

# SpaceX successfully launched its Starship, but the vehicle was 'lost' after reentry



SpaceX's massive Starship took off from the company's Starbase launch facility in Boca Chica, Texas, at 9:25AM ET on Thursday morning.

This test flight was far more successful than its two predecessors, as the vehicle became "the first Starship to complete its full-duration ascent burn" after the six Raptor engines powered it to its expected orbit. It completed the hot-staging separation from its Super Heavy booster and opened a payload door to demonstrate how it could be used for missions like delivering Starlink satellites into orbit.

The vehicle remained in one piece until contact with the Starship spacecraft was lost shortly before its anticipated splashdown in the Indian Ocean. According to SpaceX, "The flight test's conclusion came during entry, with the last telemetry signals received via Starlink from Starship at approximately 49 minutes into the mission."

Before the broadcast ended, commentators said, “We may have lost Starship,” after losing communication with the spacecraft. “We haven’t heard from the ship up until this point, so the team has made the call that the ship has been lost. So, no splashdown today,” said SpaceX spokesperson Dan Huot.

“Starship and Super Heavy vehicles are preparing for upcoming flights as we seek to increase our launch cadence throughout the year,” writes SpaceX.

In a recap of the mission, SpaceX confirmed the fate of the Super Heavy booster rocket after completing a flip maneuver and boostback burn toward its splashdown location in the Gulf of Mexico:

*Super Heavy successfully lit several engines for its first ever landing burn before the vehicle experienced a RUD (that’s SpaceX-speak for “rapid unscheduled disassembly”). The booster’s flight concluded at approximately 462 meters in altitude and just under seven minutes into the mission.*

And gave a reason for not attempting the on-orbit engine relight as planned:

*Starship did not attempt its planned on-orbit relight of a single Raptor engine due to vehicle roll rates during coast.*

Today’s Starship test was given the green light by the US Federal Aviation Administration (FAA) on Wednesday, less than 24 hours before its scheduled launch time, having determined that SpaceX had “met all safety, environmental, policy and financial responsibility requirements.” According to Space.com, the FAA had required SpaceX to complete 17 corrective actions concerning things like vehicle hardware redesigns, flammability analysis updates, and the installation of additional fire protection following an investigation into

the second failed Starship test – far fewer than the 63 corrective actions identified during the first test.

<https://www.theverge.com/2024/3/14/24100501/spacex-starship-launch-third-flight-test-success>