

# National Transportation Safety Board Aviation Accident Final Report

Location: Rupert, WV Accident Number: NYC04FA139

Date & Time: 06/13/2004, 0830 EDT Registration: N200BE

Aircraft: Beech 200 Aircraft Damage: Destroyed

Defining Event: Injuries: 2 Fatal

Flight Conducted Under: Part 91: General Aviation - Positioning

# **Analysis**

An IFR flight plan and slot reservation were filed for the planned flight over mountainous terrain. The flightcrew intended to reposition to an airport about 30 miles southeast of the departure airport, pick up passengers, and then complete a revenue flight to another airport. The airplane departed VFR, and the flightcrew never activated the flight plan. A debris path was located, consistent with straight and level flight, near the peak of a mountain at 3,475 feet msl. Examination of the wreckage did not reveal any pre-impact mechanical malfunctions. Instrument meteorological conditions prevailed near the accident site, about the time of the accident. Further investigation revealed the aircraft operator was involved in two prior weather related accidents, both of which resulted in fatalities. A third accident went unreported, and the weather at the time of that accident was unknown. Over a period of 14 years, the same FAA principal operations inspector was assigned to the operator during all four accidents; however, no actions were ever initiated as a result of any of the accidents.

# **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot-in-command's improper decision to continue VFR flight into IMC conditions, which resulted in controlled flight into terrain. Factors were the FAA Principle Operations Inspector's inadequate surveillance of the operator, and a low ceiling.

## **Findings**

Occurrence #1: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: CRUISE

#### **Findings**

- 1. TERRAIN CONDITION MOUNTAINOUS/HILLY
- 2. (C) VFR FLIGHT INTO IMC CONTINUED PILOT IN COMMAND
- 3. (C) IMPROPER DECISION PILOT IN COMMAND
- 4. (F) INADEQUATE SURVEILLANCE OF OPERATION FAA(ORGANIZATION)
- 5. (F) WEATHER CONDITION LOW CEILING

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### **Factual Information**

#### HISTORY OF FLIGHT

On June 13, 2004, about 0830 eastern daylight time, a Beech 200 (King Air), N200BE, was destroyed when it impacted Big Mountain, near Rupert, West Virginia. The certificated airline transport pilot and certificated commercial pilot were fatally injured. Instrument meteorological conditions prevailed near the accident site, for the flight that departed Summersville Airport (SXL), Summersville, West Virginia, about 0815; destined for Greenbrier Valley Airport (LWB), Lewisburg, West Virginia. An instrument flight rules (IFR) flight plan was filed for the repositioning flight conducted under 14 CFR Part 91.

According to a Federal Aviation Administration (FAA) inspector, who was also the operator's principle operations inspector (POI), the flightcrew intended to meet passengers at LWB, and take them to Charlotte, North Carolina. The POI reported that the pilot-in-command usually used data user access terminal (DUAT) to obtain weather information and file flight plans. The POI further stated that an IFR slot reservation and an IFR flight plan were on file for the first leg of the trip, to LWB. However, the flight plan was never activated.

The POI also reported that no radar data was recorded for the accident flight.

The wreckage was located on June 13, about 1400, near the peak of Big Mountain. The accident site was approximately 15 miles southeast of SXL, which was about mid-way between SXL and LWB.

The accident occurred during the hours of daylight; located about 37 degrees, 58.71 minutes north latitude, and 80 degrees, 41.56 minutes west longitude.

#### PILOT INFORMATION

The pilot-in-command held an airline transport pilot certificate, with ratings for airplane single engine land and airplane multi-engine land. He also held a commercial pilot certificate, with a rating for airplane single engine sea; and a private pilot certificate, with a rating for glider aero tow. The pilot-in-command held a flight instructor certificate, with ratings for airplane single engine land and instrument airplane.

The pilot-in-command's most recent FAA first class medical certificate was issued on February 24, 2004.

According to the aircraft operator, the pilot-in-command had accumulated a total flight experience of 10,400 hours; of which, 1,500 hours were in the same make and model as the accident airplane, and 2,700 hours were in actual instrument conditions. During the 90 days preceding the accident, the pilot-in-command flew 80 hours; of which, 25 hours were in the same make and model as the accident airplane.

The copilot held a commercial pilot certificate, with ratings for airplane single engine land, airplane mutli-engine land, and instrument airplane. He also held a flight instructor certificate, with a rating for airplane single engine land.

The copilot's most recent FAA second class medical certificate was issued on December 29, 2003.

According to the aircraft operator, the copilot had accumulated a total flight experience of 2,910 hours; of which, 400 hours were in the same make and model as the accident airplane,

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and 175 hours were in actual instrument conditions.

#### AIRCRAFT INFORMATION

According to the aircraft logbooks, the airplane was maintained under an alternate approved inspection program (AAIP). On June 9, 2004, a "Phase 2" inspection was completed on the airplane. At that time, the airplane had accumulated approximately 9,444 hours of operation. According to the operator, the airplane had accumulated about 5 additional hours of operation from the time of the inspection, until the accident.

At the time of the inspection, the both engines had accumulated about 6,467 hours since overhaul.

#### METEOROLIGICAL INFORMATION

Lewisburg was located about 16 nautical miles southeast of the accident site, at a field elevation of 2,302 feet msl. The reported weather at LWB, at 0822, was: wind 190 degrees at 6 knots; visibility 7 miles; scattered clouds at 1,300 feet; ceiling 2,000 feet overcast; temperature 61 degrees F; dew point 61 degrees F; altimeter 30.23 inches Hg.

The reported weather at LWB, at 0838, was: wind calm; visibility 7 miles; ceiling 1,800 feet overcast; temperature 61 degrees F; dew point 61 degrees F; altimeter 30.23 inches Hg.

Raleigh County Memorial Airport (BKW), Beckley, West Virginia, was located about 26 nautical miles southwest of the accident site, at field elevation of 2,504 feet msl. The reported weather at BKW, at 0800, was: wind 160 degrees at 8 knots; visibility 7 miles; light rain; ceiling 800 feet broken; temperature 63 degrees F; dew point 61 degrees F; altimeter 30.20 inches Hg.

The reported weather at BKW, at 0822, was: wind 150 degrees at 9 knots; visibility 5 miles; light rain and mist; few clouds at 800 feet; ceiling 5000 feet broken; ceiling 7000 feet overcast; temperature 63 degrees F; dew point 61 degrees F; altimeter 30.20 inches Hg.

#### WRECKAGE INFORMATION

The investigative team arrived at the accident scene on June 14. The wreckage was resting on an approximate heading of 140 degrees, about 3,475 feet msl. A majority of the wreckage had been consumed by a post-crash fire, and a strong fuel odor was present at the scene. A debris path was observed, originating at a tree-strike, and extended on an approximate 140-degree heading, about 500 feet, terminating at the main wreckage. The first several hundred feet of the debris path contained trees that had their respective treetops sheared off. The tops were sheared off at approximately the same height, about 60 feet above the ground.

All major components of the airplane were accounted for at the scene. From the initial impact point, a section of wingtip was located about 50 feet along the debris path. Sections of both ailerons, and an outboard portion of the left wing were located about 80 feet along the debris path. An oil-to-fuel heater was located further, and it contained a liquid consistent with Jet A aviation fuel. An engine nacelle was then located about 200 feet along the debris path. Although the majority of debris was observed along the path that terminated at the main wreckage, both engines were located about 200 feet beyond the main wreckage.

Four propeller blades were located along the debris path. Two blades remained attached to a partial hub, one blade was found separated, and the fourth blade remained attached to a different partial hub. Four additional propeller blades were located in the vicinity of the main

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wreckage. The propeller blades exhibited leading edge gouging, chordwise scratches, and sbending. The left engine was resting on top of a fallen tree, and contained residual oil. The first stage reduction gear box and exhaust duct had separated from the left engine. The first stage power turbine was exposed. The turbine vanes exhibited leading edge gouging and circumferential scoring along the shroud. The accessory gearbox had separated from the engine, and the gears could not be rotated, which was consistent with impact damage. The left engine gas generator was compressed torsionally.

The right engine was found in the vicinity of the left engine. The first stage compressor turbine was exposed. The vanes exhibited leading edge gouging. The right engine inlet case and accessory gearbox had separated, and were located near the main wreckage. The gas generator and exhaust duct exhibited torsional creasing. The first stage compressor turbine was rotated by hand, with some resistance, which was consistent with impact damage.

The main wreckage consisted of a section of right wing, the cockpit area, and the empennage. The left main landing gear was located along the debris path, and the right main landing was recovered near the engines. The nose gear was not recovered. The radar altimeter was the only readable instrument recovered from the cockpit. The caution panel lights and cabin pressure gauge were also recovered. The empennage was resting inverted, and trim jackscrew measurements corresponded to an approximate 5-degree, and an approximate 3-degree, trim tab down (nose-up) position for the left and right elevator trim tabs respectively. A representative from the airplane manufacturer stated that the positions were consistent with a takeoff trim setting.

Due to impact and fire damage, flight control continuity could not be confirmed for the rudder. The elevator bellcrank had separated into two pieces. The elevator control cables remained attached to the bellcrank and terminated near the mid-cabin section of the airplane. One of the cable ends had melted, and the other cable end exhibited a broom-straw separation. Elevator cables also extended from the control column and terminated near the mid-cabin section of the airplane. Those cable ends were also melted and separated consistent with overload. The elevator trim cable continuity was confirmed from the actuators to the mid-cabin area. The trim cable ends were melted. Aileron control cables for the right and left wing were located in the main wreckage, underneath a large fallen tree.

#### MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies were performed on the pilots by the West Virginia Office of the Chief Medical Examiner, Charleston, West Virginia.

Toxicological testing of the pilots was conducted at the FAA Toxicology Accident Research Laboratory, Oklahoma City, Oklahoma.

#### ADDITIONAL INFORMATION

### Operator and FAA Oversight

Review of the Safety Board's database, and aircraft manufacturer records, revealed that the operator had been involved in a total of four accidents, including the most recent accident, dating back to 1992. Three of the accidents resulted in fatalities.

On November 11, 1992, the prior owner of the fixed based operator was piloting a Cessna 310, N711RG, that impacted mountainous terrain near Summersville, West Virginia. The pilot had cancelled his IFR flight plan, and was attempting to make a VFR landing at SXL. The Safety

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Board's probable cause for that accident was "The pilot's inadequate altitude (or clearance) from mountainous hilly terrain. Factors related to the accident were darkness, low clouds, and light snow."

During 1994, the same Beech 200 involved in the most recent accident, was repaired in South Carolina for "some damage when it contacted a tree while in flight." The following had to be replaced or repaired: right and left hand lower forward cowlings; right and left hand inboard wing leading edge assemblies; the radome; right hand lower forward fuselage nose section skin; and the right and left hand outboard wing inboard leading edge assemblies. That accident was not reported to the FAA or the Safety Board.

On January 8, 2001, the pilot of a Cessna 310, N123RA, was conducting an instrument approach in heavy snow. The airplane wreckage was located in rising terrain, about one-half mile to the left of the departure end of the runway. The Safety Board's probable cause for that accident was "The pilot's failure to execute the published missed approach procedure. A factor was heavy snowfall during the approach."

During the time period of all four accidents, the same POI was assigned to the operator. The POI stated he had heard about a 1994 accident involving a King Air in West Virginia, long after the accident had occurred. The POI asked the chief mechanic of the operator about the accident. The chief mechanic did not answer and walked away. The POI became suspicious, but had no proof and took no further action. The accident was eventually revealed during the current investigation. The POI then heard that the current owner of the fixed based operator, and the same pilot-in-command of the most recent accident, in the same Beech 200, were maneuvering the airplane in the vicinity of SXL when they struck trees. The airplane was repaired in South Carolina, but no ferry permit was ever issued by the FAA.

On March 15, 2004, the FAA had initiated an emergency suspension of the operator's CFR Part 135 for different matter. However, at the time of the most recent accident, the suspension had been finalized. On September 16, 2004, the Safety Board notified the FAA Office of Accident Investigation, Washington, D.C., about the four accidents. That same day, the FAA completed the emergency suspension of the operator's CFR Part 135 certificate. Prior to September 16, 2004, no FAA enforcement actions were ever taken against the operator's CFR Part 135 certificate as a result of any of the four accidents.

When the POI was asked why none of the accidents resulted in enforcement actions, he stated that all of the accidents occurred under CFR Part 91, when the operator had either already dropped-off passengers, or was en route to pick them up; and that none of the accidents actually occurred during a CFR Part 135 flight.

#### Wreckage Release

The wreckage was released to a representative of the owner's insurance company on June 14, 2004

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# **Pilot Information**

Certificate:	Airline Transport	Age:	67, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land; Single-engine Sea	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medicalw/waivers/lim.	Last FAA Medical Exam:	02/24/2004
Occupational Pilot:		Last Flight Review or Equivalent:	05/17/2004
Flight Time:	10400 hours (Total, all aircraft), 1500 hours (Total, this make and model), 10375 hours (Pilot In Command, all aircraft), 80 hours (Last 90 days, all aircraft), 35 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

### **Co-Pilot Information**

Certificate:	Commercial	Age:	56, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medicalw/waivers/lim.	Last FAA Medical Exam:	12/29/2003
Occupational Pilot:		Last Flight Review or Equivalent:	04/05/2004
Flight Time:	2910 hours (Total, all aircraft), 400 hours (Total, this make and model), 1900 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N200BE
Model/Series:	200	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	BB-832
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	06/09/2004, AAIP	Certified Max Gross Wt.:	12500 lbs
Time Since Last Inspection:	5 Hours	Engines:	2 Turbo Prop
Airframe Total Time:	9449 Hours at time of accident	Engine Manufacturer:	Pratt & Whitney
ELT:	Installed, not activated	Engine Model/Series:	PT6A-41
Registered Owner:	Land Use Corporation	Rated Power:	850 hp
Operator:	RADER AVIATION INC	Operating Certificate(s) Held:	None
Operator Does Business As:		Operator Designator Code:	BXSR

Meteorological Information and Flight Plan

Canditions at Assident Citae	Viewal Canditions	Candition of Limbts	Devi
Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	LWB, 2302 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	0838 EDT	Direction from Accident Site:	150°
Lowest Cloud Condition:		Visibility	7 Miles
Lowest Ceiling:	Overcast / 1800 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	Calm /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.23 inches Hg	Temperature/Dew Point:	16°C / 16°C
Precipitation and Obscuration:			
Departure Point:	Summersville, WV (SXL)	Type of Flight Plan Filed:	IFR
Destination:	Lewsiburg, WV (LWB)	Type of Clearance:	None
Departure Time:	0815 EDT	Type of Airspace:	Class G

# **Airport Information**

Airport:	Greenbriar Valley Airport (LWB)	Runway Surface Type:	Unknown
Airport Elevation:	2302 ft	Runway Surface Condition:	Unknown
Runway Used:	NA	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

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### Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	37.978611, -80.692778

### **Administrative Information**

Investigator In Charge (IIC):	Robert J Gretz	Report Date:	03/30/2005
Additional Participating Persons:	Paul N Reynolds; FAA FSDO-09; Charleston, WV Paul F Crosby; Pratt & Whitney Canada; Bridgeport, WV Timothy D Rainey; Raytheon Aircraft Company; Wichita, KS		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:publinq@ntsb.gov">publinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.ntsb.gov/pubdms/">http://dms.ntsb.gov/pubdms/</a> .		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available <a href="here">here</a>.

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