Aviation Investigation Final Report

Location:	AKRON, Ohio	**Accident Number:**	NYC00FA094
Date & Time:	March 19, 2000, 07:48 Local	**Registration:**	N1410L
Aircraft:	Beech A23	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The day before the accident, Saturday, the pilot was observed by airport personnel to takeoff in the accident airplane, return to his parking space, and then takeoff off again. The pilot repeated this action several times. Also, the pilot called the airframe and powerplant mechanic who performed the airplane's last annual inspection and said 'the airplane wasn't developing power.' The mechanic then told the pilot to 'leave it on the ground,' and he would look at the airplane on Monday. Witnesses who observed the airplane depart on Sunday, stated that the engine noise was constant; however, it 'just didn't seem like it was at full RPM.' The airplane 'barely cleared' the airport perimeter fence located off the departed end of the 6,337 foot long runway. The airplane made a series of descending left turns, and impacted two homes about 1/2 mile from the runway. With the exception of an 8-foot section of the empennage and the outboard half of the left wing, the airplane was consumed by a post crash fire. The engine also sustained substantial fire damage. The fuel injector and electric fuel pump were consumed in the fire. Examination of the airplane and disassembly of the engine, did not reveal evidence of any catastrophic failures. The pilot had flown the airplane about 90 hours in the year prior to the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's improper decision to operate the airplane with known deficiencies. A factor in this accident was the inability of the engine to attain full power for undetermined reasons.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - NONMECHANICAL
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings
1. (F) POWERPLANT - UNDETERMINED
2. (C) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - ATTEMPTED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: DESCENT - EMERGENCY

Findings
3. OBJECT - RESIDENCE

Factual Information

HISTORY OF FLIGHT

On March 19, 2000, about 0748 Eastern Standard Time, a Beech A23, N1410L, was destroyed when it impacted houses in a residential area, shortly after takeoff from Akron Fulton International Airport (AKR), Akron, Ohio. The certificated private pilot was fatally injured. Visual meteorological conditions prevailed and no flight plan had been filed for the personal flight conducted under 14 CFR Part 91.

The airplane departed Runway 07, a 6,337 foot-long, 150 foot-wide asphalt runway.

A witness near the runway stated that he looked up and saw the airplane about 10 to 15 feet above the ground, "barely climbing." He said he had observed several single engine airplanes takeoff in the past, and the accident airplane seemed "slow." He said the engine noise was constant; however, it "just didn't seem like it was at full RPM." He diverted his attention from the airplane, and within about 30 seconds, he observed a puff of smoke rising.

Another witness stated that the airplane looked like it just cleared the fence which surrounds the airport. He said the airplane did not sound like any airplane he had heard in the past, "like it wasn't picking up RPM." The airplane climbed "a little," leveled off about the "height the telephone poles" and made a left turn. The airplane was heading directly towards him and descended slightly. The airplane passed over some power lines, and barley missed a maple tree or brushed it slightly. The airplane then made another left turn and continued to descend, below his field of view. This was followed by a loud "bang" which was immediately followed by rising smoke. He said the engine wasn't "missing or sputtering, it just wasn't revving up like normal." He further described the engine noise like "a truck in high gear going up a steep hill."

A third witness who lived about 300 feet from the accident site stated that he looked out his window and observed the blue and white airplane below the roof-tops. He said the airplane appeared to be "gliding in," and it looked like it was maneuvering from a left turn to a right turn when it disappeared from his field of view. He then heard a loud explosion.

The accident occurred during the hours of daylight approximately 41 degrees, 2 minutes north latitude, and 81 degrees, 27 minutes west longitude.

PERSONNEL INFORMATION

The pilot held a private pilot certificate with a single engine land airplane rating. According to the pilot's wife, the pilot had purchased the airplane about 7 years prior to the accident. The most recent entry in the pilot's logbook was on December 19, 1999; however, witnesses report

that the pilot flew regularly. Examination of the pilot's logbook revealed that the pilot had accumulated approximately 663 hours of total fight experience as of December 19, 1999. Additionally, the pilot had flown about 100 hours, all in the accident airplane, between December 1998, and December 1999. It was estimated that the pilot flew about 90 hours during the year prior to the accident. The pilot received a biennial flight review on November 25, 1999.

The pilot's most recent Federal Aviation Administration (FAA) third class medical certificate was issued on December 22, 1998.

AIRCRAFT INFORMATION

The airplane's most recent annual inspection was performed on April 20, 1999, at a tachometer time of 4591.20 hours. The tachometer time at the accident site was 4683.44 hours.

The pilot's wife reported that the airplane's battery had been having trouble holding a charge. She believed the pilot had gone to the airport to check the battery and did not know he was planning to fly the airplane.

The day before the accident, the pilot was observed by AKR airport personnel to takeoff in the accident airplane, return to his parking space, and then takeoff off again. The pilot repeated this action several times.

The airframe and powerplant mechanic who performed the airplane's last annual inspection stated that accident pilot called him the day before the accident and said "the airplane wasn't developing power." He asked the pilot what the "magneto drop" was, and the pilot replied "fifty on one, and eighty on the other." The mechanic then told the pilot to "leave it on the ground," and he would look at the airplane on Monday.

METEOROLOGICAL INFORMATION

An automated weather observation taken at AKR, at 0754, reported: Variable winds at 4 knots; Visibility 10 statue miles; Ceiling 5,500 feet overcast; Temperature 37 degrees F; Dewpoint 21 degrees F; Altimeter 30.17 in/hg.

WRECKAGE AND IMPACT INFORMATION

The accident site was located about 1/2 mile from the departure end of the runway, and on 030-degree magnetic bearing from the airport. The airplane struck two homes and came to rest upright, on a magnetic heading of about 275 degrees.

With the exception of an 8-foot section of the empennage and the outboard half of the left wing, the airplane was consumed by a post crash fire, which also destroyed the house on the north side of the wreckage. All major components of the airplane were accounted for at the

accident site.

Flight control continuity was confirmed from the elevator, rudder, and left aileron control surfaces to the forward cockpit area. Additionally, no breaks were found in the control cable for the right aileron.

The engine was separated from it's mounts, and had sustained substantial fire damage. The oil sump, rocker box covers, and a majority of the propeller had melted. The magnetos remained attached to the engine, and could not be manipulated by hand. The engine was removed from the accident site, and examined in a nearby hangar. The top spark plugs were removed. Their electrodes were intact and light gray in color. The engine's crankshaft was not able to be rotated, and the engine was retained for further examination.

The fuel selector was found in the right tank position. Additionally, it was noted that the engine's fuel injector, and electric fuel pump were consumed in the fire.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot, on March 20, 2000, by the Summit County Medical Examiners Office, Akron, Ohio.

The toxicological testing report from the FAA Toxicology Accident Research Laboratory, Oklahoma City, Oklahoma, was negative for drugs and alcohol for the pilot.

TESTS AND RESEARCH

On September 12, 2000, the engine was examined at Teledyne Continental Motors, Mobile, Alabama, under the supervision of the Safety Board investigator. Further examination of the engine magnetos revealed they had sustained substantial internal fire damage and could not be rotated. Due to the impact and fire damage, the magnetos internal and engine "timing" could not be determined.

The engine driven fuel pump was partially melted and seized; however, the fuel pump drive coupling was intact.

No evidence of a catastrophic engine failure was observed during the engine examination. The engine's internal components revealed damaged consistent with impact and fire damage. Additionally, no metallic debris was observed on the oil filter element.

ADDITIONAL INFORMATION

The airplane wreckage was released on March 22, 2000, to a representative of the owners insurance company.

Pilot Information

Certificate:	Private	**Age:**	49,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	None	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	December 22, 1998
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	
Flight Time:	663 hours (Total, all aircraft), 663 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N1410L
Model/Series:	A23 A23	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	M799
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	April 20, 1999 Annual	**Certified Max Gross Wt.:**	2350 lbs
Time Since Last Inspection:	92 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	4685 Hrs	**Engine Manufacturer:**	Continental
ELT:	Installed, not activated	**Engine Model/Series:**	IO-346
Registered Owner:	RUDOLPH PERRY	**Rated Power:**	165 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	AKR ,1067 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	07:52 Local	**Direction from Accident Site:**	210°
Lowest Cloud Condition:	Unknown	**Visibility**	10 miles
Lowest Ceiling:	Overcast / 5500 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	4 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	0°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	3°C / -6°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(AKR)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	07:45 Local	**Type of Airspace:**	Class E

Airport Information

Airport:	AKRON FULTON INT'L AKR	**Runway Surface Type:**	Asphalt
Airport Elevation:	1067 ft msl	**Runway Surface Condition:**	Dry
Runway Used:	7	**IFR Approach:**	None
Runway Length/Width:	6337 ft / 150 ft	**VFR Approach/Landing:**	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	On-ground
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	41.039741,-81.520431(est)

Administrative Information

Investigator In Charge (IIC):	Schiada, Luke
Additional Participating Persons:	DANIEL E SCHMIDT; CLEVELAND , OH BRIAN D CASSIDY; WICHITA , KS JOHN BURES; FT. MYERS , FL
Original Publish Date:	November 23, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=48831