Boeing Completes Delta System Definition Review of Crew Space Transportation Design

Commercial crew system on track for operational capability in 2015

HOUSTON, June 13, 2011 -- Boeing [NYSE: BA] on May 19 completed the Delta System Definition Review (SDR) of the company's Crew Space Transportation (CST)-100 space capsule design. The milestone follows NASA's award of a Commercial Crew Development Phase 2 (CCDev2) contract to Boeing in April.

The daylong review included representatives from NASA, the Federal Aviation Administration, and independent consultants. They examined the changes made to the CST-100 design since the initial SDR, which was conducted in October under the original CCDev agreement.

"This review allowed the Boeing team to incorporate changes in the design since the last review and to update the overall baseline requirements," said Keith Reiley, deputy program manager of Commercial Crew Programs for Boeing. "We brought in outside experts, who reviewed the vehicle design from an overall integrated system perspective to ensure that we are designing and building a safe and affordable system."

Boeing engineers reviewed major spacecraft subsystems -- including structures, thermal, electrical, propulsion, life support, software and avionics -- as part of the Delta SDR, and reached agreement during the review on a single integrated, consolidated baseline design. The Boeing team also was able to show strong alignment between the current design and NASA's draft Commercial Crew Program Requirements.

The Delta SDR enables a common understanding of the design baseline as the team progresses toward a system-level Preliminary Design Review (PDR), which will further mature the system design and ensure it meets all requirements. Under the second round of NASA's Commercial Crew Development Space Act Agreement, Boeing expects to complete its System PDR no later than early spring 2012.

Boeing is preparing to gather performance data on the spacecraft's launch abort system and service module fuel tank; evaluate vehicle ascent performance in wind tunnel testing; and build on earlier landing air bag and parachute demonstrations with more in-depth investigations.

With firm requirements and adequate funding, Boeing plans to conduct test flights in 2014 and 2015 to support operations beginning in 2015.

Boeing's Commercial Crew Transportation System (CCTS) includes the CST-100 spacecraft, launch services and ground systems. The CST-100 is a reusable capsule-shaped spacecraft that has a crew module and service module. The CST-100 relies on proven materials and subsystem technologies and can transport up to seven people, or a combination of people and cargo.

The CCTS will provide safe, affordable access to the International Space Station and other destinations in low Earth orbit, and will enable NASA to focus on deep space exploration missions. In addition to its support to NASA, Boeing also plans to supply the CST-100 to Bigelow Aerospace for that company's inflatable space station. Boeing will also work with Space Adventures to sell unused seats.

A unit of The Boeing Company, Boeing Defense, Space & Security is one of the world's largest defense, space and security businesses specializing in innovative and capabilities-driven customer solutions, and the world's largest and most versatile manufacturer of military aircraft. Headquartered in St. Louis, Boeing Defense, Space & Security is a $32 billion business with 65,000 employees worldwide. Follow us on Twitter: @BoeingDefense.

# # #

Contact:

Ed Memi
Space Exploration
Office: 281-226-4029
Mobile: 713-204-5464
edmund.g.memi@boeing.com