



National Transportation Safety Board Aviation Accident Data Summary

Location:	ALBANY, GA	Accident Number:	ATL89FA188
Date & Time:	08/02/1989, 1516 EDT	Registration:	N11TP
Aircraft:	BEECH 70	Injuries:	6 Fatal
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

DURING TAKEOFF, THE ACFT ROLLED ABRUPTLY TO THE RIGHT AFTER LIFT-OFF. SUBSEQUENTLY, THE RIGHT WINGTIP STRUCK THE SURFACE, THEN THE ACFT CARTWHEELED & CRASHED. THE FUSELAGE WAS DESTROYED BY A POST-CRASH FIRE. AN EXAM OF THE ENGS REVEALED THAT THE RIGHT ENG SUPERCHARGER INTERMEDIATE DRIVE GEAR SHAFT HAD BECOME WORN & ONE OF ITS GEAR TEETH HAD FAILED FROM FATIGUE. THERE WAS EVIDENCE THAT AN OUT-OF-MESH CONDITION OCCURRED, WHICH RESULTED IN A PARTIAL LOSS OF ENG POWER DURING TAKEOFF. ALSO, THE ACFT WAS ESTIMATED TO BE 679 LBS OVER ITS MAX CERTIFIED GROSS WEIGHT. DENSITY ALT WAS CALCULATED TO BE ABOUT 2000 FT.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FATIGUE FAILURE OF THE SUPERCHARGER INTERMEDIATE DRIVE GEAR SHAFT (GEAR TOOTH), WHICH RESULTED IN A PARTIAL LOSS OF POWER, AND THE PILOT'S INITIATION OF LIFT-OFF BEFORE REACHING VMC AIRSPEED. FACTORS RELATED TO THE ACCIDENT WERE: THE WORN INTERMEDIATE DRIVE GEAR SHAFT, THE PILOT'S OPERATION OF THE AIRCRAFT ABOVE ITS MAXIMUM CERTIFIED GROSS WEIGHT LIMIT, AND THE HIGH DENSITY ALTITUDE.

Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. (F) ACCESSORY DRIVE ASSY,DRIVE GEAR - WORN
2. (C) ACCESSORY DRIVE ASSY,DRIVE GEAR - FATIGUE

Occurrence #2: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

3. (F) AIRCRAFT WEIGHT AND BALANCE - EXCEEDED - PILOT IN COMMAND
4. (F) WEATHER CONDITION - HIGH DENSITY ALTITUDE
5. (C) LIFT-OFF - PREMATURE - PILOT IN COMMAND
6. (C) AIRSPEED(VMC) - NOT ATTAINED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: TAKEOFF

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	43
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Single-engine
Flight Time:	5000 hours (Total, all aircraft), 35 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N11TP
Model/Series:	70 70	Engines:	2 Reciprocating
Operator:	D.L. PORTER CONSTRUCTION, INC.	Engine Manufacturer:	LYCOMING
Operating Certificate(s) Held:	None	Engine Model/Series:	IGSO-480-A1E6
Flight Conducted Under:	Part 91: General Aviation - Business		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	ABY, 196 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Broken / 10000 ft agl	Wind Speed/Gusts, Direction:	10 knots / , 260°
Temperature:	33° C	Visibility	6 Miles
Precipitation and Obscuration:			
Departure Point:		Destination:	AKRON, OH (CAK)

Airport Information

Airport:	SOUTHWEST GEORGIA RGNL (ABY)	Runway Surface Type:	Asphalt
Runway Used:	34	Runway Surface Condition:	Dry
Runway Length/Width:	5200 ft / 150 ft		

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	5 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:			

Administrative Information

Investigator In Charge (IIC): SCOTT STRICKLAND Adopted Date: 04/15/1991

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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