

National Transportation Safety Board Aviation Accident Preliminary Report

Location: Miami, FL Accident Number: ERA22FA226

Date & Time: May 14, 2022, 12:51 Local Registration: N8845Z

Aircraft: Cessna 172H Injuries: 1 Fatal, 2 Serious, 5

Minor

Flight Conducted

Under: Part 91: General aviation - Personal

On May 14, 2022, about 1251 eastern daylight time, a Cessna 172H airplane, N8845Z, was substantially damaged when it was involved in an accident near Miami, Florida. The pilot was fatally injured, two passengers were seriously injured, and five people on the ground received minor injuries. The airplane was operated as a Title 14 Code of Federal Regulations Part 91 personal flight.

On the day of the accident, the pilot departed Miami Homestead General Aviation Airport (X51), Homestead, Florida about 1145, destined for North Perry Airport (HWO), Hollywood, Florida. After landing about 1220, the pilot taxied to a self-serve fuel pump and added about 11.2 gallons of 100LL aviation fuel to the airplane. After loading his passengers, he taxied out and departed at 1238, destined for Key West International Airport (EYW), Key West, Florida.

According to a passenger, he and the other passenger arrived as the pilot was completing the fueling. He observed the pilot use a checklist while were waiting to takeoff. After takeoff, they headed (east) toward the shoreline for local sightseeing. About 15 to 20 minutes later, the pilot called "the tower" and said he had an engine problem and had to return. The passenger did not hear anything wrong with the engine, and though the pilot seemed concerned, he was not panicked. The passenger could not remember anything else.

According to preliminary air traffic control data provided by the Federal Aviation Administration the pilot requested flight following from Miami Approach after takeoff from HWO, with the pilot using the call sign "N5545Z" (instead of "N8845Z"). After establishing radar contact with the airplane, the pilot was instructed to remain below 2,000 ft clear of Class B airspace. At 1248, when the airplane was southbound along Miami Beach about 1,200 ft, the pilot transmitted to Miami Approach: "Miami Approach...Mayday-Mayday-Mayday...54Z, uh lost engine power ...I don't know where I am going to put this down but I'm going down right here". The airplane then turned northbound and began losing altitude. When the airplane was about 500 ft, Miami Approach provided the wind speed and direction (180° at 3 knots) and asked the pilot if he had time to provide the number of souls on board and fuel, to which the pilot replied: "There's three souls, there's um a road right here...a little bridge, I'm going to make that, 54Z." This was the last transmission from the pilot.

Page 1 of 3 ERA22FA226

The airplane touched down on the Herman B. Fultz Bridge which passed over the Haulover Inlet. The bridge was about 1,257 feet long with a deck width of about 56 feet. The edges of the deck were equipped with sidewalks, railings, and streetlights. The bridge was configured with four traffic lanes (two Northbound and two Southbound) which were separated by a raised concrete median.

The airplane struck two vehicles before coming to rest on the bridge. Examination of the bridge revealed that the airplane had touched down in a northbound direction with the left main landing gear tire and right main landing gear tire straddling the raised concrete median. It then struck a vehicle from behind on the northbound side, crossed over the median and struck another vehicle from the front which was traveling on the southbound side before it nosed over, and came to rest on the northbound side of the bridge, facing southbound. Measurements of the airplane's ground path indicated that it traveled about 318 feet after striking the first vehicle until it came to rest.

Images of the airplane prior to touchdown indicated that the propeller was windmilling, the wing flaps were up, and there was no sign of smoke or fire.

After the airplane came to rest, a post-crash fire ensued, which consumed a majority of the cabin and fuselage. During a post-accident examination, the throttle control was found in the full forward position, the mixture control was full rich, and the carburetor heat control was closed. The primer was in and locked. The fuel selector valve handle was destroyed by the post impact fire. The position of the valve was between Both and Right. Thumb compression and suction were obtained on all cylinders, and spark was produced by both magnetos on all leads. All the bottom spark plugs were normal gray in color, and except for spark plugs No. 1, No. 3, and No. 5, which were oil fouled due to the position of the airplane when it came to rest in an inverted position, all the top spark plugs were normal gray in color.

The fuel strainer bowl contained a small amount of charred debris and was free of any corrosion. When disconnected from the carburetor a small amount of fuel was observed to flow from the line. The carburetor accelerator pump functioned normally, and the inlet screen was clean. The floats were submerged in water and did not exhibit any signs of leakage. There was a small amount of visible corrosion in the carburetor bowl. The oil filter contained some carbon deposits; the oil suction screen was clean.

The wing flap actuator when measured correlated to a flap ups (0°) position. The elevator trim actuator when measured correlated to a 10° trim tab up position. There was no evidence of an inflight fire, and flight control continuity was established from the rudder, elevator, and ailerons to the flight controls in the cockpit.

Examination of the fuel providers facility did not reveal any evidence of fuel contamination, or any anomalies with the dispensing system. Additionally, all inspections were found to be up to date.

The wreckage was retained by the NTSB for further examination.

Page 2 of 3 ERA22FA226

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N8845Z
Model/Series:	172H	Aircraft Category:	Airplane
Amateur Built:			
Operator:	On file	Operating Certificate(s) Held:	None

Operator Designator Code:

Meteorological Information and Flight Plan

Conditions at Accident Site:	VMC	Condition of Light:	Day
Observation Facility, Elevation:	KOPF,4 ft msl	Observation Time:	12:53 Local
Distance from Accident Site:	9 Nautical Miles	Temperature/Dew Point:	30°C /20°C
Lowest Cloud Condition:	Scattered / 4400 ft AGL	Wind Speed/Gusts, Direction:	7 knots / , 170 $^{\circ}$
Lowest Ceiling:		Visibility:	10 miles
Altimeter Setting:	29.96 inches Hg	Type of Flight Plan Filed:	None
Departure Point:	Hollywood, FL (HWO)	Destination:	Key West, FL (EYW)

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Substantial
Passenger Injuries:	2 Serious	Aircraft Fire:	On-ground
Ground Injuries:	5 Minor	Aircraft Explosion:	None
Total Injuries:	1 Fatal, 2 Serious, 5 Minor	Latitude, Longitude:	25.900583,-80.124667

Administrative Information

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Investigator In Charge (IIC):	Gunther, Todd
Additional Participating Persons:	Juan Carlos Garcia; FAA / FSDO; Miramar, FL Jennifer Barclay; Textron Aviation; Wichita, KS
Note:	

Page 3 of 3 ERA22FA226