



National Transportation Safety Board Aviation Accident Final Report

Location:	Doral, Florida	Accident Number:	ERA20TA030
Date & Time:	November 3, 2019, 21:50 Local	Registration:	N6015Z
Aircraft:	Beech 76	Aircraft Damage:	Substantial
Defining Event:	Fuel exhaustion	Injuries:	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot stated that he estimated that he had sufficient fuel onboard before departing on the flight. About 20 miles from the destination, at 2,000 ft mean sea level (msl), the right engine suddenly lost power. The pilot attempted to restart the engine but was unsuccessful. The pilot then diverted toward a closer airport. About 500 ft msl, the left engine also suddenly lost power. The pilot was unable to restart the engine and attempted a forced landing on a road. Shortly before touchdown, the left wing impacted a truck on the road and the airplane was substantially damaged.

Postaccident examination revealed that both fuel tanks were intact, and no fuel was leaking. About 1 cup and 1/2 cup of fuel were recovered from the left and right fuel tanks, respectively. Thus, it is likely that the pilot either incorrectly estimated his fuel state before departure or he underestimated the fuel required to reach the destination and exhausted the airplane's fuel supply, which resulted in a total loss of power to both engines.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's improper fuel planning, which resulted in fuel exhaustion and a total loss of power to both engines.

Findings

Personnel issues	Fuel planning - Pilot
Personnel issues	Decision making/judgment - Pilot
Aircraft	Fuel - Fluid level

Factual Information

On November 3, 2019, about 2150 eastern standard time, a Beech 76, N6015Z, was substantially damaged during a forced landing on a road near Doral, Florida. The commercial pilot and a pilot-rated passenger were not injured. The airplane was operated by GPS Global Pilot School under the provisions of Title 14 Code of Federal Regulations Part 91 as a personal flight. Night, visual meteorological conditions prevailed, and an instrument flight rules flight plan was filed for the flight. The flight originated at Hilton Head Airport (HXD), Hilton Head, South Carolina about 1840 and was destined for Miami Executive Airport (TMB), Miami, Florida.

The pilot reported that he landed at HXD with 55 to 60 gallons of fuel on board, and another 20 gallons of fuel were purchased before departing HXD. The fuel tanks were not filled to capacity at HXD. He estimated that the fuel needed to fly to TMB was 65 gallons with 15 gallons in reserve. The en route portion of the flight was uneventful. About 20 miles northwest of TMB, at 2,000 ft mean sea level (msl), the right engine "failed without warning." An attempt to restart the engine was unsuccessful. The right engine propeller was feathered. Following some radio communication problems, contact with Miami approach was re-established and the pilot diverted to Miami International Airport (MIA), Miami, Florida. About 500 ft msl, the left engine also experienced a sudden total loss of power. The pilot was unable to restart the engine and attempted a forced landing on a road to the west of MIA. Shortly before touchdown, the left wing struck a truck on the road. The airplane came to a stop and the pilots egressed the airplane and were met by first responders.

An inspector with the Federal Aviation Administration responded to the accident site and examined the wreckage. Both wings and the fuselage were structurally damaged. The airplane was equipped with a fuel tank in each wing, with a capacity of 50 gallons useable in each tank. The tanks were drained; 1/2 cup of fuel was recovered from the left tank and 1 cup of fuel was recovered from the right tank. The inspector arrived on scene within one hour of the accident and reported that there was no fuel leaking from either tank and no fuel stains were observed on the ground under the airplane. First responders also reported that there was no fuel leaking from the airplane when they arrived on scene.

History of Flight

Enroute-descent	Fuel exhaustion (Defining event)
Enroute-descent	Attempted remediation/recovery
Enroute-descent	Off-field or emergency landing

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	27, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	October 22, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 28, 2019
Flight Time:	1491 hours (Total, all aircraft), 16 hours (Total, this make and model), 1400 hours (Pilot In Command, all aircraft), 157 hours (Last 90 days, all aircraft), 83 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Pilot-rated passenger Information

Certificate:	Commercial; Flight instructor	Age:	26, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	October 10, 2019
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	September 5, 2019
Flight Time:	1312 hours (Total, all aircraft), 5 hours (Total, this make and model), 1244 hours (Pilot In Command, all aircraft), 226 hours (Last 90 days, all aircraft), 78 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N6015Z
Model/Series:	76 No Series	Aircraft Category:	Airplane
Year of Manufacture:	1979	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	ME-145
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	October 1, 2019 Annual	Certified Max Gross Wt.:	3900 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	11508 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O360-A1G6D
Registered Owner:		Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	KMIA, 9 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	21:53 Local	Direction from Accident Site:	280°
Lowest Cloud Condition:	Scattered / 1100 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 2500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	8 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.03 inches Hg	Temperature/Dew Point:	24° C / 22° C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Hilton Head, SC (HXD)	Type of Flight Plan Filed:	IFR
Destination:	Miami, FL (TMB)	Type of Clearance:	IFR
Departure Time:	18:40 Local	Type of Airspace:	Class B

Airport Information

Airport:	MIAMI INTL MIA	Runway Surface Type:	Asphalt
Airport Elevation:	9 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	25.796943, -80.34111 (est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph		
Additional Participating Persons:	Juan C Garcia; FAA/FSDO; Miramar, FL		
Original Publish Date:	January 28, 2021	Investigation Class:	3
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=100524		

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).