Aviation Investigation Final Report

Location:	Ferris, Texas	**Accident Number:**	GAA18CA149
Date & Time:	March 1, 2018, 11:00 UTC	**Registration:**	N77MM
Aircraft:	Beech B	**Aircraft Damage:**	Substantial
Defining Event:	Fuel exhaustion	**Injuries:**	1 Minor
Flight Conducted Under:	Part 91: General aviation - Ferry		

Analysis

The pilot in the multi-engine, retractable landing gear airplane reported that, during an instrument flight rules cross-country flight, about 5,000 ft above mean sea level, the left engine surged several times and he performed an emergency engine shutdown. Shortly afterward, the right engine lost power.

During the emergency descent, the airplane struck treetops, and landed hard in a field with the landing gear retracted.

The airplane sustained substantial damage to both wings, the engine mounts, and the lower fuselage.

The pilot reported that he had requested 200 gallons of fuel from his home airport fixed base operator, but they did not fuel the airplane. The pilot did not check the fuel quantity during his preflight inspection.

According to the Federal Aviation Administration Airplane Flying Handbook, Chapter 2, page 2-7, pilots must always positively confirm the fuel quantity by visually inspecting the fuel level in each tank.

The pilot reported that there were no 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 fuel level, which resulted in a loss of engine power due to fuel exhaustion. Contributing to the accident was the pilot's failure to lower the landing gear before the emergency landing.

Findings

Personnel issues	Preflight inspection - Pilot
Aircraft	Fuel - Not inspected
Aircraft	Fuel - Fluid level
Aircraft	Main landing gear - Not used/operated
Environmental issues	Tree(s) - Contributed to outcome

Factual Information

History of Flight

Enroute	Fuel exhaustion (Defining event)
Emergency descent	Collision with terr/obj (non-CFIT)
Landing	Hard landing

Pilot Information

Certificate:	Private	**Age:**	79,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:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	No
Medical Certification:	Class 3 Waiver time limited special	**Last FAA Medical Exam:**	December 16, 2015
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	July 27, 2017
Flight Time:	(Estimated) 6400 hours (Total, all aircraft), 2200 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N77MM
Model/Series:	B 60	**Aircraft Category:**	Airplane
Year of Manufacture:	1982	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	P-587
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	December 1, 2017 Continuous airworthiness	**Certified Max Gross Wt.:**	6775 lbs
Time Since Last Inspection:		**Engines:**	2 Reciprocating
Airframe Total Time:	2210 Hrs at time of accident	**Engine Manufacturer:**	LYCOMING
ELT:	C91 installed, not activated	**Engine Model/Series:**	TIO-541
Registered Owner:	MIKE & MAYO PARTNERS LP	**Rated Power:**	380 Horsepower
Operator:	MIKE & MAYO PARTNERS LP	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KCRS,448 ft msl	**Distance from Accident Site:**	16 Nautical Miles
Observation Time:	16:53 Local	**Direction from Accident Site:**	185°
Lowest Cloud Condition:		**Visibility**	6 miles
Lowest Ceiling:	Overcast / 1800 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	13 knots /	**Turbulence Type Forecast/Actual:**	/ None
Wind Direction:	350°	**Turbulence Severity Forecast/Actual:**	/ N/A
Altimeter Setting:	30.11 inches Hg	**Temperature/Dew Point:**	14°C / 12°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	DALLAS, TX (ADS)	**Type of Flight Plan Filed:**	IFR
Destination:	MEXIA, TX (LXY)	**Type of Clearance:**	IFR
Departure Time:	10:30 Local	**Type of Airspace:**	Class G

Wreckage and Impact Information

Crew Injuries:	1 Minor	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Minor	**Latitude, Longitude:**	32.301387,-96.372222(est)

Administrative Information

Investigator In Charge (IIC):	Hicks, Michael
Additional Participating Persons:	Chuck Kuykendall; FAA; Irving, TX
Original Publish Date:	August 27, 2018
Last Revision Date:	
Investigation Class:	Class
Note:	This accident report documents the factual circumstances of this accident as described to the NTSB.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=96829