

8A ■ THURSDAY, DECEMBER 6, 2018 ■ TALLAHASSEE DEMOCRAT

Williams

Continued from Page 1A

James Dean
FLORIDA TODAY
USA TODAY NETWORK - FLORIDA

As a SpaceX Falcon 9 rocket flew back to Earth on Wednesday afternoon, an onboard camera offered stunning views of Cape Canaveral, its intended landing site, coming into focus.

But when that camera view suddenly began spinning sharply from side to side and then cut out, as the 156-foot rocket stage dropped at the speed of sound, it was clear something was amiss.

Eight minutes after its successful 1:36 p.m. blastoff from the same coastline, the booster fell short of its targeted touchdown at Cape Canaveral Air Force Station and splashed down in the Atlantic Ocean instead.

"The vehicle kept well away from anything where it could pose even the slightest risk to population or property," said Hans Koenigsmann, vice president of build and flight Reliability at SpaceX. "So public safety was well protected here."

The unplanned water landing did not mar a flawless launch of a SpaceX Dragon cargo capsule to the International Space Station, where it is due to arrive around 6 a.m. Saturday.

The Dragon is packed with nearly 6,000 pounds of food, supplies and experiments, including turkey, candied yams and other traditional holiday pro-

The Dragon vehicle is performing nominally, and we have a 100 percent clean spacecraft on its way to the International Space Station and the six crew members on board," said Joel Montalbano, deputy manager of NASA's space station program.

The launch was SpaceX's 20th of the year, adding to a company-best total set Monday with a launch of more than 60

The landing would have been the 33rd by a Falcon booster — roughly half the number that have launched — and the first on land at the Cape since February, when a pair of boosters from SpaceX's first Falcon Heavy launch touched

Instead, it became the first missed land landing, after 11 successes.



A SpaceX Falcon 9 rocket lifts off from Complex 40 at Cape Canaveral Air Force Station on Wednesday. The rocket is carrying supplies for the International Space Station. CRAIG BAILEY / FLORIDA TODAY

trol momentarily, the rocket still managed to hit the water softly with four legs deployed and remain intact.

"Engines stabilized rocket spin just in time," CEO Elon Musk said on Twitter. "Ships en route to rescue Falcon."

As a single engine was set to fire and slam on the brakes prior to touchdown at SpaceX's Landing Zone 1, the company believes the four grid fins that help control the booster's descent malfunctioned.

A hydraulic pump that steers the fins installed, Musk said. The system has no backup, but he said SpaceX would now consider adding one.

Falcon boosters are equipped with an automated self-destruct system that would blow up the rocket if it veered too far off course during a launch or landing.

However, Koenigsmann said that system wasn't needed because the rocket stayed well within its intended flight path.

Instead, he said, the landing was guided by onboard software that targets an "impact point" through the final engine burn, known as the landing

If all is well after that burn, computers move the target from a point in the water to the landing pad. But if something is wrong, they keep aiming for wa-

In this case, the booster, which had dropped from a peak altitude of about

84 miles and top speed over 2,200 mph, splashed down about two miles offshore.

SpaceX planned to recover the booster and return it to Port Canaveral. Musk said it might fly again for "an in-

If a Falcon stage were coming down over land, Koenigsmann said the software is also designed to detect and

As a precaution, NASA and the Air Force's 45th Space Wing, which man-

force's 4th Air Space Wing, which manages the Eastern Range and is responsible for public safety, routinely evacuate portions of the Cape for any rocket launch, and for Falcon landings.

Koernigsmann said he did not expect the landing problem to delay upcoming missions, including the company's first launch of a Global Positioning System

satellite for the Air Force, targeted for Dec. 18 from Cape Canaveral. No landing will be attempted during that mission.

"As much as we are disappointed in this missed landing — or landing in the water, rather, instead of land — it shows the system overall knows how to recover from certain malfunctions," said Koe-

Contact Dean at 321-917-4534 or jdean@floridatoday.com. And follow on Twitter at @flatoday_jdean and on Facebook at <https://www.facebook.com/SpaceTeamGa>.

Jury selection begins Monday in the trial of Williams, 48, on charges of first-degree murder, conspiracy to commit murder and accessory after the fact in the December 2000 killing of the 31-year-old real estate appraiser. She was arrested at her office at Florida State University in May after a lengthy investigation and an indictment by a Leon County grand jury.

Additional pretrial matters resolved Wednesday included a formal agreement by Assistant State Attorney Jon Fuchs not to seek the death penalty if Williams is convicted. Fuchs had said he was not intending to pursue capital punish-

In exchange for immunity, Williams' estranged husband, Brian Winchester, confessed to shooting his best friend in the head during a duck hunting trip on Dec. 26, 2000, at Lake Seminole in Jackson County.

Winchester's confession revealed Denise Williams' purported involvement in the plot and led investigators to Mike's body along the shores of Carr Lake in Leon County last fall. For years, it was asserted he had fallen from his boat while duck hunting alone and had been eaten by alligators.

The discovery of his body was made public at a December press conference.

Winchester cut the immunity deal with prosecutors for a full confession before being sentenced to 20 years in prison for the 2016 armed

years in prison for the 2016 armed kidnapping of Denise Williams who he feared was going to go to police and blame him for the murder. Married five years after Mike Williams

Winchester is expected to testify at the trial before a 12-person jury.

kinson took under advisement a motion that four people, including a jail mate and members of Winchester's family, not be able to testify in an attempt to discredit Denise Wilkins, another of the defendants.

Contact Karl Etters at ketters@tallohassee.com or @KarlEtters on Twitter.

POWERED BY
Newspapers™