



Week ending September 20, 2008

Pad Abort-1 Progress



 **The first delivery of Electrical Ground Support Equipment arrived at Dryden Flight Research Center** (Photo top right).

The Back End elements of the Command, Control, and Monitoring System (CCMS) were delivered to the Shuttle Hangar and will later be installed in the Orion AFT Mobile Operations Facility (MOF) to support PA-1 testing.



The Crew Exploration Vehicle Parachute Assembly System Pad Abort-1 installation and fit checks took place at Dryden Flight Research Center (Photos top left and below).



The Crew Module (CM) “goal post”

The “goal-post” (Photo left) is an attachment location for the Crew Module (CM) mobilizers. The mobilizers are used to move the CM around and the “goal-post” creates a place on the CM transport fixture for stability.

Thermal Protection System (TPS) PICA gap filler testing continues on silicone foams and PICA-on-edge. Low heat flux testing is in work. PICA-on-edge specimen fabrication is complete. Acoustic loading testing of Avcoat is complete with no degradation observed. The first Avcoat transient thermal testing is complete and under evaluation.



The Crew Module integration schedule is proceeding on plan. The Forward Bay Cover, and side panels were installed. The scaffolding removed and the CM is proceeding into weight and balance testing as planned to support the April 2009 PA-1 testing (Photo left).

Launch Abort System (LAS)

The Static Test #1 (ST-1) igniter closure insulation remold and cure is complete and passed inspection. The pins were successfully pulled from the radial port holes without damaging the insulation. ST-1 igniter assembly is complete and shipped to ATK for integration on September 15.

All Abort Motor titanium manifold welds in the flight system production configuration were successfully completed passed inspection. This is an important validation

of production process for this complex subassembly. This hardware will now be integrated with other abort motor components to complete future high-fidelity testing of the LAS Abort Motor.



The Launch Abort System (LAS) "Pathfinder" tube "rocket" body section was delivered (Photo right). LAS "Pathfinder" nozzles were received early September. The LAS pathfinder hardware is used to validate the LAS integration processes and procedures at the WSMR flight test launch site prior to PA-1 flight test LAS hardware delivery.

Two LAS Pathfinder build carts completed proof load testing. Each was subjected to 11,600 lbs of dummy load for three minutes.



Production Facilities



The Operations and Checkout (O&C) Facility Substation at Kennedy Space Center is powered up and operational (Photo left).

This equipment will control the distribution of electrical power throughout the O&C highbay where Orion assembly, integration and checkout operations will occur and enables independent isolation of the highbay from the rest of the O&C building.

Hurricane Ike Recovery Update

The NASA, Lockheed Martin, and other industry team members of the Orion Project were not operating during the time Johnson Space Center closed in response to Hurricane Ike. The project is assessing impacts for all project personnel and is assisting the recovery of those who need it to assure normal operations are resumed as soon as possible. The project is replanning all near-term technical activities and expects to reschedule the System Baseline Review for late October.
