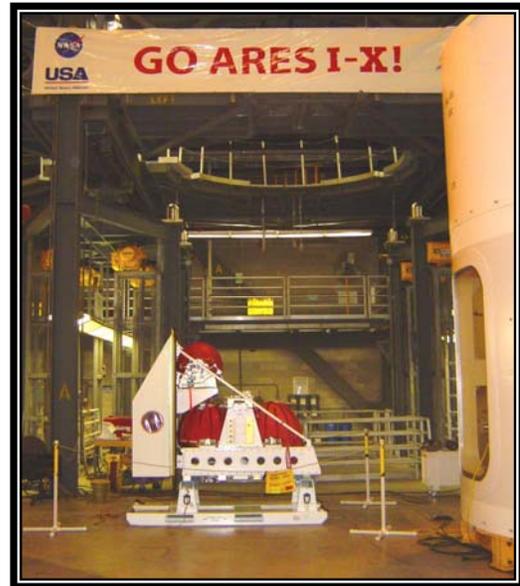




Roll Control System (RoCS) Module B Arrives at Kennedy Space Center (KSC): RoCS Module B was shipped from Teledyne Brown Engineering (TBE) on January 30 and was received and off-loaded in the Vehicle Assembly Building (VAB) at KSC. It was transferred to High Bay 4, adjacent to the Interstage interface opening, where fit checks will take place. The Spreader Beam, originally planned for shipment with Module B, was held back at TBE to facilitate a modification being made to the pallet for Module A. It shipped to KSC on February 2.



Off-Loading of RoCS Module B in VAB Transfer Aisle



RoCS Module B Adjacent to the Interstage Interface Opening

Recent activities specific to the Elements include:

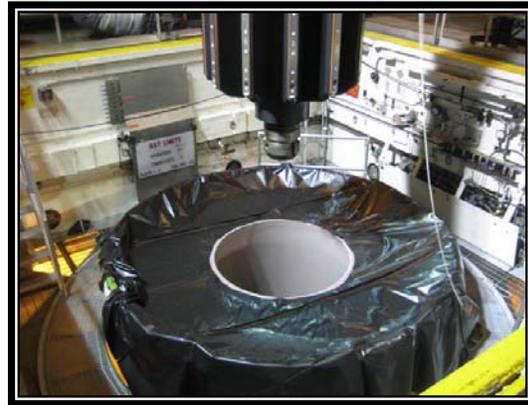
- **First Stage (FS)**
 - **Ares I FS Avionics Breeding Testing:** NASA/ATK/L-3 Cincinnati Electronics performed the first integration test between the Ares I newly designed Thrust Vector Control (TVC) electronics and the heritage Solid Rocket Booster (SRB) TVC Actuator at Marshall Space Flight Center (MSFC) on January 26. The Ares I breadboard TVC electronics successfully controlled the SRB heritage four-channel TVC actuator. The testing also demonstrated the ability to excitate the TVC actuator pressure transducers and detect servovalve delta pressure behavior. Finally, testing was performed to demonstrate the ability to drive the servoactuator bypass valves.
 - **Development Motor 1 (DM-1) Forward Segment:** The casting core for the DM-1 forward segment was popped and removed on January 28, following a 48-hr post-cast cool-down period. Following core removal a “spider tool” was put in place to prevent fin movement



during the remainder of cool-down (an additional 48 hr). Cooling was completed on February 3, with fin pop and removal initiated the same day. To date, four of the five segments have been cast with the remaining (center/center) segment to be cast on February 9.



Spider Tool Being Lowered into the DM-1 Forward Segment to Retain the Fins in Position



Cast DM-1 Forward Segment with the Core Being Removed

- **Flight and Integrated Test Office (FITO) and Ares I-X**
 - **Ares I-X RoCS Element:** Activities specific to the RoCS Element include:
 - Development Flight Instrumentation integrated harness installation was being worked in the Module A fairing to prepare the module for shipment on February 5.
 - Discussions with Systems Engineering and Integration (SE&I) on fairing loads and component vibration levels revealed that the models run by ATA (vibration analysis contractor to SE&I) in developing vibro-acoustic environments for RoCS assumed aluminum fairings instead of titanium. Updated information is being recycled through ATA, and it is anticipated that the stiffer titanium will result in a lower vibration environment against which to perform the structural assessment.

The Ares Projects looks forward to the FS Drogue drop test in February and Cluster drop test in April.

...and as of this Ares Projects Weekly Summary, there are only 155 days until the first Ares I test flight, Ares I-X!!!