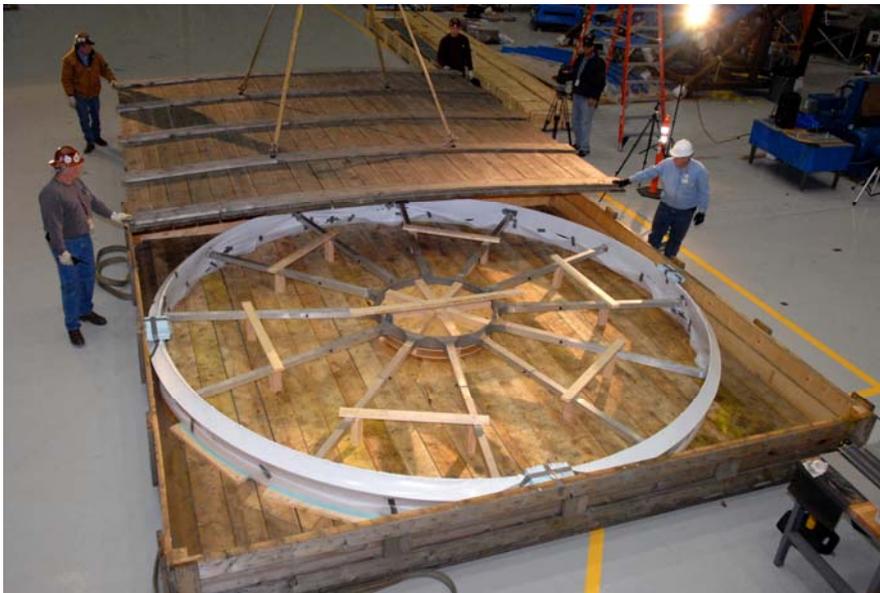




Deceleration Subsystem (DSS) Ares I-X Main Parachutes: USA completed packing operations last week on the third and final Ares I-X main parachute. The three Ares I-X main parachutes are Ares I development parachutes and are 150-ft diameter each and weigh approximately 2,200 lb per pack. The packing operation was conducted at the Parachute Refurbishment Facility at Kennedy Space Center (KSC). The three completed packs are now ready for transportation to the Assembly and Refurbishment Facility where they will be installed in the Ares I-X Forward Skirt Extension (FSE).



Upper Stage (US) Manufacturing and Assembly (M&A) Subsystem: The second of three machined 2195 aluminum-lithium (Al-Li) y-rings for the US Liquid Hydrogen (LH₂) tank was delivered to Marshall Space Flight Center (MSFC) on January 15. The y-ring was originally shipped from Ladish Forging in Cudahy, WI, to the Spincraft Company in Boston, MA, for final machining prior to shipping to MSFC. The final y-ring for the LH₂ tank will be delivered to MSFC in the spring of 2009.



Al-Li 2195 Y-ring Delivered to MSFC

Recent activities specific to the Elements include:

- **Flight and Integrated Test Office (FITO) and Ares I-X**
 - **Ares I-X Roll Control System (RoCS) Element:** Activities specific to the RoCS Element include:
 - Installation of the modified Development Flight Instrumentation (DFI) cable on module structure side and the fabrication of the cable for the fairing side was completed. This



- modification supports an option to remove the fairing at KSC, if a fairing structural modification should be needed based on late-breaking aero loads requirements.
- Module A propellant line installation, leak checks, and thruster mapping was completed.
 - Helium regulator/relief valve testing on the Cold Flow Unit and Flight Modules A and B was completed, clearing the way to complete mechanical assembly and support ship dates as agreed to in the Pre-Ship Review (PSR) (Module B, January 30, Module A, February 5).
 - A Teledyne Task Directive was approved to ship test ordnance to ATK and conduct bomb tests in support of Peacekeeper heritage ordnance waiver.
 - New (unofficial) fairing aero loads exceed the current fairing design. Systems Engineering and Integration (SE&I) are evaluating the validity of these loads. In the meantime, the PSR Board and Mission Manager have directed RoCS shipment to occur with current design. RoCS will ship fairings torqued short of the locking feature so as to allow later removal for re-work, if necessary.

The Ares Projects looks forward to the First Stage (FS) Drogue drop test in February and Cluster drop test in April; FSE separator test and the US Ullage Settling Motor Subsystem igniter open air tests beginning in January.

...and as of this Ares Projects Weekly Summary, there are only 169 days until the first Ares I test flight, Ares I-X!!!