

SpaceX's next-generation reusable rocket roars in tie-down test

April 2 2014, by Elizabeth Howell



The first stage of SpaceX's F9R rocket was tested in a "static fire" in March 2014. Credit: SpaceX/YouTube (screenshot)

As SpaceX pursues its quest of rocket reusability, it recently subjected the first stage of its next generation Falcon 9 rocket (called the Falcon 9-reusable or F9R) to a tie-down test ahead of some more heavy-duty work in the coming months and years. Early indications are that the test was a success, the firm said.

Details of the rocket are still scarce on the SpaceX's website, but the California-based company said that the rocket would generate about a million pounds of thrust at [sea level](#), and 1.5 million pounds in space. It's also a sort of follow-on from the leaping reusable Grasshopper rocket that retired last year.

Rockets are usually the "throwaway" items in a flight, but SpaceX is betting that by creating a reusable one that it will save on launch costs in the long run. (The rocket has been tested before, such as this long-duration one last June.)

"F9R test flights in New Mexico will allow us to test at higher altitudes than we are permitted for at our test site in Texas, to do more with unpowered guidance and to prove out landing cases that are more-flight like," SpaceX stated in the YouTube video description.

SpaceX's next launch to the space station was supposed to be in March, but it was scrubbed due to a radar outage that is affecting several launches. You can read more about the Falcon 9 [rocket](#)'s development (including the addition of landing legs) in this recent Universe Today article by Ken Kremer.

Source: [Universe Today](#)

Citation: SpaceX's next-generation reusable rocket roars in tie-down test (2014, April 2) retrieved 20 March 2024 from <https://phys.org/news/2014-04-spacex-next-generation-reusable-rocket-roars.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--