

		NTSB ID: ERA13FA105		Aircraft Registration Number: N375B	
		Occurrence Date: 01/04/2013		Most Critical Injury: Fatal	
		Occurrence Type: Accident		Investigated By: NTSB	
Location/Time					
Nearest City/Place Palm Coast		State FL	Zip Code 32164	Local Time 1419	Time Zone EST
Airport Proximity: Off Airport/Airstrip		Distance From Landing Facility: 1			
Aircraft Information Summary					
Aircraft Manufacturer BEECH		Model/Series H35		Type of Aircraft Airplane	
Revenue Sightseeing Flight: No			Air Medical Transport Flight: No		
Narrative					
<p>Brief narrative statement of facts, conditions and circumstances pertinent to the accident/incident:</p> <p>*** Note: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report. ***</p> <p>HISTORY OF FLIGHT</p> <p>On January 4, 2013, about 1419 eastern standard time, a Beechcraft H35, N375B, owned and operated by a private individual, experienced a loss of engine power while in cruise flight and was destroyed when it impacted a house, while on approach to the Flagler County Airport (XFL), Palm Coast, Florida. The private pilot and two passengers were fatally injured. Instrument meteorological conditions prevailed and an en route instrument flight rules (IFR) clearance was obtained for the flight, which departed Saint Lucie County International Airport (FPR), Fort Pierce, Florida, and was destined for Knoxville Downtown Island Airport (DKX), Knoxville, Tennessee. The personal flight was conducted under the provisions of Title 14 Code of Federal Regulations Part 91.</p> <p>The airplane arrived at FPR after flying from Stella Maris, Bahamas. The passengers cleared U.S. Customs about 1145. The airplane was subsequently refueled and departed for DKX under visual flight rules.</p> <p>According to air traffic control information provided by the Federal Aviation Administration (FAA), the pilot contacted Daytona Approach control about 1407, and reported vibrations and an "oil pressure problem." The controller advised the pilot that the airports in the area were IFR with cloud ceilings of 900 to 1,000 feet above ground level. The pilot received radar vectors for an airport surveillance radar approach to runway 29 at XFL, which was about 8 miles north of the airplane's position. At 1411:06, the pilot reported that the engine oil pressure was "zero" with "cool cylinders." At that time, the airplane was flying at an altitude of 5,300 feet mean seal level (msl), and was located about 2.5 miles from the approach end of runway 11, at XFL. The airplane continued to be vectored to a point about 6.5 miles northeast of the airport and was provided headings to the south and then west, to the final approach course for runway 29. The airplane was subsequently cleared to land about 1416. Radar contact with the airplane was lost when the airplane was about 2 miles from the runway, at an altitude of 200 feet msl. At 1418:27, the pilot transmitted "...we need help; we're coming in with smoke." There were no further communications from the airplane.</p> <p>The XFL airport director observed the airplane as it approached runway 29. He described the weather conditions as instrument meteorological conditions with a low ceiling and mist. He observed the airplane "break out" of the cloud layer, very low, just above the tree line. The airplane's wings were level as it descended and disappeared in the tree line.</p> <p>Another witness, who was an airline transport pilot and flight instructor, reported that the airplane looked "slow" as it exited clouds, was in a nose high attitude, and appeared to "stall" prior to descending below the tree line, which was followed by smoke about 10 seconds later.</p>					
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## Narrative (Continued)

## PERSONNEL INFORMATION

The pilot, age 58, held a private pilot certificate, with ratings for airplane single-engine land and instrument airplane. The pilot's logbooks were not recovered. His most recent FAA third class medical certificate was issued on December 31, 2012. At that time, he reported a total flight experience of 1,300 hours, which included 30 hours during the previous 6 months. The pilot reported 1,100 hours of total flight experience, with 50 hours during the previous 6 months, on an FAA medical certificate application dated February 4, 2010.

## AIRCRAFT INFORMATION

The four-seat, all-metal, low-wing, retractable-gear airplane, serial number D-5121, was manufactured in 1957. It was powered by a Continental Motors IO-470-C1, 250-horsepower engine and equipped with a Beech 278 propeller assembly. According to Beechcraft, the airplane was originally manufactured with a Continental Motors O-470-G series engine, which could be modified post manufacturer with a fuel injected engine per Beech Kit 35-648, "Engine Conversion to Fuel Injection on the Beech Model H35 Bonanza." No documentation for the engine that was installed on the accident airplane was found.

The airplane was found to have been modified with the addition of 15-gallon fiberglass wingtip fuel tanks, which would have included a wingtip tank fuel transfer pump mounted in each respective wing's wheel-well, to allow fuel to be transferred from each wingtip fuel tank, to its respective wing. There was no record of a supplemental type certificate for the installation of wingtip fuel tanks found in the airplane's FAA airworthiness file.

According to FAA records, the pilot purchased the airplane on May 30, 2008.

The airplane's maintenance records were not located. According to an FAA inspector, it was reported that the pilot traveled with his personal logbook and the airplane's maintenance records onboard the airplane. Additional information obtained by the FAA inspector revealed that the engine's No. 1 and No. 4 cylinders were replaced due to low compression during early December 2012; however, no work orders or other associated documentation could be located.

A friend of the pilot reported that he believed that the airplane's last annual inspection was performed around September-October 2012. He stated that he was not aware of any previous engine issues with the airplane, except for a small oil leak.

In a written statement, the lineman who refueled the airplane at FPR reported that he noticed "visible oil leaks" on the airplane's nose gear strut. In addition, after he informed the pilot of a fuel imbalance prior to refueling, the pilot informed the lineman that the airplane's right fuel pump was not working.

## METEOROLOGICAL INFORMATION

The weather reported at XFL at 1350 was: wind 360 degrees at 7 knots, visibility 3 statute miles, ceiling 900 feet broken, 1,400 feet overcast, temperature 15 degrees Celsius (C), dew point 13 degrees C, and altimeter 30.22 in/hg.

## COMMUNICATIONS

The following information, which contains excerpts of recorded communications, was obtained by an NTSB air traffic control specialist through interviews and review of communications and radar information obtained from the FAA:

At 1349:34, the pilot contacted Daytona Beach approach control and reported that he was at 4,500 feet. Eight minutes later, the pilot requested a climb to 6,500 feet. The approach controller informed the pilot that they had received a pilot report (PIREP) reporting that the cloud tops were at 7,000 feet.

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The controller advised the pilot to maintain at or above 7,000 feet, and remain in VFR conditions. The pilot complied and climbed to 7,500 feet.

At 1407:01, the pilot reported, "...we got a vibration in the prop, I need some help here." The approach controller informed the pilot that the closest airport was at his 12 to 1 o'clock position and 5 miles, and asked him if he was instrument flight rules (IFR) capable and equipped. The pilot stated, "I'm IFR, we're just getting a little vibration. We've got an oil pressure problem; we're going to have to drop quickly here." When asked to clarify the nature of the problem, the pilot stated, "...we got a propeller or something going, I'm backing it up here to see."

According to the approach controller, Ormond Beach Airport, which was located approximately 6 miles to the southeast of the airplane's position, was considered briefly, however, because runway 8/26 was closed for construction and there had been a strong tailwind for runway 17, that airport was not an option. The approach controller subsequently cleared the flight to XFL, instructed the pilot to descend and maintain 2,000 feet.

About 1408, the approach controller instructed the pilot to continue his present heading, and informed him that he would get him as close as he could to the Flagler airport for a runway 29 approach. He advised the pilot that the weather ceiling at XFL was 900 feet, and that an instrument approach was necessary. The controller subsequently asked the pilot if he could accept an airport surveillance approach (ASR) into XFL and the pilot replied that he was "...lovely with that" (An ASR approach was a type of instrument approach wherein the air traffic controller issued instructions, for pilot compliance, based on an aircraft's position in relation to the final approach course, and the distance from the end of the runway as displayed on the controller's radar scope).

Flagler County Airport did not have a published ASR approach. The controllers determined that to best handle the emergency it was necessary to offer the pilot an unpublished ASR approach to runway 29 at XFL using area navigation (RNAV) approach minimums. This determination was based on the information obtained from the pilot, and the need for the pilot to conduct an instrument approach into the airport due to the IFR weather conditions.

At 1409, the pilot checked in with the arrival controller and reported he was at 7,000 feet descending to 2,000 feet. The arrival controller instructed the pilot to descend and maintain 3,000 feet, and to turn right to a heading of 060 degrees. According to the arrival controller, he assigned the airplane 3,000 feet because he wanted to ensure the airplane was high enough to remain clear of an antenna that was located northwest of XFL.

About 1410, the controller advised the pilot to expect an ASR approach to runway 29 at XFL.

At 1411:06, the pilot reported, "...we got zero oil pressure, but we've got cool cylinder head temperature." The controller acknowledged the pilot's transmission and instructed the pilot to turn right to a heading of 090 degrees and to descend and maintain 2,000 feet.

At 1411:47, the controller informed the pilot that he would provide guidance along the RNAV runway 29 approach and that the straight in minimum descent altitude (MDA) was 560 feet.

At 1413:46, the controller instructed the pilot to turn right to a heading of 180 degrees and advised that the airplane was about 6 miles east-northeast of XFL on "a base leg for about a four and one-half to five mile final." The pilot acknowledged the turn and said "...we're starting to see some ground here."

At 1414:27, the controller instructed the pilot to descend to 1,600 feet and to turn right, to a heading of 200 degrees.

At 1415:01, the controller informed the pilot that the airplane 5 miles southeast of XFL. About 35 seconds later, the controller provided the pilot turns to intercept the final approach course and informed the pilot that he was 4 miles straight in for runway 29, which the pilot acknowledged.

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## Narrative (Continued)

About 1416, the controller informed the pilot that the airplane was three miles from the runway, asked him to advise when he had the airport in sight, and cleared the airplane to land on runway 29.

At 1417:25, the controller told the pilot that the airplane was below radar coverage, instructed him to contact the XFL tower, and provided missed approach instructions, "if you don't have the airport in sight, climb straight ahead to 2,000 [feet]."

At 1417:59, the pilot transmitted, "...do you read me?" The controller immediately responded that he had him loud and clear and asked the pilot if he had the airport in sight at his 12 o'clock and a mile. The pilot did not respond.

At 1418:27, the pilot transmitted, "...we need help; we're coming in with smoke." The arrival controller informed the pilot that Flagler Tower was waiting for him, and that he was cleared to land.

At 1418:55, the XFL tower controller called the arrival controller and informed him that the airplane did not make it to the airport.

Federal Aviation Administration order 7110.65, "Air Traffic Control," provides guidance and instruction to air traffic controllers when an emergency situation exist or is imminent. Paragraphs 10-1-1, 10-1-2, and 10-2-5 stated in part:

10-1-1: Emergency Determinations...Because of the infinite variety of possible emergency situations, specific procedures cannot be prescribed. However, when you believe an emergency exists or is imminent, select and pursue a course of action which appears to be most appropriate under the circumstances and which most nearly conforms to the instructions in this manual.

10-1-2: Obtaining Information...Obtain enough information to handle the emergency intelligently. Base your decision as to what type of assistance is needed on information and requests received from the pilot because he/she is authorized by 14 CFR Part 91 to determine a course of action.

10-2-5: Emergency Situations...Consider that an aircraft emergency exists...when any of the following exist:

- a. An emergency is declared by either:
  1. The pilot.
  2. Facility personnel.
  3. Officials responsible for the operation of the aircraft.

[For additional information, please see the NTSB Air Traffic Control Group Factual Report located in the Public Docket.]

## WRECKAGE INFORMATION

The airplane impacted trees and a residence about 3/4 mile from the approach end of runway 29, slightly left of the extended centerline. The initial impact point (IIP) was identified as a pine tree that was about 60 feet tall and contained broken limbs about 30 to 35 feet above ground level. Various components of wreckage extended from the IIP, on a heading of 288 degrees magnetic for 50 feet. The remainder of the airplane impacted the roof of a detached single family home and a large fire ensued, which destroyed most of the airplane and dwelling.

The airplane's left outboard wing, with about one-half of the corresponding aileron attached, displayed evidence of a tree strike and was found at the base of a tree located about 60 feet from the back of the house. The inbound portion of the left aileron was observed near the right wing, which was inverted and located along the back of the house. The empennage came to rest inverted on the backside edge of the roof alongside of a section of the right wing inboard leading edge.

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Other remains of the fuselage and left wing were found inside the house. Examination of the airplane's flight control cables did not reveal evidence of any preimpact failures. The right flap actuator remained intact and was observed in a flap retracted position. The landing gear actuator was not observed and the preaccident position of the landing gear could not be confirmed.

The engine was found inverted on the floor of the house. It sustained a significant amount of thermal and impact damage, which destroyed all accessories, with the exception of the propeller governor, which was intact, but fired damaged. A large hole was observed in the crankcase, which contained a portion of the No. 4 connecting rod. The engine was forwarded to Continental Motors Inc., Mobile, Alabama, for further examination.

The propeller remained attached to the crankshaft flange. The spinner was dented and did not display spiral dents. Both propeller blades displayed light chordwise scratches. The outboard section of one propeller blade was missing about 4 to 6 inches of its tip. The propeller blade was cut inboard of the missing section and forwarded to the NTSB Materials Laboratory, Washington, DC, for further examination.

Subsequent teardown of the engine under the supervision of the NTSB investigator-in-charge revealed that the crankshaft exhibited lubrication distress, thermal damage, and mechanical damage at the No. 4 connecting rod journal. The crankshaft oil transfer passage at the No. 4 journal sustained mechanical damage and contained displaced journal material. The remaining crankshaft oil transfer passages were unrestricted. Only fragments of the No. 4 connection rod bearing were recovered and they displayed lubrication and thermal distress. In addition, the number No.4 connecting rod was fractured at the base of the I-beam and exhibited extreme thermal and mechanical damage consistent with a loss of lubrication. The oil galleys and passages in the left and right crankcase halves were intact, clear, and unrestricted.

Subsequent examination of sectioned propeller blade by an NTSB metallurgist revealed that it exhibited extensive evidence of exposure to elevated temperatures that approached the melting point of the blade. This included complete removal of the paint, a thick oxide skin, and internal slumping of the blade material. The blade fracture surface exhibited characteristics consistent with separation while at elevated temperatures. The blade also showed a gradual deformation toward the camber side adjacent to the fracture. The deformation was accompanied by transverse cracking and stretching of the oxide layer on the flat side of the blade indicating deformation after or during high temperature exposure.

## MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot by the Office of the Medical Examiner, District 23, St. Augustine, Florida. The autopsy report noted the cause of death as "multiple blunt force injures."

Toxicological testing performed on the pilot by the FAA Bioaeronautical Science Research Laboratory, Oklahoma City, Oklahoma, was positive for the following:

"Atenolol detected in Liver  
Atenolol detected in Blood (Heart)  
1949 (mg/dl) Glucose detected in Urine  
149 (mg/dl) Glucose detected in Vitreous  
7 (%) Hemoglobin A1C detected in Blood"

Review of the pilot's most recent FAA medical examination application (dated December 31, 2012) revealed "No" was selected to the question "Do you currently use any medication (Prescription or Nonprescription)."

Updated on May 8 2014 10:42AM

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<b>Landing Facility/Approach Information</b>					
Airport Name	Airport ID:	Airport Elevation	Runway Used	Runway Length	Runway Width
Flagler County Airport	XFL	33 Ft. MSL	29	4999	100
Runway Surface Type: Asphalt					
Runway Surface Condition: Unknown					
Approach/Arrival Flown: ASR					
VFR Approach/Landing: Forced Landing					
<b>Aircraft Information</b>					
Aircraft Manufacturer		Model/Series		Serial Number	
BEECH		H35		D-5121	
Airworthiness Certificate(s): Normal; Utility					
Landing Gear Type: Retractable - Tricycle					
Amateur Built Acft? No	Number of Seats: 4	Certified Max Gross Wt.	2900 LBS	Number of Engines: 1	
Engine Type:	Engine Manufacturer:	Model/Series:	Rated Power:		
Reciprocating	CONT MOTOR	IO-470 SERIES	250 HP		
- Aircraft Inspection Information					
Type of Last Inspection	Date of Last Inspection	Time Since Last Inspection	Airframe Total Time		
Unknown		Hours	Hours		
- Emergency Locator Transmitter (ELT) Information					
ELT Installed?/Type Yes / C91	ELT Operated? No	ELT Aided in Locating Accident Site?			
<b>Owner/Operator Information</b>					
Registered Aircraft Owner		Street Address			
Michael R. Anders		City		State	Zip Code
		Albany		KY	00840
Operator of Aircraft		Street Address			
Michael R. Anders		City		State	Zip Code
		Albany		KY	00840
Operator Does Business As:			Operator Designator Code:		
- Type of U.S. Certificate(s) Held: None					
Air Carrier Operating Certificate(s):					
Operating Certificate:			Operator Certificate:		
Regulation Flight Conducted Under: Part 91: General Aviation					
Type of Flight Operation Conducted: Personal					

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**First Pilot Information**

Name On File	City On File	State On File	Date of Birth On File	Age 58
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Sex:	Seat Occupied: Left	Occupational Pilot? No	Certificate Number: On File
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Certificate(s): Private

Airplane Rating(s): Single-engine Land

Rotorcraft/Glider/LTA: None

Instrument Rating(s): Airplane

Instructor Rating(s): None

Current Biennial Flight Review?

Medical Cert.: Class 3	Medical Cert. Status: With Waivers/Limitations	Date of Last Medical Exam: 12/2012
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- Flight Time Matrix	All A/C	This Make and Model	Airplane Single Engine	Airplane Multi-Engine	Night	Instrument		Rotorcraft	Glider	Lighter Than Air
						Actual	Simulated			
Total Time	1300									
Pilot In Command(PIC)										
Instructor										
Instruction Received										
Last 90 Days										
Last 30 Days										
Last 24 Hours										

Seatbelt Used? Unknown	Shoulder Harness Used? Unknown	Toxicology Performed? Yes	Second Pilot? No
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**Flight Plan/Itinerary**

Type of Flight Plan Filed: VFR

Departure Point St.Lucie County	State FL	Airport Identifier FPR	Departure Time 1330	Time Zone EST
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Destination Knoxville	State TN	Airport Identifier DKX	
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Type of Clearance: VFR

Type of Airspace:

**Weather Information**

U.S. Source of Wx Information:

Unknown

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<b>Weather Information</b>					
WOF ID	Observation Time	Time Zone	WOF Elevation	WOF Distance From Accident Site	Direction From Accident Site
XFL	1350	EST	33 Ft. MSL	1 NM	288 Deg. Mag.
Sky/Lowest Cloud Condition:			Ft. AGL	Condition of Light: Day	
Lowest Ceiling: Broken		900 Ft. AGL		Visibility: 3 SM	Altimeter: 30.22 "Hg
Temperature: 15 °C	Dew Point: 13 °C	Weather Conditions at Accident Site: Instrument Conditions			
Wind Direction: 260		Wind Speed: 7		Wind Gusts:	
Visibility (RVR): Ft.		Visibility (RVV) SM			
Precip and/or Obscuration: Mist; No Obscuration					

<b>Accident Information</b>		
Aircraft Damage: Destroyed	Aircraft Fire: Ground	Aircraft Explosion: Ground

- Injury Summary Matrix	Fatal	Serious	Minor	None	TOTAL
First Pilot	1				1
Second Pilot					
Student Pilot					
Flight Instructor					
Check Pilot					
Flight Engineer					
Cabin Attendants					
Other Crew					
Passengers	2				2
- TOTAL ABOARD -	3				3
Other Ground					
- GRAND TOTAL -	3				3

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**FACTUAL REPORT**

**AVIATION**



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Occurrence Type: Accident

Administrative Information

Investigator-In-Charge (IIC)

Terry L. Duprie

Additional Persons Participating in This Accident/Incident Investigation:

Peter Kandravi  
FAA/FSDO  
Orlando, FL

Paul E Yoos  
Hawker Beechcraft  
Wichita, KS

Kurt A Gibson  
Continental Motors, Inc  
Mobile, AL