



National Transportation Safety Board Aviation Accident Final Report

Location:	Grove Hill, AL	Accident Number:	ERA15LA232
Date & Time:	06/01/2015, 1730 CDT	Registration:	N29JR
Aircraft:	BEECH A23 24	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The pilot reported that, during the long cross-country flight, he stopped at an intermediate airport and added 30 gallons of fuel to the airplane. About 15 minutes after departure from that airport and while the airplane was cruising at 3,500 ft, the engine lost all power. The pilot attempted to restart the engine using the emergency procedures but was unsuccessful. He then chose a field for an emergency landing. During the landing on rough terrain, the nose landing gear collapsed.

Examination of the wreckage revealed that each wing fuel tank was about half full, and fuel drained from the fuel sump did not contain any visible contamination. Subsequent engine examination revealed no preimpact mechanical malfunctions, and the engine was test run successfully.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A total loss of engine power for reasons that could not be determined because engine examination and testing did not reveal any anomalies that would have precluded normal operation.

Findings

Not determined	Not determined - Unknown/Not determined (Cause)
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Factual Information

On June 1, 2015, about 1730 central daylight time, a Beech A23-24, N29JR, operated by a private individual, was substantially damaged during a forced landing to a field in Grove Hill, Alabama, following a total loss of engine power during cruise flight. The airline transport pilot and passenger were not injured. The personal flight was conducted under the provisions of 14 Code of Federal Regulations Part 91. Visual meteorological conditions prevailed and no flight plan was filed for the planned flight to Jack Edward Airport (JKA), Gulf Shores, Alabama. The flight originated from Demopolis Regional Airport (DYA), Demopolis, Alabama, about 1715.

The pilot stated that during a cross-country flight, he stopped at DYA and added 30 gallons of fuel. About 15 minutes after departure, while cruising at 3,500 feet, the engine lost all power. The pilot utilized emergency procedures to restart the engine, but was unsuccessful. He then selected a field for an emergency landing due to utility wires surrounding the adjacent roads. The pilot also noted that there was an airport he had recently flown over, but it was behind him and he could not locate it. As such, he felt that the field was the best option for the forced landing. The touchdown was normal, but the field included rough terrain, which resulted in the nosegear collapsing before the airplane came to rest upright.

Examination of the wreckage by a Federal Aviation Administration inspector revealed that an engine mount and underside fuselage sustained damage. The inspector noted that each wing fuel tank was approximately half-full. He drained fuel from the fuel sump and it did not contain any visible contamination. Due to the disposition of the wreckage, the inspector was not able to examine the engine.

Subsequently, when a recovery company lifted the airplane from the field, the recovery crew was able to rotate the propeller and confirm continuity to the rear accessory section of the engine, with the sound of the magneto impulse coupling activating. They also attained thumb compression on each cylinder. The engine was later test-run at the recovery facility under the supervision of an NTSB investigator. Fuel was plumbed to the fuel pump, the battery was replaced, and the exhaust pipe was manually opened to correct impact damage. The engine then started and ran continuously at settings between idle and 1,700 rpm, where a successful magneto check was performed. Due to vibration as a result of impact damage, a high power setting was not attempted.

History of Flight

Enroute-cruise	Loss of engine power (total) (Defining event)
Emergency descent	Off-field or emergency landing
Landing	Collision with terr/obj (non-CFIT)

Pilot Information

Certificate:	Airline Transport; Flight Instructor; Commercial	Age:	52
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	Helicopter; Instrument Helicopter	Toxicology Performed:	No
Medical Certification:	Class 1 With Waivers/Limitations	Last Medical Exam:	12/29/2014
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	5751 hours (Total, all aircraft), 300 hours (Total, this make and model), 3500 hours (Pilot In Command, all aircraft), 70 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Manufacturer:	BEECH	Registration:	N29JR
Model/Series:	A23 24	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	MA-235
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	05/15/2015, Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	3 Hours	Engines:	1 Reciprocating
Airframe Total Time:	4173 Hours	Engine Manufacturer:	LYCOMING
ELT:	C91 installed, not activated	Engine Model/Series:	IO-360-2B2N
Registered Owner:	On file	Rated Power:	200 hp
Operator:	On file	Air Carrier Operating Certificate:	None

Meteorological Information and Flight Plan

Observation Facility, Elevation:	GZH, 259 ft msl	Observation Time:	1753 CDT
Distance from Accident Site:	40 Nautical Miles	Condition of Light:	Day
Direction from Accident Site:	115°	Conditions at Accident Site:	Visual Conditions
Lowest Cloud Condition:	Clear	Temperature/Dew Point:	23°C / 21°C
Lowest Ceiling:	None	Visibility	10 Miles
Wind Speed/Gusts, Direction:	3 knots, 90°	Visibility (RVR):	
Altimeter Setting:	30.01 inches Hg	Visibility (RVV):	
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Demopolis, AL (DYA)	Type of Flight Plan Filed:	None
Destination:	Gulf Shores, AL (JKA)	Type of Clearance:	None
Departure Time:	1715 CDT	Type of Airspace:	

Airport Information

Airport:	Grove Hill Municipal Airport (3A0)	Runway Surface Type:	N/A
Airport Elevation:	478 ft	Runway Surface Condition:	
Runway Used:	N/A	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		

Administrative Information

Investigator In Charge (IIC):	Robert J Gretz	Adopted Date:	12/14/2015
Additional Participating Persons:	Joel Clark; FAA/FSDO; Birmingham, AL		
Publish Date:	12/14/2015		
Note:	The NTSB did not travel to the scene of this accident.		
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=91290		

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