

# **Aviation Investigation Final Report**

Location:	ROYAL, Arkansas		Accident Number:	FTW95FA080
Date & Time:	January 3, 1995, 18	:17 Local	Registration:	N101GA
Aircraft:	BEECH	65-90	Aircraft Damage:	Destroyed
Defining Event:			Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General aviation - Positioning			

### **Analysis**

THE PILOT OBTAINED A WEATHER BRIEFING, FILED AN IFR FLIGHT PLAN, AND TOOK OFF AT NIGHT ON A FLIGHT FROM HOT SPRINGS, ARKANSAS, TO PUEBLO, COLORADO. ABOUT ONE MINUTE LATER, HE ADVISED AIR TRAFFIC CONTROL THAT HE NEEDED TO RETURN TO HOT SPRINGS. HE THEN CONTACTED THE AIRPLANE OPERATOR AND SAID THE HEATER WAS NOT WORKING. THE OPERATOR SUGGESTED THAT HE RETURN FOR REPAIRS. THE PILOT WAS THEN HEARD TO SAY, 'OH, SHOOT!' NO FURTHER RADIO TRANSMISSIONS WERE RECEIVED FROM THE FLIGHT. THE AIRPLANE CUT A 400 FOOT SWATH THROUGH TREES, AND THE WRECKAGE PATH MEASURED 940 FEET. WITH EXCEPTION OF A HEATER PROBLEM, NO PREIMPACT MECHANICAL FAILURE WAS EVIDENT.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT INADVERTENTLY ALLOWED THE AIRPLANE TO DESCEND AND COLLIDE WITH TREES, AFTER HE BECAME DIVERTED BY AN INOPERATIVE CABIN HEATER. DARKNESS WAS A RELATED FACTOR.

#### **Findings**

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. CABIN HEATER - INOPERATIVE 2. (F) REASON FOR OCCURRENCE UNDETERMINED

Occurrence #2: IN FLIGHT COLLISION WITH OBJECT Phase of Operation: APPROACH

Findings

- 3. (F) LIGHT CONDITION DARK NIGHT
- 4. (C) DESCENT INADVERTENT PILOT IN COMMAND
- 5. (C) DIVERTED ATTENTION PILOT IN COMMAND
- 6. OBJECT TREE(S)

### **Factual Information**

#### HISTORY OF FLIGHT

On January 3, 1995, approximately 1817 central standard time, a Beech 65-90, N101GA, was destroyed during approach to the Hot Springs, Arkansas, Memorial Airport. The airline transport pilot-in-command and commercial pilot-rated passenger were fatally injured. Visual meteorological conditions prevailed.

The pilot obtained a weather briefing and filed an IFR flight plan to Pueblo, Colorado, at 1442. An IFR clearance was issued at 1810 and the airplane took off from Hot Springs at 1814. One minute later, the pilot advised Memphis Air Route Traffic Control Center he had to return to Hot Springs. He was instructed to maintain 3,000 feet. "We ain't got a problem, we just need to come back in and land," the pilot said. The pilot then asked for permission to switch over to the unicom frequency.

According to the pilot's father, operator of Airborne Flying Service, his son called him on the radio and said the airplane's cabin heater was not working. The father suggested that he return. He said the mechanics were still at the airport, they would fix the heater, and he could resume his flight without too much delay. At about this time, he heard his son say, "Oh, shoot!" This was the last radio contact with the airplane. Two witnesses listening on monitor radios confirmed the conversation. One witness said that whereas the pilot did not sound panicky, his voice was one of concern.

Two witnesses who reported seeing the airplane go down were asked to submit written statements. None were received. One of these witnesses, located 5 miles south of the accident site, was interviewed by telephone. He said he saw a "glow in the clouds" that "spread out." Seconds later, he heard the engines "screaming," saw a "trail of fire," then heard the noise of a "prolonged impact."

#### AIRCRAFT INFORMATION

A maintenance records review disclosed that in October 1993, the airplane's janitrol heater (p/n A10D40, s/n 5771618) was removed because it failed the "heater decay test." After being overhauled and pressure checked, the unit was reinstalled in December 1993. No other complaints about the heater were recorded.

### WRECKAGE AND IMPACT INFORMATION

Examination of the accident site revealed a 400-foot swath cut through the tops of trees on a magnetic heading of 125 degrees. At the 80-foot mark were portions of the right horizontal

stabilizer and elevator. At the 170 and 200-foot marks were portions of the right wing and left horizontal stabilizer and elevator. Also beginning at this point were burned and sooted trees and vegetation. At the 275-foot mark was the lower portion of the rudder with attached trim tab. The first ground marks were noted at the 400-foot mark. At the 650-foot mark was the left main landing gear. The left propeller, engine power turbine disk, and reduction gearbox were 50 feet left of centerline. At the 700-foot mark was the aft portion of the cabin, and 90 feet left of centerline was the nose landing gear.

The cockpit area was located at the 720-foot mark, and the inboard portion of the right wing with attached landing gear was 30 feet right of centerline. At the 820-foot mark was the right engine gas generator assembly. The right propeller was located at the 940-foot mark.

No evidence was found indicative of an inflight fire. Only the cockpit area was gutted. The remaining wreckage was sooted that was easily rubbed off.

#### MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies were performed on both occupants (ME-8-95 and ME-9-95) by the Arkansas State Crime Laboratory in Little Rock. Only one trachea was recovered and examined. According to the pathologist, there was no soot or carbonaceous material in the trachea.

Toxicological screens were conducted by the Armed Forces Institute of Pathology. These tests were negative for drugs. Tests for the presence of carbon monoxide and cyanide could not be performed.

#### ADDITIONAL INFORMATION

The wreckage was released to the owner's representative on January 6, 1995.

### **Pilot Information**

Certificate:	Airline transport; Commercial	Age:	31,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:	Yes
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medicalno waivers/lim.	Last FAA Medical Exam:	January 25, 1994
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	4000 hours (Total, all aircraft), 185 hours (Total, this make and model), 2959 hours (Pilot In Command, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N101GA
Model/Series:	65-90 65-90	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	LJ-11
Landing Gear Type:	Retractable - Tricycle	Seats:	10
Date/Type of Last Inspection:	September 8, 1994 AAIP	Certified Max Gross Wt.:	9000 lbs
Time Since Last Inspection:	53 Hrs	Engines:	2 Turbo prop
Airframe Total Time:	7507 Hrs	Engine Manufacturer:	P&W
ELT:	Installed, not activated	Engine Model/Series:	PT6A-6A
Registered Owner:	AIRBORNE FLYING SERVICE, INC.	Rated Power:	500 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:		Operator Designator Code:	PQGA

### Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	HOT ,540 ft msl	Distance from Accident Site:	6 Nautical Miles
Observation Time:	17:51 Local	Direction from Accident Site:	95°
Lowest Cloud Condition:	Unknown	Visibility	10 miles
Lowest Ceiling:	Broken / 1600 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	6 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	20°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	2°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipita	tion	
Departure Point:	HOT SPRINGS , AR (HOT )	Type of Flight Plan Filed:	IFR
Destination:	PUEBLO, CO (PUB)	Type of Clearance:	IFR
Departure Time:	18:14 Local	Type of Airspace:	Class G

### **Airport Information**

Airport:		Runway Surface Type:	
Airport Elevation:		Runway Surface Condition:	
Runway Used:	0	IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	On-ground
Total Injuries:	2 Fatal	Latitude, Longitude:	34.520732,-93.32006(est)

#### **Administrative Information**

Investigator In Charge (IIC):	Scott, Arnold
Additional Participating Persons:	RODNEY L DOSS; LITTLE ROCK , AR
Original Publish Date:	February 28, 1997
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=19201

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