

NASA Completes First Full-Scale Motor Test for Orion Spacecraft

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Orion Launch Abort System jettison motor test. Credit: AeroJet

NASA has completed the first full-scale rocket motor test for the Constellation Program's Orion spacecraft, a test of a solid rocket that will be used to jettison the craft's launch abort system.

Now under development, Orion will be America's next human spacecraft, designed to fly to the International Space Station and be part of a space flight system to return humans to the moon. The Orion jettison motor will separate the craft's launch abort system from the Orion crew module during launch.

The Orion launch abort system is a larger solid rocket motor system that will provide a safe escape for the crew in an emergency on the launch pad or during the climb to orbit. The test completed late last month is a critical milestone in NASA's preparations for a series of flight tests planned to begin late this year of the full Orion abort system.

"This was a major success for the Orion launch abort system team," said Mark Cooper, NASA's integrated product team lead for launch abort system propulsion at the Marshall Space Flight Center in Huntsville, Ala. "The test provided valuable data on motor performance that will allow design and analytical refinements by our contractor team. The test is the culmination of intense and focused work by the entire jettison motor team."

The jettison motor static test firing was conducted by Aerojet Corporation in Sacramento. NASA has partnered with Lockheed Martin Corporation, Orbital Sciences Corporation, and Aerojet to supply the jettison motor. NASA's Langley Research Center in Hampton, Va., manages the Orion launch abort system design and development effort with partners and team members from Marshall.

Source: NASA

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