

Shoddy strut likely culprit in SpaceX rocket wreck

Company says the part failed under stress that was five times below certified limit.

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John Raoux/AP

SpaceX has a contract with NASA to deliver supplies to the International Space Station.

A weak metal strut most likely broke and caused the failure on 28 June of a SpaceX rocket carrying cargo bound for the International Space Station, company chief executive Elon Musk said on 20 July.

The part, which secured a canister of helium inside one of the Falcon 9 rocket's fuel tanks, broke under a force equal to one-fifth of what it was certified to withstand. The fault caused the rocket to break up over the Atlantic Ocean. Musk refused to name the manufacturer of the part.

Speaking with reporters, Musk was hesitant to assign blame for the incident, and instead reflected on the difficulty of building and flying rockets. "The fundamental nature of rocketry is that it is a case where the passing grade is 100%, every time," he said. "From the moment of lift-off, it's 100% or nothing."

Musk said that SpaceX policy will now be to independently test the struts regardless of certification, a check that he estimates will add minimal cost to the rockets overall.

A Falcon 9 rocket was scheduled to launch a US–European climate satellite on 8 August. The satellite, called Jason-3, is designed to measure the height of the oceans. The failure of the SpaceX resupply mission — dubbed CRS-7 by NASA — has postponed that launch.

Musk said that SpaceX will continue to analyse data from the 28 June launch failure to identify any further problems that could impact future flights.