



Aviation Investigation Final Report

Location:	Halfway, Missouri	Accident Number:	CEN13LA091
Date & Time:	December 5, 2012, 13:00 Local	Registration:	N8775K
Aircraft:	Stinson 108-2	Aircraft Damage:	Substantial
Defining Event:	Loss of engine power (total)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot said the airplane was in cruise flight when the engine made an unusual grinding noise and then stopped producing power. The pilot made a forced landing to a field. During the emergency descent, the airplane struck a power line with the left main landing gear and landed hard. Examination of the engine revealed that the magnetos were not properly secured to the engine and that the camshaft was broken. A review of the engine maintenance logbook revealed the airplane's most recent annual inspection was completed in January 2008, almost 5 years before the accident.

Probable Cause and Findings

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

The pilot's failure to properly maintain the airplane and engine, which resulted in a total loss of engine power due to improperly installed magnetos and a broken camshaft.

Findings

Aircraft	(general) - Failure
Personnel issues	Scheduled/routine maintenance - Pilot

Factual Information

History of Flight

Enroute	Loss of engine power (total) (Defining event)
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On December 5, 2012, at 1300 central standard time, a Stinson 108, N8775K, was substantially damaged during a forced landing to a field following a loss of engine power near Halfway, Missouri. The private pilot sustained minor injuries. The airplane was registered to and operated by the pilot. Visual meteorological conditions prevailed for the personal flight conducted under 14 Code of Federal Regulations Part 91. No flight plan was filed for the flight that departed Eads Ridge Airport (MO68), Fair Grove, Missouri, at 1240.

A Federal Aviation Administration (FAA) aviation safety inspector interviewed the pilot and examined the airplane. According to the inspector, the pilot had been airborne for approximately 20 minutes when the engine began to make an unusual grinding noise followed by a loss of engine power. The pilot attempted to make a forced landing to a field and struck a powerline with the left main landing gear. The airplane landed hard, resulting in substantial damage to both wings, the fuselage and an engine mount. The left main landing gear and propeller were also damaged. Examination of the engine revealed the magnetos were not properly secured to the engine and were loose. When the magnetos were removed, the inspector could visually see that the camshaft was broken.

A review of the engine maintenance logbooks revealed the airplane's last annual inspection was January 8, 2008.

The pilot held a private pilot certificate for airplane single-engine land. His last FAA third class medical was issued on March 4, 2009, and his last biennial flight review was on August 31, 2008. The pilot reported a total of 761 hours; of which 437 hours were in the accident airplane. He stated that he had flown the airplane approximately 3 hours in the last 90 days and was trying to prepare for a biennial flight review when the accident occurred.

Pilot Information

Certificate:	Private	Age:	58, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	March 4, 2009
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	August 31, 2008
Flight Time:	761 hours (Total, all aircraft), 437 hours (Total, this make and model), 3 hours (Last 90 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Stinson	Registration:	N8775K
Model/Series:	108-2	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	108-2357
Landing Gear Type:	Tailwheel	Seats:	4
Date/Type of Last Inspection:	January 8, 2008 Annual	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	1271 Hrs at time of accident	Engine Manufacturer:	FRANKLIN
ELT:	Not installed	Engine Model/Series:	6A4165 SERIES
Registered Owner:	HUFF MIKE W	Rated Power:	165 Horsepower
Operator:	HUFF MIKE W	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	None	Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:	3°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	18°C
Precipitation and Obscuration:			
Departure Point:	Fair Grove, MO (M068)	Type of Flight Plan Filed:	Unknown
Destination:	Bolivar, MO (M17)	Type of Clearance:	Unknown
Departure Time:	12:40 Local	Type of Airspace:	

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:	37.616664,-93.239997(est)

Administrative Information

Investigator In Charge (IIC):	Yeager, Leah
Additional Participating Persons:	Rod McLaughlin; FAA/FSDO; Kansas City, MO
Original Publish Date:	January 30, 2014
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=85755

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