

NASA's commercial crew partner Boeing completes parachute test

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The Boeing Company successfully completed the second parachute drop test for its Crew Space Transportation (CST) spacecraft Wednesday, part of its effort to develop commercial crew transportation capabilities that could ferry U.S. astronauts to and from low-Earth orbit (LEO) and the International Space Station.

A helicopter lifted the CST-100 crew capsule to about 14,000 feet above the Delamar Dry Lake Bed near Alamo, Nev. A <u>drogue parachute</u> deployment sequence was initiated, followed by deployment of the main <u>parachute</u>. The capsule descended to a smooth ground landing, cushioned by six inflated <u>air bags</u>. The test demonstrated the performance of the entire landing system.

"Boeing's parachute demonstrations are a clear sign NASA is moving in the right direction of enabling the American aerospace transportation industry to flourish under this partnership," NASA's Commercial Crew Program Manager Ed Mango said. "The investments we're making now are enabling this new path forward of getting our crews to LEO and potentially the space station as soon as possible."

Boeing's CST-100 spacecraft is designed to be a reusable, capsule-shaped spacecraft capable of taking up to seven people, or a combination of people and cargo, to and from low-Earth orbit, including the space station. Bigelow Aerospace of Las Vegas, Nev., provided the capsule test article and associated electronics. HDT Airborne Systems of Solon, Ohio, designed, fabricated and integrated the parachute system,



including the two drogue parachutes. ILC Dover of Frederica, Del., designed and fabricated the landing air bag system.

The first test, on April 3, validated the architecture and deployment of the parachute system, characterized pyrotechnic shock loads, confirmed parachute size and design, and identified potential forward compartment packaging and deployment issues. The company inspected and re-packed the full parachute system for this second test.

"This second parachute <u>drop test</u> validates Boeing's innovative system architecture and deployment plan," said John Mulholland, vice president and program manager of Boeing Commercial Programs. "Boeing's completion of this milestone reaffirms our commitment to provide safe, reliable and affordable crewed access to space."

The company has scheduled additional tests to be performed in the next few months that will provide more data on elements of the spacecraft's design.

Boeing's spacecraft was designed to be compatible with a variety of expendable launch vehicles. The company selected United Launch Alliance's Atlas V rocket for initial CST-100 test flights.

All of <u>NASA</u>'s industry partners, including Boeing, continue to meet their established milestones in developing commercial crew transportation capabilities.

Provided by JPL/NASA

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