

SpaceX launches rocket from NASA's historic moon pad

February 19 2017, by Marcia Dunn



In this image from NASA TV, the SpaceX Falcon rocket launches from the Kennedy Space Center in Florida on Sunday, Feb. 19, 2017. It's carrying a load of supplies for the International Space Station. (NASA TV via AP)

A SpaceX rocket soared from NASA's long-idled moonshot pad Sunday, sending up space station supplies from the exact spot where astronauts embarked on the lunar landings nearly a half-century ago.

It was the first flight from NASA's legendary Launch Complex 39A since the shuttle program ended almost six years ago, and SpaceX's first liftoff from Florida since a rocket explosion last summer.

The crowds at Kennedy Space Center watched eagerly as the unmanned Falcon 9 rocket took flight with a cargo ship bound for the International Space Station. They got barely 10 seconds of viewing before clouds swallowed up the Falcon as it thundered skyward.

As an extra special treat, SpaceX landed its leftover booster back at Cape Canaveral eight minutes after liftoff, a feat accomplished only twice before. Most of SpaceX's eight successful booster landings—rocket recycling at its finest—have used ocean platforms. As they did during the shuttle era, sonic booms heralded Sunday's return.

SpaceX employees at company flight headquarters in Southern California cheered as the 15-story booster landed upright at its designated parking spot at Cape Canaveral Air Force Station.

SpaceX chief Elon Musk celebrated the successful touchdown via Twitter.

"Baby came back," he tweeted.



A Space X Falcon9 rocket sits on the launch pad, Saturday, Feb. 18, 2017 at the Kennedy Space Center in Cape Canaveral, Fla Last-minute rocket trouble forced SpaceX on Saturday to delay its inaugural launch from NASA's historic moon pad. SpaceX halted the countdown with just 13 seconds remaining. The problem with the second-stage thrust control actually cropped up several minutes earlier. With just a single second to get the Falcon rocket airborne, flight controllers could not resolve the issue in time. (Red Huber/Orlando Sentinel via AP)

The celebratory roar grew when the Dragon cargo ship successfully reached orbit a couple minutes later. It will reach the [space station](#) Wednesday, delivering 5,500 pounds of food, clothes and experiments.

It was SpaceX's second launch attempt in a row. Saturday's effort was foiled by last-minute rocket concerns. The repairs paid off, and even the clouds parted enough to ensure a safe flight.

Musk said he's honored to use Launch Complex 39A. The company

hopes to launch astronauts from this very spot next year, bringing U.S. crew launches back to home soil after a longer-than-intended hiatus. SpaceX Mars missions, first robots then people, could follow from here.

If the pad weathered Sunday's launch well, another Falcon could be standing there for a satellite send-up in just two weeks.

Kennedy Space Center's director Robert Cabana, a former shuttle commander who flew four times from 39A, is thrilled to see the pad used for commercial flights like this "instead of just sitting out there and rusting away." It's a stark contrast, he noted, to the depression that followed the final shuttle mission in 2011.

"It's just really an exciting time," Cabana said just before liftoff.

It was a momentous comeback for SpaceX. The last time SpaceX had a rocket ready to fly from Cape Canaveral, it blew up on a neighboring pad during prelaunch testing on Sept. 1. Although the company successfully returned to flight last month from California, the focus was on getting leased Launch Complex 39A ready for action given that the pad with the accident was left unusable. The damaged pad should be back in action later this year.



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Built in the mid-1960s for the massive Saturn V moon rockets, Launch Complex 39A has now seen 95 launches. Apollo 11's Neil Armstrong,

Buzz Aldrin and Michael Collins left Earth from here on July 16, 1969, on the first moon-landing mission. The very first space shuttle pilots, John Young and Robert Crippen, soared from here on April 12, 1981. And in a grand shuttle finale, Atlantis took off from here on July 8, 2011.

NASA signed over 39A to SpaceX in 2014 under a 20-year lease.

SpaceX has spent tens of millions of dollars to make 39A Falcon-ready. By the time astronauts climb into a Dragon capsule to fly to the space station, Shotwell said, pad renovations will exceed \$100 million.

Last week, the U.S. Government Accountability Office warned the commercial crew launches by SpaceX and Boeing are at risk of slipping into 2019. "The hell we won't fly before 2019," SpaceX President Gwynne Shotwell told reporters in response.

In a tweet Saturday, Musk said the company has already "retired" so much research and development risk on the crew Dragon capsule "that I feel very confident of 2018."



A SpaceX Falcon 9 rocket remains on launch Pad 39A at Kennedy Space Center, Fla., Saturday, Feb. 18, 2017. The rocket, scheduled to lift off with cargo for the International Space Station, was aborted with 13 seconds to go in the countdown. (Craig Bailey/Florida Today via AP)

As for the second-stage steering issue that cropped up Saturday, SpaceX hustled to replace an engine part before Sunday morning's try. Musk said he personally called Saturday's launch off, saying he was unwilling to risk something going wrong.

For SpaceX employees long accustomed to breaking new ground, Sunday was "a huge deal for us," according to SpaceX's Dragon mission manager, Jessica Jensen.

"I'm sure the team will be out celebrating," Jensen told reporters. "We'll be out tonight if you want to find us."

More information: SpaceX: www.spacex.com/
NASA: www.nasa.gov/

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