

SpaceX's Falcon 9 rocket grounded pending mishap investigation

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The first-stage booster tilted and blew up as it descended onto a droneship.

SpaceX's stalwart Falcon 9 rocket has been grounded while the Federal Aviation Administration investigates why its first-stage booster tipped over and exploded while attempting to land after its latest launch, the agency announced Wednesday.

The rare failure came after the [rocket](#) sent the latest batch of 21 Starlink internet satellites into orbit during an early morning launch.

A webcast from Elon Musk's company showed the [first stage](#), which normally fires its thrusters to achieve a precise upright landing, tilting and blowing up as it descended onto a droneship off the Florida coast.

Although landing the [booster](#) is a secondary objective, and no lives or public property were at risk, the reusability of the entire rocket system is crucial to SpaceX's business model.

It snapped a more than three-year streak of hundreds of successful booster landings.

"An investigation is designed to further enhance public safety, determine the root cause of the event, and identify corrective actions to avoid it from happening again," the FAA said in a statement.

"A return to flight of the Falcon 9 booster rocket is based on the FAA determining that any system, process, or procedure related to the anomaly does not affect public safety," it added.

Falcon 9 is the workhorse of SpaceX's fleet, trusted by the US government and [private industry](#) to propel satellites and astronauts into orbit.

It was last grounded for around two weeks in July when its second stage engine experienced an anomaly that prevented it from deploying another batch of Starlink satellites at the correct altitude, leading them to burn up on re-entry through Earth's atmosphere.

The latest setback could delay the next scheduled launch attempt for Polaris Dawn, a multi-day orbital mission organized by billionaire

entrepreneur Jared Isaacman that aims to conduct the first spacewalks by an all-civilian crew.

The Polaris Dawn launch has already been postponed twice this week, first due to a technical issue with the ground-based rocket tower and then because of forecasted [weather conditions](#) at the planned splashdown site.

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