



Aviation Investigation Final Report

Location: Farmingdale, New York Accident Number: ERA23LA050

Date & Time: November 5, 2022, 13:51 Local Registration: N51AL

Aircraft: Beech B-60 Aircraft Damage: Substantial

Defining Event: Fuel exhaustion **Injuries:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Business

Analysis

The pilot reported that he was under the impression that his airplane's inboard fuel tanks had been topped and he had 202 gallons on board prior to departure. He had a "standing order" with the airport's fixed base operator to top the tanks; however, the fueling was not accomplished and he did not visually check the fuel level prior to departure. He entered 202 gallons in cockpit fuel computer and unknowingly commenced the flight with 61 gallons on board. Prior to reaching his destination, his fuel supply was exhausted, both engines lost all power, and he performed a forced landing in a cemetery about one mile from the airport. The pilot and his passenger had minor injuries. Inspectors with the Federal Aviation Administration examined the wreckage and determined that damage to the wings and fuselage was substantial. The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's improper preflight inspection of the airplane's fuel system, resulting in him commencing the flight with an inadequate fuel supply.

Findings

Aircraft	Fuol - Fluid lovel
Aircraft	Fuel - Fluid level

Personnel issues Preflight inspection - Pilot

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Factual Information

History of Flight

Approach-IFR initial approach	Fuel exhaustion (Defining event)	
Emergency descent	Off-field or emergency landing	

Pilot Information

0.116	A . I.	A .	6414
Certificate:	Airline transport	Age:	64,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Lap only
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	August 18, 2021
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 29, 2022
Flight Time:	4672 hours (Total, all aircraft), 173 hours (Total, this make and model), 4039 hours (Pilot In Command, all aircraft), 23 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N51AL
Model/Series:	B-60	Aircraft Category:	Airplane
Year of Manufacture:	1973	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	P-247
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	October 28, 2022 Annual	Certified Max Gross Wt.:	7000 lbs
Time Since Last Inspection:		Engines:	2 Reciprocating
Airframe Total Time:	7476 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	C126 installed	Engine Model/Series:	TIO-541-E1C4
Registered Owner:	On file	Rated Power:	380 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KFRG,75 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	13:53 Local	Direction from Accident Site:	257°
Lowest Cloud Condition:	Few / 4100 ft AGL	Visibility	10 miles
Lowest Ceiling:	Broken / 6000 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	14 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	200°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	23°C / 16°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Burlington, VT (BTV)	Type of Flight Plan Filed:	IFR
Destination:	Farmingdale, NY	Type of Clearance:	IFR
Departure Time:	12:30 Local	Type of Airspace:	Class D

Airport Information

Airport:	Republic Airport FRG	Runway Surface Type:	
Airport Elevation:	81 ft msl	Runway Surface Condition:	Unknown
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	1 Minor	Aircraft Fire:	None
Ground Injuries:		Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	40.73805,-73.39278(est)

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Administrative Information

Investigator In Charge (IIC): Hicks, Ralph

Additional Participating Persons:

Original Publish Date: June 6, 2023

Last Revision Date:

Investigation Class: Class 4

Note: The NTSB did not travel to the scene of this accident.

Investigation Docket: https://data.ntsb.gov/Docket?ProjectID=106258

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

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.

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