



National Transportation Safety Board Aviation Accident Data Summary

Location:	Palm Coast, FL	Accident Number:	ERA13FA105
Date & Time:	01/04/2013, 1419 EST	Registration:	N375B
Aircraft:	BEECH H35	Injuries:	3 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane departed under visual flight rules and was at an altitude of about 7,500 feet when the pilot reported vibrations and an “oil pressure problem.” Airports in the area were under instrument meteorological conditions with cloud ceilings of 900 to 1,000 feet above ground level (agl). An air traffic controller provided the pilot with radar vectors for an airport surveillance radar (ASR) approach to a nearby airport that did not have a published ASR procedure. The airplane was about 2.5 miles northwest of the airport, at an altitude of about 5,300 feet agl, when the pilot reported that the engine oil pressure was “zero” with “cool cylinders.” The controller did not obtain nor did the pilot provide any additional information about the engine’s power status. During the next approximately 7 minutes, the airplane continued past the airport to a point about 6.5 miles northeast before the controller vectored the airplane to the south and then west to the final approach course. The airplane subsequently struck trees and a residence about 3/4 mile from the approach end of the runway. A postcrash fire destroyed the airframe and engine.

Postaccident examination of the airplane revealed that the engine sustained a fractured No. 4 connecting rod due to oil starvation. The connecting rod punctured the crankcase, which resulted in a total loss of engine power. The crankshaft oil transfer passage at the No. 4 journal sustained mechanical damage during the accident sequence and contained displaced journal material. All other oil passages were unrestricted. The airplane’s maintenance logbooks were destroyed during the accident. Maintenance performed on the airplane about 1 month before the accident included the replacement of the Nos. 1 and 4 cylinders; however, it could not be determined if this maintenance played a role in the accident. The reason for the oil starvation could not be determined.

Review of the air traffic control transcripts and interviews with the controllers revealed that they vectored the airplane such that it was unable to reach the airport. This was likely due to the weather conditions and the controllers’ incomplete understanding of the airplane’s mechanical condition (complete loss of power), which the pilot did not provide.

At the time of the accident, the pilot was using medication for hypertension and had well-controlled diabetes. It was unlikely that either condition significantly affected the pilot’s performance at the time of the accident.

Flight Events

Enroute - Powerplant sys/comp malf/fail
Approach - Loss of engine power (total)
Emergency descent - Collision with terr/obj (non-CFIT)

Probable Cause

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

A total loss of engine power after the failure of the No. 4 connecting rod due to oil starvation, which resulted in a subsequent forced landing. Contributing to the accident was the pilot's failure to clearly state that the aircraft had lost all power and the air traffic controllers' incomplete understanding of the emergency, which resulted in the controllers vectoring the airplane too far from the airport to reach the runway.

Findings

Aircraft-Aircraft power plant-Engine (reciprocating)-Recip eng cyl section-Not specified - C
 Aircraft-Aircraft oper/perf/capability-Performance/control parameters-Altitude-Attain/maintain not possible - C
 Personnel issues-Task performance-Communication (personnel)-(general)-Pilot - F
 Personnel issues-Task performance-Communication (personnel)-Interpretation/understanding-ATC personnel - F
 Environmental issues-Conditions/weather/phenomena-Ceiling/visibility/precip-Low ceiling-Contributed to outcome

Pilot Information

Certificate:	Private	Age:	58
Airplane Rating(s):	Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	(Estimated) 1300 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N375B
Model/Series:	H35	Engines:	1 Reciprocating
Operator:	On file	Engine Manufacturer:	CONT MOTOR
Operating Certificate(s) Held:	None	Engine Model/Series:	IO-470 SERIES
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	XFL, 33 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 900 ft agl	Wind Speed/Gusts, Direction:	7 knots / , 260°
Temperature:	15° C	Visibility	3 Miles
Precipitation and Obscuration:	Mist; No Obscuration		
Departure Point:	St.Lucie County, FL (FPR)	Destination:	Knoxville, TN (DKX)

Airport Information

Airport:	Flagler County Airport (XFL)	Runway Surface Type:	Asphalt
Runway Used:	29	Runway Surface Condition:	Unknown
Runway Length/Width:	4999 ft / 100 ft		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	2 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Latitude, Longitude:	29.458889, -81.185556		

Administrative Information

Investigator In Charge (IIC):	Terry L Duprie	Adopted Date:	05/08/2014
Investigation Docket:	http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=85964		

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