

Aviation Investigation Final Report

Location: Fort Lauderdale, Florida **Accident Number:** ERA13CA073

Date & Time: December 1, 2012, 14:30 Local Registration: N2196W

Aircraft: Beech B19 Aircraft Damage: Substantial

Defining Event: Fuel exhaustion **Injuries:** 3 None

Flight Conducted Under: Part 91: General aviation - Instructional

Analysis

The pilot reported that the purpose of the flight was an orientation for two potential student pilots. The pilot said that he completed a visual inspection of the fuel tanks and that he estimated that the fuel tanks contained 10 gallons of fuel, which he determined, would have been adequate for the flight. The pilot completed two traffic patterns, and as he climbed the airplane to the downwind leg of the third pattern, the engine lost power and "surged" during the subsequent forced landing. The pilot requested an emergency landing to runway 13 but amended his request to runway 8 because the airplane was "too high." He subsequently determined the airplane was "too low" for runway 8, and the airplane touched down hard on a taxiway and skidded to a stop in the grass infield. The airplane sustained substantial damage to the cabin floor structure. Examination revealed that the airplane contained no fuel, and the pilot reported that he had exhausted his fuel supply.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inadequate preflight planning, which resulted in fuel exhaustion and a total loss of engine power.

Findings

Aircraft	Fuel - Fluid management
Personnel issues	Preflight inspection - Pilot

Page 2 of 6 ERA13CA073

Factual Information

History of Flight

Approach-VFR pattern downwind	Fuel exhaustion (Defining event)
Approach-VFR pattern downwind	Loss of engine power (total)

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	33,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	June 20, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 18, 2012
Flight Time:	(Estimated) 365 hours (Total, all aircraft), 22 hours (Total, this make and model), 176 hours (Pilot In Command, all aircraft), 26 hours (Last 90 days, all aircraft), 22 hours (Last 30 days, all aircraft)		

Page 3 of 6 ERA13CA073

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N2196W
Model/Series:	B19	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	MB-690
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	February 5, 2012 Annual	Certified Max Gross Wt.:	2150 lbs
Time Since Last Inspection:	62 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	4606 Hrs at time of accident	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320 SERIES
Registered Owner:	Steven George Gilchrist	Rated Power:	150 Horsepower
Operator:	Status Air	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	FXE,13 ft msl	Distance from Accident Site:	
Observation Time:	18:53 Local	Direction from Accident Site:	
Lowest Cloud Condition:	Scattered / 2500 ft AGL	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	12 knots / 18 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	50°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.13 inches Hg	Temperature/Dew Point:	25°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Fort Lauderdale, FL (FXE)	Type of Flight Plan Filed:	Unknown
Destination:	Fort Lauderdale, FL (FXE)	Type of Clearance:	VFR
Departure Time:	14:15 Local	Type of Airspace:	Class D

Page 4 of 6 ERA13CA073

Airport Information

Airport:	Ft. Lauderdale Executive FXE	Runway Surface Type:	Asphalt
Airport Elevation:	13 ft msl	Runway Surface Condition:	Dry
Runway Used:	08	IFR Approach:	None
Runway Length/Width:	6001 ft / 100 ft	VFR Approach/Landing:	Forced landing;Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	2 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 None	Latitude, Longitude:	26.191944,-80.171112(est)

Page 5 of 6 ERA13CA073

Administrative Information

Investigator In Charge (IIC):	Rayner, Brian
Additional Participating Persons:	Edmundo Rolon; FAA/FSDO; Miramar, FL
Original Publish Date:	April 10, 2013
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=85722

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

Page 6 of 6 ERA13CA073