Aviation Investigation Final Report

Location:	Gunthertown, Alabama	**Accident Number:**	ATL07FA005
Date & Time:	October 9, 2006, 07:35 Local	**Registration:**	N6974Q
Aircraft:	Beech BE-19A	**Aircraft Damage:**	Destroyed
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

About 24 minutes before departure, the pilot received a weather briefing from a flight service station that informed him that overcast conditions at 1200 feet could be expected along his route of flight. The briefer also informed the pilot that flight under visual flight rules (VFR) was not recommended; however, the pilot elected to depart under VFR. Although no radar data exists for the flight, the location of the accident site was consistent with the pilot having flown the airplane toward the Talladega National Forest, an area where the pilot frequently flew. After the pilot failed to arrive at his destination, a search was initiated, and the wreckage was located on October 11, 2006, at 1340, on Burgess Peak, at an elevation of 1,787 feet mean sea level. The airplane first impacted the top of a tree on the south side of Burgess Peak on a 300-degree heading. This heading coincides with the heading the pilot would have been flying when he departed the Auburn-Opelika Airport, indicating the pilot was on his intended heading and had control of the airplane at the time of the first tree impact. A review of the weather briefing the pilot received from Flight Service prior to his departure, revealed that the airplane likely encountered instrument meteorological conditions and near zero visibility at the altitude of the accident site. Examination of the airplane found no preimpact mechanical failure or malfunctions that would have prevented the airplane from operating properly.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's continued flight from VMC into IMC conditions which resulted in an in-flight collision with rising terrain.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: CRUISE - NORMAL

Findings
1. WEATHER CONDITION - LOW CEILING
2. (C) VFR FLIGHT INTO IMC - CONTINUED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: CRUISE

Findings
3. TERRAIN CONDITION - RISING

Factual Information

HISTORY OF FLIGHT

On October 9, 2006, about 0735 central daylight time, a Beech BE-19A, N6974Q, registered to SID Hall Enterprises Inc., and operated by a private pilot, collided with rising mountainous terrain during cruise flight in the Talladega National Forest in Gunthertown, Alabama. The personal flight was operated under the provisions of 14 Code of Federal Regulations Part 91 with no flight plan filed. Instrument meteorological conditions prevailed at altitude. The private pilot received fatal injuries. The airplane was substantially damaged by impact and postcrash fire. The flight departed from Auburn-Opelika Robert G. Pitts Airport (AUO) in Auburn, Alabama, en route to Murfreesboro, Tennessee, on October 9, 2006, about 0700.

Before departure, the pilot received a weather briefing from the Nashville Flight Service Station, in Nashville, Tennessee, at 0636. In the briefing, the weather briefer informed the pilot that overcast conditions at 1200 feet could be expected from Auburn, to north of Anniston, Alabama, along his route of flight. Additionally, the briefer informed the pilot that visual flight rules flight was not recommended.

According to witnesses at AUO when the pilot failed to arrive at his destination, concerned family members started calling the airport and notified the FAA of the overdue airplane about 1400. The FAA notified the search and rescue personnel and a search was initiated. The airplane and pilot were located on October 11, 2006, at 1340, on Burgess Peak, at an elevation of 1,787 feet mean sea level (msl). The airplane had impacted several trees and came to rest on a 335-degree magnetic heading in rocky terrain.

PERSONNEL INFORMATION

The pilot, age 24, held a private pilot certificate for airplane single-engine land, multi-engine land, instrument airplane issued on August 17, 2006, and a second-class medical certificate issued on December 14, 2004, with no limitations.

AIRCRAFT INFORMATION

The four-seat, low-wing, fixed-gear airplane, was manufactured in 1968. It was powered by a Lycoming O-320-E2C, 150-horsepower engine, and equipped with a Sensenich model M74DM-0-58 fixed pitch propeller.

A review of the airplane's logbooks found that the airplane's last annual inspection was performed on September 28, 2006. According to the inspection write up, the tachometer time was 2644.92, the engines total time was 3813.69 and the estimated time since overhaul was

1833.89. The airframe total time was 6328.97.

METEOROLOGICAL INFORMATION

The 0715 surface weather observation at AUO, was: wind 070 degrees at 6 knots, visibility 10 miles, overcast 1,200, temperature 61 degrees Fahrenheit, dew point temperature 55 degrees Fahrenheit, and altimeter 30.13.

WRECKAGE AND IMPACT INFORMATION

The wreckage was located on October 11, 2006, by family members searching an area in which the pilot was known to frequently fly. The debris path extended on a 300 degree magnetic heading from the first broken trees, then a second crash debris path extended along a 360 degree heading, and came to rest on a 335-degree heading at an elevation of 1786 feet msl. There was a postcrash fire. The highest point on Burgess Peak is 1800 feet msl. The distance from AUO to the accident site is 52.1 nautical miles on a 300-degree heading.

Examination of the fuselage and cockpit found them mostly consumed by the postcrash fire. The right wing leading edge exhibited crush damage along the outboard 10 feet and was partially consumed by fire. The left wing exhibited crush damage along the outboard 15 feet and was partially consumed by fire. The left and right fuel tanks were breached and a large burnt area extended down the hill and up surrounding trees. Control cable continuity was established for the ailerons, elevators and rudder. Examination of the airframe revealed no evidence of preimpact mechanical malfunctions.

The engine sustained heavy fire damage on all sides. Impact damage was noted to the lower front sections. The induction air system was destroyed. The front No. 1 and No. 2 induction air pipes were impact damaged and dislodged. The alternator was impact separated. The muffler and exhaust pipes were partially crushed. A broken area was located on the muffler wall. The muffler inner baffles appeared intact. The exhaust pipes were not obstructed. Fluid-carrying hoses were destroyed by fire.

Examination of the engine included partial disassembly. The induction air pipes, exhaust system, spark plugs, valve covers, accessory components, and rear accessory case were removed and documented. Borescope examination of the top end components revealed no anomalies. The combustion chambers exhibited the same gray color as the spark plugs. The engine crankshaft was rotated by hand and continuity of the crankshaft, camshaft, valve train, and accessory drives was established. Each cylinder produced compression while the engine was rotated. At the conclusion of the examination no evidence of any preimpact mechanical failure or malfunction was found.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed on the pilot on October 12, 2006 by the Alabama Department of

Forensic Sciences, Montgomery, Alabama. The autopsy findings reported the cause of death as blunt force injuries of the head and blunt force and g-force injuries to the torso.

Forensic toxicology was performed on specimens from the pilot by the Federal Aviation Administration (FAA), Aeronautical Sciences Research Laboratory, Oklahoma City, Oklahoma. The toxicology report stated that no Carbon Monoxide or Cyanide was detected in the blood. Ethanol was detected in blood, urine, muscle and brain, however, the report noted: "The ethanol found in this case is from sources other than ingestion."

ADDITIONAL INFORMATION

The pilot departed AUO at about 0700, and according to the FAA, the airplane was not observed on radar. However, other traffic in the local area was observed flying in the AUO traffic pattern.

Pilot Information

Certificate:	Private	**Age:**	24,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	
Instrument Rating(s):	Airplane	**Second Pilot Present:**	No
Instructor Rating(s):	None	**Toxicology Performed:**	Yes
Medical Certification:	Class 2 Without waivers/limitations	**Last FAA Medical Exam:**	December 1, 2004
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	August 1, 2006
Flight Time:	250 hours (Total, all aircraft), 111 hours (Total, this make and model), 221 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	**Registration:**	N6974Q
Model/Series:	BE-19A	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	MB-321
Landing Gear Type:	Tricycle	**Seats:**	4
Date/Type of Last Inspection:	September 1, 2006 Annual	**Certified Max Gross Wt.:**	2150 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	6328.97 Hrs as of last inspection	**Engine Manufacturer:**	Lycoming
ELT:	Installed, activated, did not aid in locating accident	**Engine Model/Series:**	O-320-E2C
Registered Owner:	On file	**Rated Power:**	150 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	
Observation Facility, Elevation:	AUO	**Distance from Accident Site:**	
Observation Time:	07:15 Local	**Direction from Accident Site:**	
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	Overcast / 1200 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	6 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	70°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.12 inches Hg	**Temperature/Dew Point:**	16°C / 13°C
Precipitation and Obscuration:			
Departure Point:	Auburn, AL (AUO)	**Type of Flight Plan Filed:**	None
Destination:	Murfreesboro, TN (MBT)	**Type of Clearance:**	
Departure Time:	07:00 Local	**Type of Airspace:**	

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Destroyed
Passenger Injuries:		**Aircraft Fire:**	
Ground Injuries:	N/A	**Aircraft Explosion:**	
Total Injuries:	1 Fatal	**Latitude, Longitude:**	33.381942,-85.907218

Administrative Information

Investigator In Charge (IIC):	Wilson, Ralph
Additional Participating Persons:	Chuck Thompson; Birmingham FSDO; Birmingham, AL Mike Gibbons; Raytheon Aircraft Company; Wichita, KS Edward Rogalski; Textron Lycoming; Belleview, FL
Original Publish Date:	March 31, 2008
Last Revision Date:	
Investigation Class:	Class
Note:	The NTSB traveled to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=64678