitted to drive to a designated viewing site on the Causeway between **10 a.m. and noon**.

- ◆ Vehicles with a green KSC car pass may only enter KSC via gate 2 or gate 3.
- ◆ Vehicles with the orange 45<sup>th</sup> Space Wing car pass may only enter via CCAFS Gate 1.

Employees reporting to work on Friday should expect an additional badge check at the following locations:

- ◆ 5th Street (near the child care center).
- ◆ C, D and E Avenues (roads leading into the HQ, O&C and SSPF buildings).
- ◆ Kennedy Parkway (S.R. 3) 1 mile north of the NASA Causeway overpass (to the LC-39 area).

*Countdown* is published every Tuesday & Thursday for NASA KSC employees. Deadlines are 10 a.m. Mondays & Wednesdays. E-mail news to [anita.barrett@jbsc.ksc.nasa.gov](mailto:anita.barrett@jbsc.ksc.nasa.gov). For questions or information, e-mail or call 321-867-2815. You can also find *Countdown* on the Web at [nasa.gov/centers/kennedy/news/countdown/countdown-toc.html](http://nasa.gov/centers/kennedy/news/countdown/countdown-toc.html).