



National Transportation Safety Board Aviation Accident Data Summary

Location:	CHAMBLEE, GA	Accident Number:	ATL90FA001
Date & Time:	10/01/1989, 1642 EDT	Registration:	N43GT
Aircraft:	BEECH C90	Injuries:	2 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

AFTER TAKING OFF, THE PLT ESTABLISHED RADIO CONTACT WITH DEP CTL & RPRTD A DIRECTIONAL GYRO PROBLEM. SECONDS LATER, HE RPRTD THAT HE WAS LOSING ALL INSTRUMENTS. DEP CTL ATTEMPTED TO PROVIDE NO-GYRO VECTORS. THE PLT WAS INSTRUCTED TO MAKE A FREQ CHANGE. SOON THEREAFTER, RADIO & RADAR CONTACT WERE LOST & THE ACFT CRASHED. BEFORE CRASHING THE ACFT WAS OBSERVED IN A ROLLING ATTITUDE. WRECKAGE WAS FOUND SCATTERED OVER A 600' BY 150' AREA. AN EXAM REVEALED THE RIGHT WING HAD SEPD IN FLT. THERE WAS EVIDENCE THAT THE RIGHT WING HAD FAILED IN AN UPWARD (POSITIVE) DRCTN. THE PLT'S ATTITUDE GYRO WAS DAMAGED DURING IMPACT, BUT NO ROTATIONAL DAMAGE WAS NOTED. THE PLT'S ATTITUDE INDCR & COPLT'S TURN INDCR WERE AIR DRIVEN, THE PLT'S TURN INDCR WAS DC POWERED & THE COPLT'S ATTITUDE INDCR WAS AC POWERED. THE MAINTENANCE LOG DID NOT HAVE A CURRENT STATIC/ALTIMETER & TRANSPONDER CHECK.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: MALFUNCTION OF ONE OR MORE FLIGHT INSTRUMENTS FOR AN UNDETERMINED REASON, FAILUE OF THE PILOT TO MAINTAIN CONTROL OF THE AIRCRAFT WITH PARTIAL PANEL INSTRUMENTS AFTER BECOMING SPATIALLY DISORIENTED, AND HIS EXCEEDING THE DESIGN STRESS LIMITS OF THE AIRCRAFT. THE WEATHER (LOW CEILING) AND MALFUNCTIONING DIRECTIONAL GYRO WERE RELATED FACTORS.

Findings

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

Findings

1. (C) FLIGHT/NAV INSTRUMENTS - UNDETERMINED
2. MAINTENANCE,INSPECTION - NOT PERFORMED
3. (F) FLIGHT/NAV INSTRUMENTS,DIRECTIONAL GYRO - INOPERATIVE

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: MANEUVERING

Findings

4. (F) WEATHER CONDITION - LOW CEILING
5. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND

6. (C) SPATIAL DISORIENTATION - PILOT IN COMMAND

Occurrence #3: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION
Phase of Operation: MANEUVERING

Findings

7. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND

8. WING - OVERLOAD

9. WING - SEPARATION

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Pilot Information

Certificate:	Airline Transport	Age:	48
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	
Flight Time:	2000 hours (Total, all aircraft), 400 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N43GT
Model/Series:	C90 C90	Engines:	2 Turbo Prop
Operator:	ROY BEATTY	Engine Manufacturer:	P&W
Operating Certificate(s) Held:	None	Engine Model/Series:	PT6A-20
Flight Conducted Under:	Part 91: General Aviation - Personal		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PDK, 1002 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 700 ft agl	Wind Speed/Gusts, Direction:	7 knots / , 110°
Temperature:	-18° C	Visibility	2 Miles
Precipitation and Obscuration:			
Departure Point:	CHAMBLEE, GA (PDK)	Destination:	ORLANDO, FL (ORL)

Airport Information

Airport:	DEKALB PEACHTREE (PDK)	Runway Surface Type:	
Runway Used:	0	Runway Surface Condition:	
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC):	PHILLIP POWELL	Adopted Date:	06/30/1992
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 pubinq@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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