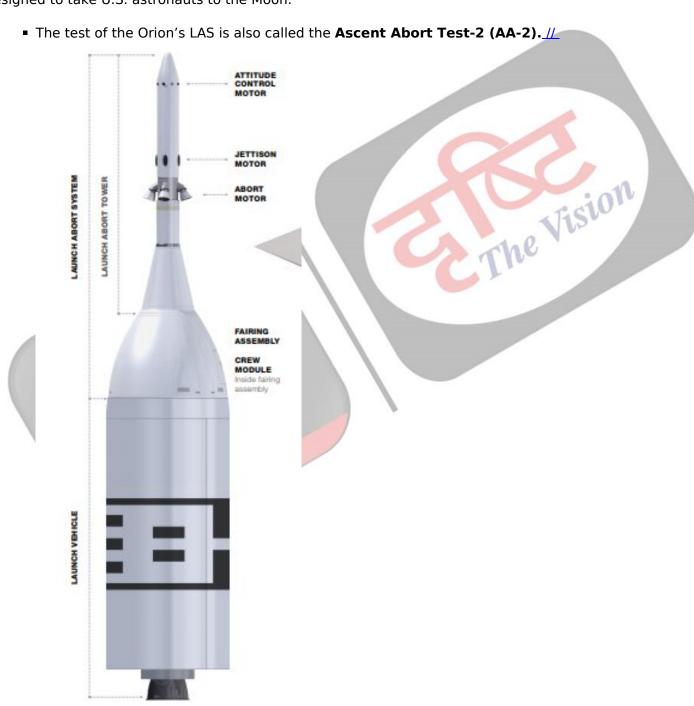


Ascent Abort Test-2

NASA has carried out a successful test of a **Launch-Abort System (LAS)** for the **Orion capsule** designed to take U.S. astronauts to the Moon.



- The **aim** was to test in almost real-life conditions the evacuation of astronauts from the capsule in the event of an explosion or rocket booster failure.
- The test is a milestone in NASA's **preparation for Artemis missions** to the Moon that will ultimately lead to astronaut missions to Mars.
 - The Artemis program will send the first woman and the next man to the Moon by the year 2024 and develop a sustainable human presence on the Moon by the year 2028.

Orion Capsule

- The safest spacecraft ever built, Orion, will execute the Artemis program.
- An integral part of ensuring safe spaceflight is Orion's Launch Abort System, or LAS. This state-of-the-art crew escape system is attached to the top of the spacecraft and can propel the crew module away from the rocket within milliseconds should a life-threatening event arise during launch.

Demonstration by the test

- In the test, an unmanned Orion capsule was launched by a mini-rocket.
- Fifty-five seconds after the launch, at an altitude of 9,500 m, a rocket-powered tower on top of the crew module ignited its engines to quickly **pull the Orion away from a hypothetical rocket experiencing problems.**
- In just 15 seconds, the capsule gained two miles of altitude. Then the tower reoriented the capsule to prepare it for descent and disengagement from the tower, finally the crew module fell into the Atlantic Ocean.
- In real-life conditions, parachutes would also open to ease the manned capsule's fall toward the Atlantic Ocean.

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