

Aviation Investigation Final Report

Location: Houston, Texas Accident Number: CEN09LA014

Date & Time: October 8, 2008, 06:45 Local Registration: N703KP

Aircraft: Beech A36 Aircraft Damage: Destroyed

Defining Event: Loss of engine power (total) **Injuries:** 1 None

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

While in cruise flight the propeller's rpms unexpectedly increased to approximately 2,900. After an attempt to reduce the rpms via the propeller governor failed, the pilot was successful by reducing the engine throttle. Seconds later the engine began to make a "knocking noise" before complete engine power was lost. The pilot performed a forced landing to a rough field, resulting in a hard landing. The pilot was able to exit the airplane unassisted. Moments later the airplane caught fire and was fully engulfed in flames. An examination of the engine revealed that the oil filter adapter housing contained a fracture that allowed the engine oil to escape, resulting in oil starvation and a subsequent engine seizure. Reportedly this was the first flight since the airplane's annual inspection and the last oil filter change. Due to thermal damage to the oil filter adapter and oil filter, the reason for the fractured oil filter adapter could not be determined.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The total loss of engine power due to a fracture in the oil filter adapter housing. Contributing to the accident was the lack of suitable terrain for the forced landing.

Findings

Aircraft	Recip eng oil sys - Failure
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Environmental issues Rough terrain - Contributed to outcome

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Factual Information

History of Flight

Enroute-cruise Powerplant sys/comp malf/fail

Enroute-cruise Loss of engine power (total) (Defining event)

Emergency descent Off-field or emergency landing

On October 8, 2008, about 0645 central daylight time, a single-engine Beech A36 airplane, N703KP, was destroyed following a complete loss of engine power and subsequent force landing near Houston, Texas. The commercial pilot, sole occupant, was not injured. The airplane was registered to and operated by a private individual. Night visual meteorological conditions prevailed and no flight plan was filed for the 14 Code of Federal Regulations Part 91 personal flight. The 36-nautical mile cross-country flight originated from the Pearland Regional Airport (LVJ), near Houston, Texas at 0630, and was destined for the David Wayne Hooks Memorial Airport (DWH), in Houston, Texas.

According to the pilot, while in cruise fight the propeller's revolutions per minute (RPM) involuntarily increased to approximately 2,900. After an attempt to reduce the RPM's via the propeller governor failed, the pilot was successful by reducing the engine throttle. Seconds later the engine began to make a "knocking noise" before complete engine power was lost. The pilot performed a forced landing to a rough field resulting in a hard touchdown. The pilot was able to exit the airplane unassisted. Moments later the airplane caught fire and was fully engulfed in flames.

The airplane wreckage was recovered back to Air Salvage of Dallas (ASOD), Lancaster, Texas, for further examination. An examination of the engine revealed that the oil filter adapter housing contained a fracture that allowed the engine oil to escape.

According to the airplane's maintenance records, the airplane's last annual inspection was performed on September 26, 2008. The oil filter was replaced at that time. This was reportedly the first flight since the annual inspection.

Due to thermal damage to the oil filter adapter and oil filter, the reason for the fractured oil filter adapter could not be determined.

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Pilot Information

Certificate:	Commercial; Flight instructor	Age:	50,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):		Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 With waivers/limitations	Last FAA Medical Exam:	November 14, 2007
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 21, 2007
Flight Time:	2172 hours (Total, all aircraft), 117 hours (Total, this make and model), 1800 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 7 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N703KP
Model/Series:	A36	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	E-1975
Landing Gear Type:	Tricycle	Seats:	6
Date/Type of Last Inspection:	September 26, 2008 Annual	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	3016 Hrs as of last inspection	Engine Manufacturer:	CONT MOTOR
ELT:	Installed	Engine Model/Series:	10 520
Registered Owner:	BARKER MICHAEL E	Rated Power:	285 Horsepower
Operator:	BARKER MICHAEL E	Operating Certificate(s) Held:	None

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Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	LVJ,44 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	06:30 Local	Direction from Accident Site:	260°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	10°C / 8°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pearland, TX (LVJ)	Type of Flight Plan Filed:	None
Destination:	Houston, TX (DWH)	Type of Clearance:	None
Departure Time:	06:30 Local	Type of Airspace:	

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Destroyed
Passenger Injuries:		Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	32.639183,-97.15052(est)

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Administrative Information

Investigator In Charge (IIC):	LeBaron, Timothy
Additional Participating Persons:	Regina Brock; Federal Aviation Administration; Houston, TX
Original Publish Date:	June 11, 2009
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=69279

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.

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