

## Image: Orion spacecraft progresses with installation of module to test propulsion systems

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Credit: NASA/Rad Sinyak



On Feb. 22, engineers successfully installed ESA's European Service Module Propulsion Qualification Module (PQM) at NASA's White Sands Test Facility in New Mexico that was delivered by Airbus – ESA's prime contractor for the Service Module.

The module will be equipped with a total of 21 engines to support NASA's Orion spacecraft: one U.S. Space Shuttle Orbital Maneuvering System (OMS) engine, eight auxiliary thrusters and 12 smaller thrusters produced by Airbus Safran Launchers in Germany. The all-steel PQM structure is used to test the propulsion systems on Orion, including "hot firing" of the OMS engine and thrusters.

Orion will <u>travel more than 40,000 miles beyond the moon</u> to test the spacecraft that will carry humans farther into the solar system than ever before. NASA will use the proving ground of space near the moon to establish the deep-space mission operations needed to for long-duration missions.

These missions will incrementally decrease our reliance on the Earth for in-space operations and enable future missions on the journey to Mars.

## Provided by NASA

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