

# [Scientific discoveries and breakthroughs](https://assignbuster.com/scientific-discoveries-and-breakthroughs/)

[Sociology](https://assignbuster.com/essay-subjects/sociology/)

NASA specially modified this pad for the erection of this rocket, which is purposed to carry astronauts to the moon. The test rocket includes a solid-rocket first stage, followed by a mock second stage, and dummy Orion crew capsule atop to stimulate the specified weight and size of Ares I. The Ares I rocket is by far the tallest booster in service and about to fly and stands about 100 meters (327 feet) high, i. e. 14 stories taller than NASA's space shuttles. Thin and exceptionally tall, the Ares I-X depicts the actual Ares I rocket which will carry the astronauts into the orbit, possibly by 2015. Being a mock-up, no person or payload will be on board during the demonstration (Moskowitz) (Dunn).
Comparatively, the shuttle is 184 feet tall. The Saturn V rockets were a record-setting 363 feet that ferried astronauts to the moon in the late 1960s and early 1970s. John Shannon, shuttle program manager stated that Ares' first-stage boosters are embedded with proven technology; it is the same kind of solid rocket booster used to propel space shuttles. The booster will parachute into the Atlantic and will be retrieved for analysis. The remaining part of the rocket, all false pieces weighted with ballast, will crash into the ocean, uncontrollably. The rocket is also manipulated with hundreds of sensors (Dunn).
But unfortunately, the test flight demonstration comes at an uncertain time for NASA. The agency's program to apply the Ares I rocket and Orion capsules as a replacement to the shuttle fleet, and return astronauts to the moon by 2020, are still being reviewed by President Barack Obama's administration. But the White House is likely to scrap those plans, with the panel of aerospace experts providing the President with a list of possible exploration options to issue its final report about the experiment to be performed. The reports suggest that NASA considers scrapping the Ares I rocket in place of commercial rockets that are likely to be ready sooner. Notwithstanding the uncertainty, NASA officials stated that they stand behind the flight test, to test not only the designing of Ares I but also other future rockets. Experts also suggest that NASA needs to make a major detour on its plans to return astronauts to the moon. According to the current plans, NASA has chosen the wrong destination with the wrong rocket, a special independent panel's chairman said (Moskowitz). A test flight version of the rocket, Ares I, is set on a launch pad at Cape Canaveral, expecting a liftoff later this month for its first experimental demonstration. Instead, NASA should have better concentrated on bigger rockets and newer places to explore (Borenstein). NASA is also set to launch another rocket called Atlantis that stands only 1 mile away from the Ares I-X pad. Atlantis is scheduled to lift off on November 16th, on a delivery mission to the renowned International Space Station. As an attempt to improve the chances of launching the Ares I-X, NASA delayed the shuttle flight by four days. Both the launches will be extensively handled by the same aerospace experts' team at the Kennedy Space Center. By the end of the next year, the remaining six shuttle flights, all to the space station, will be completed (Dunn).