



# National Transportation Safety Board Aviation Accident Final Report

---

<b>Location:</b>	Dawson, GA	<b>Accident Number:</b>	NYC06FA048
<b>Date &amp; Time:</b>	01/01/2006, 1444 EST	<b>Registration:</b>	N8165W
<b>Aircraft:</b>	Beech D55	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 Fatal, 3 Serious
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

---

## Analysis

The pilot and four passengers departed with full fuel on an IFR cross-country flight. Approximately 3 hours after departure, the pilot initiated an instrument approach at an airport where he planned to refuel. Due to low cloud ceilings, the pilot was unable to land, and flew to an alternate airport. He attempted another instrument approach, and when he again could not land, he informed ATC that the airplane was "running out of fuel," and he needed to be vectored to the closest airport. The pilot attempted another instrument approach at the third airport; however, the pilot-rated passenger reported the cloud layer was approximately 100 feet, and they could not visually obtain the runway environment. Witnesses observed the airplane circle the runway three times, before the nose suddenly dropped straight down, and impacted the ground. Examination of the airplane revealed approximately 4 gallons of fuel remained in the fuel tanks following the accident, and no mechanical anomalies were noted. At the time of the accident, the airplane had been flying for a little over four hours. According to the Beechcraft Baron Pilot's Operating Handbook, each engine burned approximately 12-13 gallons of fuel per hour, and the endurance for the airplane was approximately 4.5 hours. A review of flight service station data revealed that the pilot obtained a weather briefing prior to departing, which indicated deteriorating weather conditions for the estimated time of arrival, but did not obtain any further updates while en route. The pilot-rated passenger stated that the engines continued to operate until impact.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain sufficient airspeed to preclude a stall, which resulted in an inadvertent stall and loss of control while circling to land. Factors associated with the accident were the pilot's inadequate in-flight planning and weather evaluation, low clouds, a low fuel condition, and an inadvertent stall.

## Findings

---

Occurrence #1: LOSS OF CONTROL - IN FLIGHT  
Phase of Operation: CIRCLING (IFR)

### Findings

1. (C) AIRSPEED(VS) - NOT MAINTAINED - PILOT IN COMMAND
  2. (F) STALL - INADVERTENT - PILOT IN COMMAND
  3. (F) WEATHER CONDITION - LOW CEILING
  4. (F) WEATHER EVALUATION - INADEQUATE - PILOT IN COMMAND
  5. (F) FLUID,FUEL - LOW LEVEL
  6. (F) IN-FLIGHT PLANNING/DECISION - INADEQUATE - PILOT IN COMMAND
- 

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

### Findings

7. TERRAIN CONDITION - GROUND

## Factual Information

### HISTORY OF FLIGHT

On January 1, 2006, at 1444 eastern standard time, a Beech D55, N8165W, was substantially damaged while on approach to the Dawson Municipal Airport (16J), Dawson, Georgia. The certificated private pilot and one passenger were fatally injured. A pilot-rated passenger and two additional passengers were seriously injured. Instrument meteorological conditions prevailed, and an instrument flight rules (IFR) flight plan was filed for the flight which originated at the Indianapolis Metropolitan Airport (UMP), Indianapolis, Indiana, at 1030. The personal flight was conducted under 14 CFR Part 91.

According to the pilot-rated passenger, who was acting as a "co-pilot" on the flight, they departed UMP with full fuel on the morning of the accident. They were en route to Florida, and planned to stop in Georgia to refuel. The pilot attempted instrument approaches at two different airports, but couldn't land because the "ceilings were too low." The pilot-rated passenger reported that the flight then proceeded to 16J; however, the airplane was "running out of fuel." He stated they used a handheld GPS to fly a traffic pattern for runway 31; however, the weather was "too bad" to land and they only obtained visual contact with the runway 2 or 3 times. The pilot-rated passenger stated that the cloud layer descended to approximately 100 feet; however, they "had to get down," and even considered landing on a road. He stated that while on the downwind leg, the airplane tilted toward the ground just prior to impact.

He additionally reported that at the time of the accident, they had been flying for a little over four hours. He stated that the engines continued to run during the flight and the accident sequence.

A review of recorded voice communications provided by the Federal Aviation Administration (FAA), revealed that:

At 1335, the pilot contacted Jacksonville Center and requested the VOR RWY 22 approach at the Moultrie Airport (MGR), Moultrie, Georgia. The pilot was cleared for the approach, and at 1410 he reported he was performing a missed approach, that the ceiling was too low, and that he needed an alternate.

The controller asked the pilot if he would like to "try Albany." The pilot requested and was given the weather there, and then asked if the ILS was available. The controller responded that it was available, and the pilot was then given vectors to the ILS RWY 4 at Southwest Georgia Regional Airport (ABY), Albany, Georgia. While being vectored to the approach, at 1420, the pilot requested to "cut it a little short" because he was low on fuel.

At 1423, the pilot was cleared for the approach, and at 1430, the pilot reported to the controller that he needed to find another airport nearby, as he was "running out of fuel." The controller asked the pilot if he could see the ground, and he replied, "negative." The controller then asked how much fuel remained in time, and the pilot responded "about 15 minutes."

The controller issued vectors to the Dawson Airport, and at 1441 radar contact was lost with the airplane. The controller continued to call the pilot, and at 1442, the pilot reported they were "trying to get this thing down."

No further communications were received from the airplane.

Witnesses who were working outside of a building located at the Dawson Airport, approximately 300 yards east of runway 31, reported that the airplane approached runway 31 from a 45-degree angle, heading south. The airplane then crossed over the runway and "made three passes, circling the runway." During its final pass, the airplane "swung around," and the nose suddenly dropped straight down, impacting the ground.

#### PILOT INFORMATION

The pilot held a private pilot certificate with ratings for airplane single engine land, airplane multiengine land, and instrument airplane. His most recent FAA third class medical was issued on July 15, 2002. At that time, he reported 950 total hours of flight experience.

Examination of the pilot's logbook revealed entries from August 21, 1996 to November 22, 2005. During that time, the pilot accumulated 1,538 total hours of flight experience and 142 hours of total instrument experience. In the previous 90 days, the pilot accumulated 14 hours of total flight experience. In the previous 6 months, the pilot accumulated 0.4 hours of actual instrument experience, which was recorded on October 8, 2005. No specific instrument approaches were listed in the actual instrument entry, and the pilot did not record any simulated instrument experience in the previous 6 months.

Additionally, the pilot's most recent flight review occurred on February 11, 2003.

#### AIRCRAFT INFORMATION

Examination of maintenance records revealed that the airplane's most recent 100-hour inspection was completed on October 29, 2005, with no anomalies noted. The airplane had flown 6 hours since the inspection.

#### METEOROLOGICAL INFORMATION

Weather conditions reported at ABY, 17 nautical miles to the southeast, at 1450, included wind from 160 degrees at 4 knots, 1 statute mile visibility, mist, overcast clouds at 100 feet, temperature 66 degrees Fahrenheit, dew point 64 degrees Fahrenheit, and an altimeter setting of 29.99 inches Hg.

On January 1, 2006, at 0930, the pilot contacted the Terre Haute, Indiana (HUF) Automated Flight Service Station (AFSS), to obtain current weather for a flight from UMP to MGR, and to his final destination of Page Field Airport (FMY), Fort Myers, Florida. He also requested to file two IFR flight plans, one for the flight from UMP to MGR, and one for the flight from MGR to FMY.

The AFSS specialist advised there were no weather advisories until the flight entered Georgia. An AIRMET for IFR conditions was issued for portions of Georgia and Florida, which forecasted occasional ceilings below 1,000 feet and/or visibility below 3 statute miles in precipitation, mist, and fog. A high-pressure ridge was dominating over the route of flight with a stationary front lying along southern portions of Alabama and Georgia. The weather en route indicated the sky conditions to be clear below 12,000 feet. From the southern portions of Tennessee to the area north of ABY, the weather was marginal visual flight rule (MVFR) conditions. The ABY Terminal Area Forecast (TAF) was the closest for use en route to and for MGR. The specialist indicated that at 1000 the weather would be ceiling broken 800 feet, overcast clouds 1,500 feet with 5 statute miles with mist. The NWS expected some improvement between 1000-1300; however, marginal conditions after 1300.

The closest weather reporting station to UMP was 13 miles to the southwest. The weather reported at the time of the briefing included wind from 110 degrees at 5 knots, visibility 7 statute miles, and sky clear below 12,000 feet.

A review of flight service station data revealed no record of the pilot requesting any in-flight weather information.

#### AIRPORT INFORMATION

Dawson Municipal Airport was comprised of a single 4,510-foot runway, oriented in a 13/31 configuration. The airport had VOR/DME and GPS instrument approaches to runway 31.

#### WRECKAGE INFORMATION

The initial impact point (IIP) was a ground scar located approximately 590 feet from the approach end of runway 31, and 110 feet to the south of the runway. Propeller slash marks were observed in the ground at the IIP. The wreckage path continued approximately 50 feet, to the main wreckage, on a heading of 112 degrees.

The airplane came to rest on a heading of 103 degrees, facing the approach end of runway 31. The wings and tail section remained attached to the fuselage; however, both wingtips and the left side of the horizontal stabilizer exhibited impact damage. Additionally, the nose section of the airplane was crushed inward to the instrument panel.

Flight control continuity was confirmed from the cockpit to all flight control surfaces.

The fuel selectors for both engines were selected to the main tanks. The fuel tanks in each wing were drained, and contained approximately 4 gallons of total fuel. The fuel tanks and fuel lines were not compromised.

The left and right engine crankshafts were rotated by hand at their respective propeller flanges. Valve train and crankshaft continuity was confirmed to the rear accessory drive on both engines. Thumb compression and suction was also obtained on all cylinders. The magnetos from both engines were tested on the engines, and produced spark at all terminal leads. Examination of the top spark plugs, on both engines, revealed their electrodes were intact and light gray in color.

#### MEDICAL AND PATHOLOGICAL INFORMATION

The Georgia Bureau of Investigation, Division of Forensic Sciences performed an autopsy on the pilot on January 2, 2006.

The FAA Toxicology and Accident Research Laboratory, Oklahoma City, Oklahoma conducted toxicological testing on the pilot. According to the pilot's toxicology test results, pantoprazole was detected in the pilot's blood and lung.

A review of the pilot's FAA medical file revealed that the pilot was taking Celebrex for muscle discomfort. Additionally, two recently refilled prescription medications were observed in the wreckage: Protonix (40mg) and Lipitor (20mg).

#### TESTS AND RESEARCH

A handheld Garmin GPSmap 296 unit, which was recovered from the wreckage, was sent to the manufacturer for data extraction. Examination of the data revealed the airplane departed UMP at 1040, and proceeded direct to the Moultrie, Georgia area. The airplane performed one

approach to the Moultrie Airport, then proceeded to the Albany Airport and attempted one approach there. The airplane then continued to the Dawson Airport, where it circled the airport 5 times before its position was last recorded at 1444, just west of the runway.

**ADDITIONAL INFORMATION**

According to fuel receipts, the airplane was last fueled on December 31, 2005, at UMP, with 36 gallons of fuel. According to personnel at UMP, this fueling filled the airplanes tanks.

According to the Beechcraft Baron Pilot's Operating Handbook, the airplane was equipped with an auxiliary fuel system, and had a total capacity of 136 gallons of useable fuel. Assuming an altitude of 8,000 feet and a power setting of 2300 rpm, each engine would consume approximately 12-13 gallons of fuel per hour giving the airplane an endurance of approximately 4.5 hours.

According to 14 CFR Part 61.57 (c), "No person may act as pilot in command under IFR or in weather conditions less than the minimums prescribed for VFR, unless within the preceding 6 calendar months, that person has performed and logged...(i) at least six instrument approaches; (ii) holding procedures; and (iii) intercepting and tracking courses through the use of navigation systems."

The airplane was released to a representative of the owner's insurance company on November 28, 2006.

**Pilot Information**

<b>Certificate:</b>	Private	<b>Age:</b>	49, Male
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 3 Without Waivers/Limitations	<b>Last FAA Medical Exam:</b>	07/01/2002
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	02/01/2003
<b>Flight Time:</b>	1538 hours (Total, all aircraft), 1329 hours (Pilot In Command, all aircraft), 14 hours (Last 90 days, all aircraft)		

## Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N8165W
Model/Series:	D55	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	TE-610
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	10/01/2005, 100 Hour	Certified Max Gross Wt.:	
Time Since Last Inspection:	6 Hours	Engines:	2 Reciprocating
Airframe Total Time:	1302 Hours at time of accident	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	IO-520-C
Registered Owner:	Joseph Krier	Rated Power:	
Operator:	Joseph Krier	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ABY, 197 ft msl	Distance from Accident Site:	17 Nautical Miles
Observation Time:	1450 EST	Direction from Accident Site:	120°
Lowest Cloud Condition:		Visibility	1 Miles
Lowest Ceiling:	Overcast / 100 ft agl	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	160°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.99 inches Hg	Temperature/Dew Point:	19° C / 18° C
Precipitation and Obscuration:			
Departure Point:	INDIANAPOLIS, IN (UMP)	Type of Flight Plan Filed:	IFR
Destination:	Dawson, GA (16J)	Type of Clearance:	IFR
Departure Time:	1030 EST	Type of Airspace:	

## Airport Information

Airport:	Dawson Municipal Airport (16J)	Runway Surface Type:	
Airport Elevation:	333 ft	Runway Surface Condition:	
Runway Used:	NA	IFR Approach:	Unknown
Runway Length/Width:		VFR Approach/Landing:	Unknown

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal, 1 Serious	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 Fatal, 2 Serious	<b>Aircraft Fire:</b>	
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	
<b>Total Injuries:</b>	2 Fatal, 3 Serious	<b>Latitude, Longitude:</b>	31.743056, -84.419167

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Jill M Andrews	<b>Report Date:</b>	05/29/2007
<b>Additional Participating Persons:</b>	Hayward A Marshall; FAA/FSDO; Atlanta, GA Robert Ramey; Raytheon Aircraft Company; Wichita, KS Jason Lukasik; Teledyne Continental Motors; Mobile, AL		
<b>Publish Date:</b>			
<b>Investigation Docket:</b>	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:pubinq@ntsb.gov">pubinq@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.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 [here](#).