Deceleration Subsystem (DSS) Ares I-X Pilot/Drogue Parachute Installation: USA has completed the integration of the Ares I-X pilot parachute pack onto the drogue parachute pack at the Parachute Refurbishment Facility (PRF), and has delivered this integrated assembly to the Assembly and Refurbishment Facility (ARF) this week. This pilot/drogue parachute assembly will be installed into the Ares I-X forward assembly later this week. This will complete the installation of the Ares I-X parachutes and the entire deceleration subsystem.

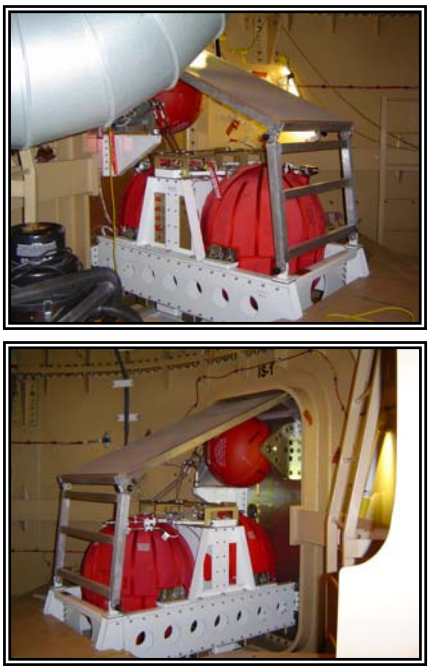
Recent activities specific to the Elements include:

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:

  - The RoCS Acceptance Review was conducted 27 May. The hardware was accepted by the program with defined open work items. A burn-down plan is in work. Six of 36 items have already been closed.

Module A External Configuration Showing Aerodynamic Fairing



Module B (Top) and Module A with Drop Protection Frames (Non-Flight) Installed

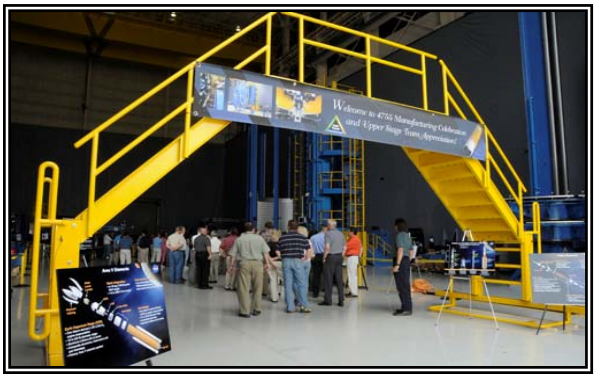
First Stage (FS)

- ***Ares I-X FS Operational Test Requirements:*** Ares I-X First Stage and Ground Operations Integrated Product Teams have developed the final set of Operational Test Requirements (OTRs) to accommodate inspections during final assembly. These OTRs, which include reusable solid rocket motor (RSRM) chamber pressure measurement, Auxiliary Power Unit Controller checkouts, and pyrotechnic preflight verification, were baselined on June 2, 2009, and are now available for incorporation in Ground Operations Work Authorization Documents.

- ***Ares First Stage Property Review of Solid Rocket Booster Hardware:*** The Ares FS property review of solid rocket booster hardware was completed on Friday, May 22. The Space Shuttle Program, First Stage Office, and United Space Alliance (USA) signed an agreement of the property that should be transferred to FS at the end of the Shuttle Program. Sixty-six percent of the property will transfer at a value of $617,833.

Upper Stage (US)

- ***US Showcase and Appreciation:*** The Ares US Office and EM01 (Materials and Processes Lab) hosted a joint Manufacturing Showcase and US Team Appreciation Event on May 27. The US Project, Engineering, Boeing Upper Stage Production Contractor (USPC), and the Instrument Unit Avionics Contractor (IUAC) team members toured the Manufacturing Facilities in Building 4755, including the Robotic and Vertical Weld Tools, and observed demonstrations and presentations from EM personnel. After the Manufacturing Showcase, the Upper Stage Office honored its Project, Engineering, and Boeing personnel with a Team Appreciation Event at the MSFC Picnic Grounds. Following remarks from the Upper Stage Manager, the EM01 Manager, and the Boeing USPC Manager, select US Team members were recognized from Stage Definition, Stage Operations, Avionics & Software, Systems Engineering, and Boeing with US "Awards of Excellence" certificates.



US Team members Touring Building 4755 during Manufacturing Showcase

Manufacturing Showcase Highlighted Marshall's Robotic Weld Tool Capabilities

Project Integration

- ***Ares Interdisciplinary National Science Project Incorporating Research and Education Experience (INSPIRE) Presentation:*** The Ares Projects outreach team presented the Ares story to 17 facilitators and college student assistants working with INSPIRE's summer residence program on May 27. Each NASA center will host between 5 and 12 high school students for an 8-week summer residential internship. Ares was the only project asked to participate in this training session held at Oklahoma State University. INSPIRE is aimed at encouraging students in grades 9–12 to learn about and seek careers in science, technology, engineering, and mathematics. The facilitators (classroom teachers) and college students majoring in education will use the information from the Ares presentation to design related activities for the high school students this summer. The facilitators can also take the experience back to their classrooms in the fall. The college education majors get hands-on experience with students.

- ***Ares New Media Outreach:*** The Ares Projects outreach team posted photo and video content of the Ares I FS parachute cluster drop test to Facebook, YouTube, and Flickr on May 20–22. The team also posted photos and information on the Team America Rocketry Challenge to Facebook and Twitter on May 17. In 24 hours, the YouTube and Facebook entries had received more than 200 hits. The video also received approximately 400 hits on the NASATV YouTube site in the same period. These "new media" outlets are part of the continuing effort by Ares to reach the public in an increasingly diverse information market.

The Ares FS Deceleration Subsystem Manager discusses the challenges of retrieving the first stage after burnout in this screen grab from the AresTV YouTube site.

The Ares Projects look forward to the STS-127 Endeavour launch on June 13 and the I-X forward assembly delivery to the Vehicle Assembly Building (VAB) at KSC in June.

…and as of this Ares Projects Weekly Summary, there are only 86 days until the first Ares I test flight, Ares I-X!!!