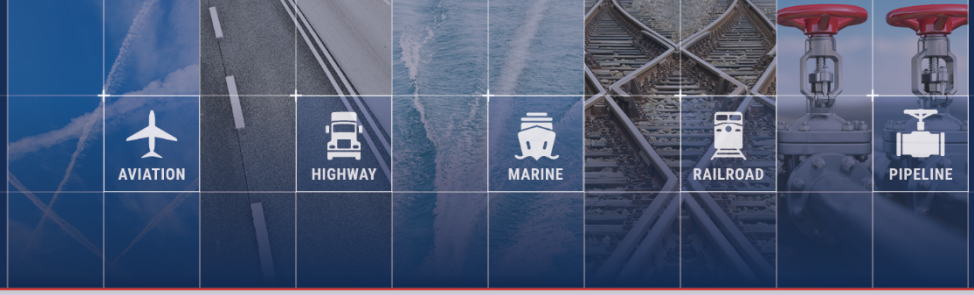

Aviation Investigation Final Report

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	Fuel - Fluid level
Personnel issues	Preflight inspection - Pilot

Factual Information

History of Flight

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

Pilot Information

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

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 / None	**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)

Administrative Information

Investigator In Charge (IIC):	Hicks, Ralph
Additional Participating Persons:	John Harris; FAA/FSDO; Farmingdale, NY
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