

NASA completes Orion spacecraft parachute testing in Arizona

September 23 2011, By Michael Braukus, J.D. Harrington and Josh Byerly

NASA this week completed the first in a series of flight-like parachute tests for the agency's Orion spacecraft. The drop tests at the U.S. Army's Yuma Proving Grounds in Arizona support the design and development of the Orion parachute assembly.

Flying at an altitude of 25,000 feet, a drop-test article that mimicked the Orion parachute compartment was deployed from a C-130 aircraft. Once airborne, two drogue chutes were deployed at an altitude of 19,000 feet, followed by three pilot parachutes, which then deployed three main landing parachutes. The drop test article speed as it impacted the desert was approximately 25 feet per second.

The tests were the closest <u>simulation</u> so far to what the actual Orion parachute landing phase will be during a return from space.

Since 2007, the Orion program has tested the spacecraft's parachutes and performed 20 drop tests. The program provided the chutes for NASA's pad abort test in 2010 and performed numerous ground-based tests. Results from the previous experiences were incorporated into the parachute design used in this test.

To learn more about the development of Orion, visit: www.nasa.gov/orion



Provided by JPL/NASA

Citation: NASA completes Orion spacecraft parachute testing in Arizona (2011, September 23) retrieved 9 April 2024 from

https://phys.org/news/2011-09-nasa-orion-spacecraft-parachute-arizona.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.