

Orion on track at T MINUS 1 Week to first blastoff

November 28 2014, by Ken Kremer



NASA's Orion EFT-1 spacecraft atop Delta 4 Heavy Booster at Space Launch Complex 37 (SLC-37) at Cape Canaveral Air Force Station in Florida ahead of launch set for Dec. 4, 2014. Credit: NASA/Kim Shiflett

At T MINUS 1 Week on this Thanksgiving Holiday, all launch processing events remain on track for the first blast off of NASA's new Orion crew vehicle on Dec. 4, 2014 which marks the first step on the long road towards sending Humans to Mars in the 2030s.

Orion will lift off on a United Launch Alliance Delta IV Heavy rocket on its inaugural test flight to space on the uncrewed Exploration Flight Test-1 (EFT-1) mission at 7:05 a.m. EST on December 4, 2014 from Space Launch Complex 37 (SLC-37) at Cape Canaveral Air Force Station in Florida.

Technicians and engineers installed Orion's batteries and have been conducting a thorough checkout of all the electrical and battery connections between the crew module, service module and Delta IV Heavy second stage while working inside the mobile service tower at pad 37.

There is some margin time available in the schedule in case additional testing and checkouts are required.

Orion's launch window opens at 7:05 a.m. EST on Dec. 4 at the beginning of a [launch window](#) that extends 2 hours, 39 minutes.

One week ago, top NASA and Lockheed Martin managers gave the "GO" to continue with launch preparations after the vehicle passed the Flight Readiness Review (FRR) on Thursday, Nov. 20.

This past week the doors of the Mobile Servicing Tower (MST) at pad 37 were opened to reveal the Orion spacecraft stack atop the Delta IV Heavy that will carry the spacecraft into orbit.



With access doors at Space Launch Complex 37 opened, the Orion and Delta IV Heavy stack is visible in its entirety inside the Mobile Service Tower where the vehicle is undergoing launch preparations. Credit: NASA/Kim Shiflett

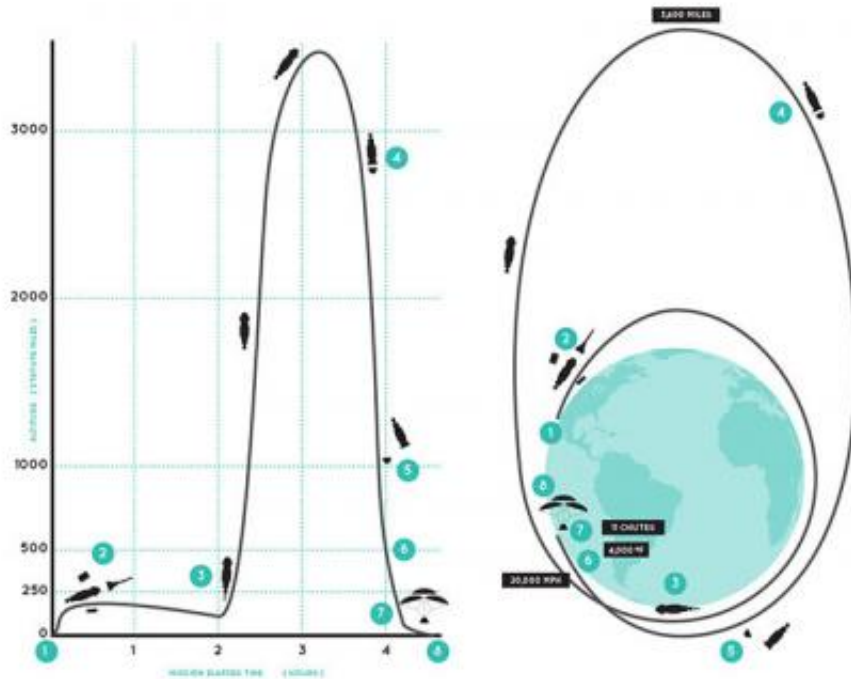
The Delta IV Heavy is the world's most powerful rocket.

The MST will be rolled back from the rocket stack on Wednesday evening, Dec. 3 starting 8 hours, 15 minutes before launch to allow the rocket to be fueled and continue into the final stage of [launch](#) operations and the countdown to liftoff on Thursday morning Dec. 4.



ORION

FLIGHT TEST



THE FLIGHT

Orion's first flight test in December is a critical and significant step toward sending humans farther into space than ever before. This test will evaluate launch and high speed re-entry systems such as avionics, attitude control, parachutes and the heat shield.

Orion flight test profile for the Exploration Flight Test-1 (EFT-1) launching on Dec. 4, 2014. Credit: NASA

The two-orbit, four and a half hour Orion EFT-1 flight around Earth will lift the Orion spacecraft and its attached second stage to an orbital altitude of 3,600 miles, about 15 times higher than the International Space Station (ISS) – and farther than any human spacecraft has journeyed in 40 years.

Orion is NASA's next generation human rated vehicle that will carry America's astronauts beyond Earth on voyages venturing farther into deep space than ever before – beyond the Moon to Asteroids, Mars and other destinations in our Solar System.

Provided by [Universe Today](#)

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