

SpaceX giant rocket explodes minutes after launch from Texas

April 20 2023, by Marcia Dunn



SpaceX's Starship launches from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. Credit: AP Photo/Eric Gay

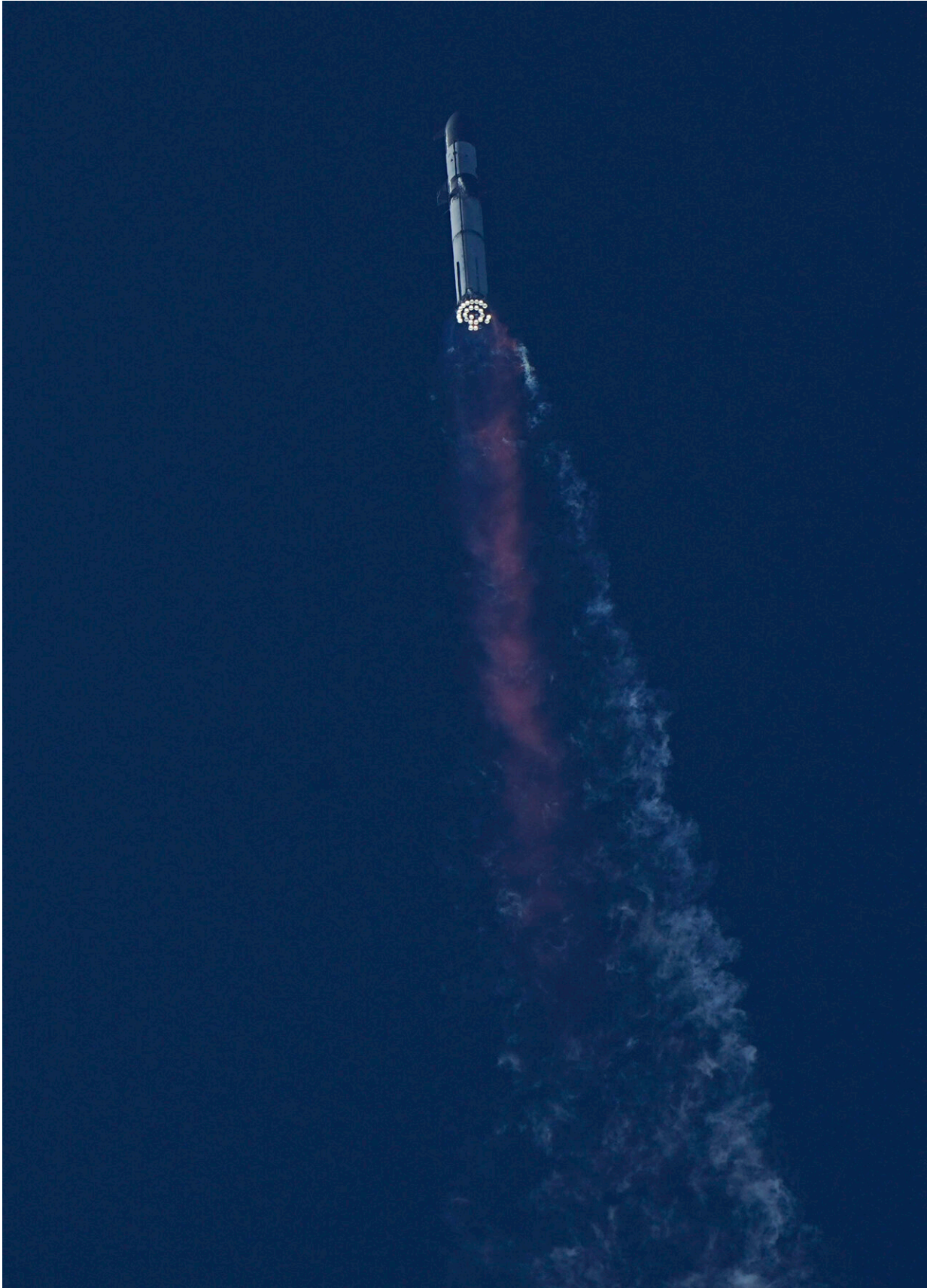
SpaceX's giant new rocket exploded minutes after blasting off on its first test flight Thursday and crashed into the Gulf of Mexico.

Elon Musk's company was aiming to send the [biggest and most powerful rocket](#) ever built on a round-the-world trip from the southern tip of Texas, near the Mexican border. The nearly 400-foot (120-meter) Starship carried no people or satellites.

SpaceX later said multiple engines on the 33-engine booster were not firing as the rocket ascended, causing it to lose altitude and begin to tumble. The rocket was intentionally destroyed by its self-destruct system, exploding and plummeting into the water.

Instead of a best-case-scenario 1 1/2-hour flight with the spacecraft on top peeling away and taking a lap around the world, the whole thing lasted four minutes. The rocket reached a maximum speed of about 1,300 mph (2,100 kph) and as high as 24 miles (39 kilometers), before going sideways and dropping.

Throngs of spectators watched from South Padre Island, several miles away from the Boca Chica Beach launch site, which was off-limits. As Starship lifted off with a thunderous roar, the crowd screamed: "Go, baby, go!"



SpaceX's Starship launches from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. Credit: AP Photo/Eric Gay

Musk, in a tweet, called it "an exciting test launch of Starship! Learned a lot for next test launch in a few months." SpaceX termed it a "rapid unscheduled disassembly."

In the weeks leading up to the flight, Musk gave 50-50 odds that the spacecraft would reach orbit. He stressed that clearing the launch tower and not blowing up the pad would be a win.

"You never know exactly what's going to happen," said SpaceX livestream commentator and engineer John Insprucker. "But as we promised, excitement is guaranteed and Starship gave us a rather spectacular end."

At liftoff, the rocket kicked up huge plumes of sand and dust around the pad. In Port Isabel, about 10 miles (6 kilometers) away, particles covered cars and other surfaces. The only other report, said John Sandoval, assistant to the city manager, was a shattered window at a local business. "Yes, it shook, rattled and rolled," he said of the rocket.



SpaceX's Starship launches from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. Credit: AP Photo/Eric Gay

The Federal Aviation Administration said it would oversee the accident investigation, noting that no injuries or public property damage were reported. The agency also said that until it determines that there is no threat to public safety, Starships are grounded.

SpaceX intends to use Starship to send people and cargo to the moon and, eventually, Mars. NASA has reserved a Starship for its next moonwalking team, and rich tourists are already booking lunar flybys.

Despite the abbreviated flight, congratulations poured in from NASA

chief Bill Nelson and others in the space industry. Retired Canadian astronaut Chris Hadfield tweeted, "Huge accomplishment, huge lessons, onwards to the next attempt."

"It fell somewhere between a small step and their hoped-for giant leap, but it still represents significant progress toward a reusable super-heavy lift rocket," University of Chicago's Jordan Bimm, a space historian, said in an email.



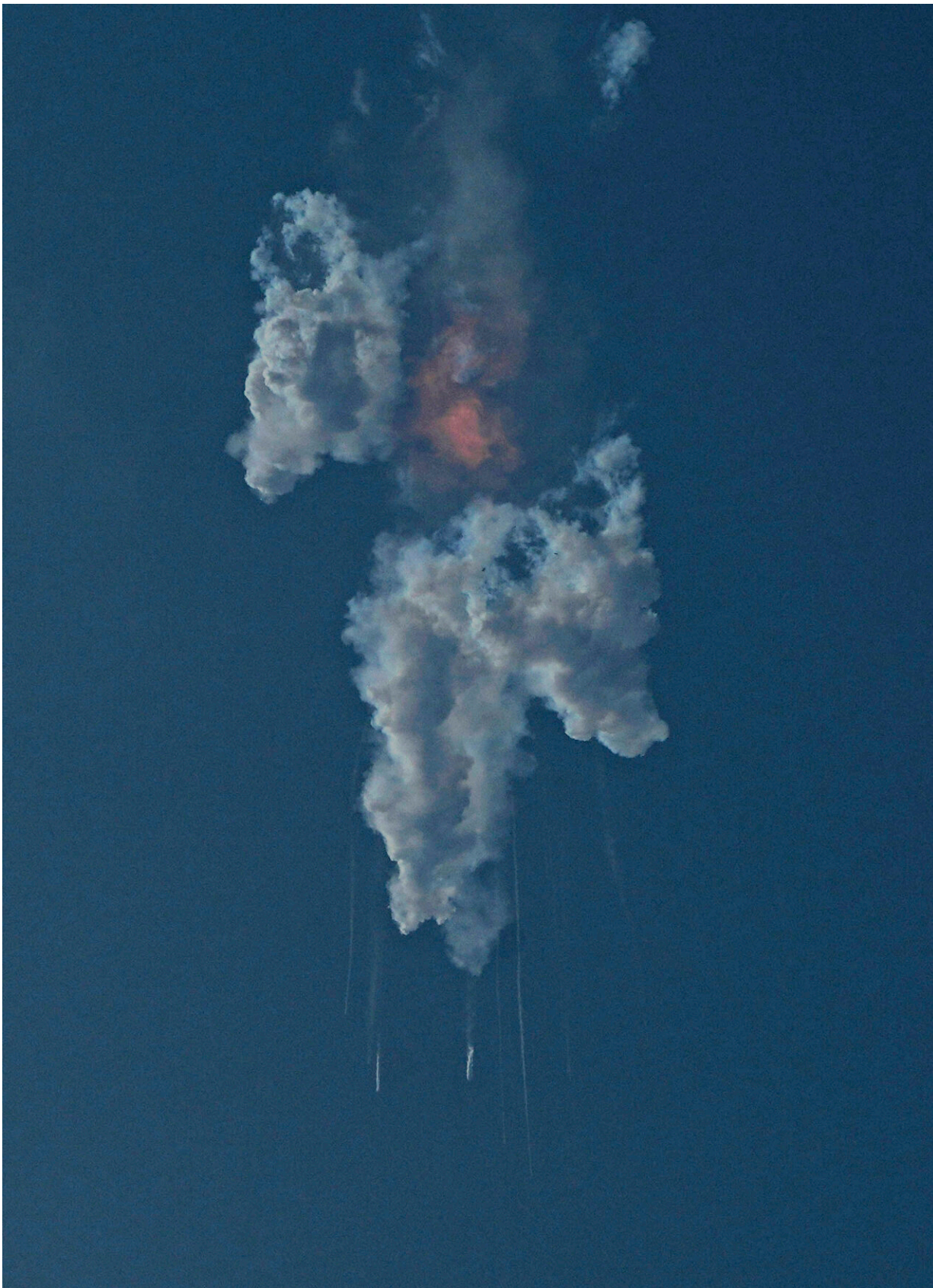
SpaceX's Starship launches from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. Credit: AP Photo/Eric Gay

At 394 feet and nearly 17 million pounds of thrust, Starship easily

surpasses NASA's moon rockets—past, present and future. [NASA successfully launched](#) its new 322-foot (98-meter) moon rocket last November on a test flight, sending the empty Orion capsule around the moon.

The stainless steel Starship rocket is designed to be fully reusable with fast turnaround, dramatically lowering costs, similar to what SpaceX's smaller Falcon rockets have done soaring from Cape Canaveral, Florida. Nothing was to be saved from this test flight, with the spacecraft—if all had gone well—aiming for a watery grave in the Pacific near Hawaii.

The futuristic spacecraft flew several miles into the air during testing a few years ago, landing successfully only once. But this was the inaugural launch of the first-stage booster with 33 methane-fueled engines.



SpaceX's Starship breaks up after its launch from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. SpaceX's giant new rocket exploded minutes after blasting off on its first test flight and crashed into the Gulf of Mexico. Credit: AP Photo/Eric Gay



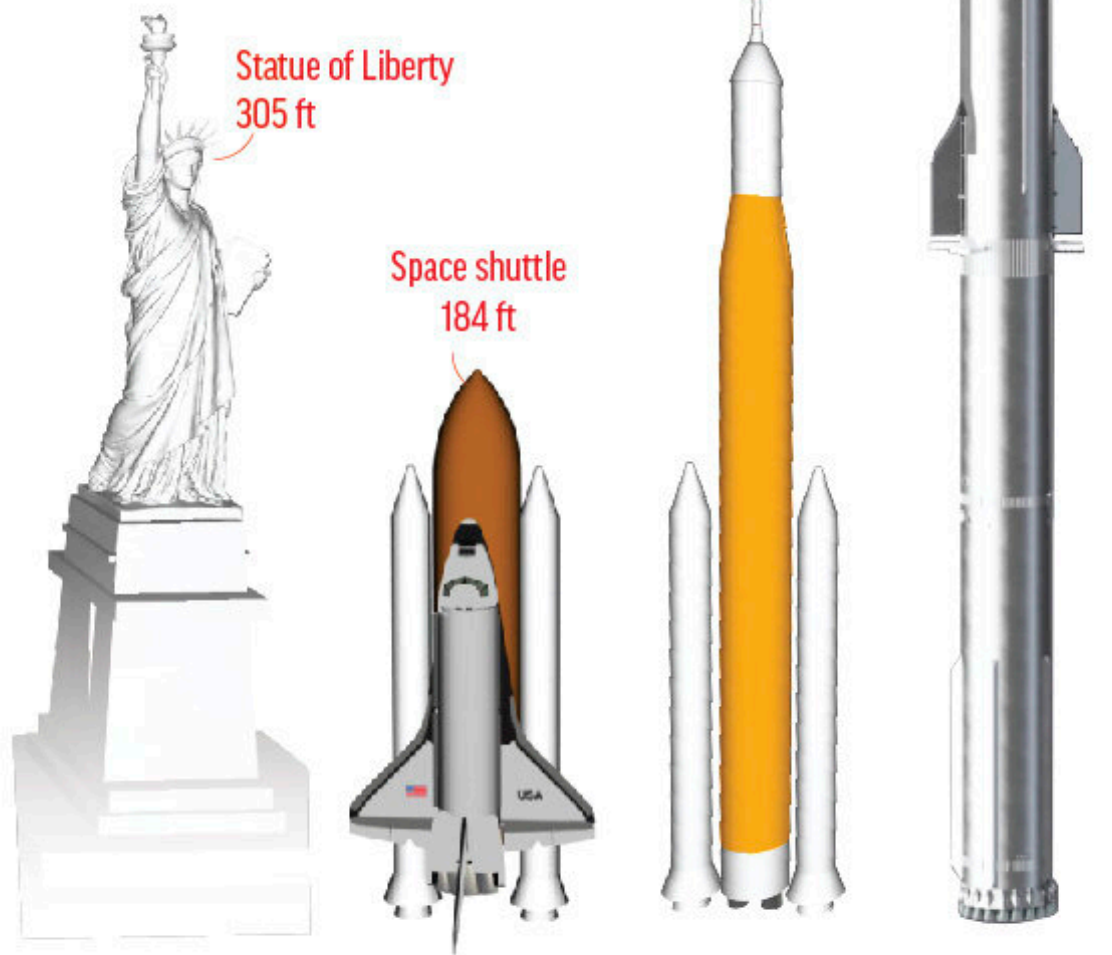
SpaceX's Starship launches from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. The giant new rocket exploded minutes after blasting off on its first test flight and crashed into the Gulf of Mexico. Credit: AP Photo/Eric Gay



SpaceX's Starship turns after its launch from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. Credit: AP Photo/Eric Gay

The biggest rocket ever built

SpaceX's Starship is the tallest and most powerful rocket. NASA intends to use it as a lunar lander for astronauts.



Sources: NASA; SPACEX

AP

Starship is the biggest and mightiest rocket ever built, jutting almost 400 feet into the South Texas sky.



Jose Cabrera, a technician with SpaceX, waits as the SpaceX Starship, the world's biggest and most powerful rocket, prepares for launch from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. Credit: AP Photo/Eric Gay



A tour boat passes SpaceX's Starship, the world's biggest and most powerful rocket, as it prepares to launch from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. Credit: AP Photo/Eric Gay



A tour boat passes SpaceX's Starship, the world's biggest and most powerful rocket, as it prepares to launch from Starbase in Boca Chica, Texas, Thursday, April 20, 2023. Credit: AP Photo/Eric Gay



This undated photo provided by SpaceX shows the company's Starship rocket at the launch site in Boca Chica, Texas. Credit: SpaceX via AP

SpaceX has more boosters and spacecraft lined up for more test flight; the next set is almost ready to go. Musk wants to fire them off in quick succession, so he can start using Starships to launch satellites into low-Earth orbit and then put people on board.

It was the second launch attempt. Monday's try was scrapped by a frozen booster valve.

Jason and Lisa Flores drove down from Corpus Christi to watch the launch with their daughter, and noticed something was amiss.

Lisa Flores cried seeing the liftoff and then realized, "It's not working out the way it was supposed to."

Elizabeth Trujillo, 13, wearing a "Star Wars" shirt and carrying toy binoculars, skipped school to see the launch from the beach with her mother and other relatives. The crowd cheered when Starship cleared the tower.

Despite the failed attempt, "it was worth it," said Jessica Trujillo, Elizabeth's mother. "Just hearing and seeing the view, the excitement of the crowd, it was priceless."

"Practice makes perfect. They just got to practice some more," she added.

© 2023 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed without permission.

Citation: SpaceX giant rocket explodes minutes after launch from Texas (2023, April 20) retrieved 10 May 2024 from <https://phys.org/news/2023-04-spacex-giant-rocket-minutes-texas.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> |
|--|