



National Transportation Safety Board Aviation Accident Data Summary

Location:	MANSFIELD, OH	Accident Number:	ATL88FA052
Date & Time:	12/03/1987, 2159 EST	Registration:	N500TS
Aircraft:	PIPER PA-60-600	Injuries:	1 Serious
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Analysis

THE PILOT DEPARTED LOUISVILLE, KY REPORTEDLY WITH A KNOWN OIL LEAK IN THE RIGHT ENGINE AND WAS ON THE SECOND LEG OF AN ON-DEMAND AIR TAXI CARGO FLIGHT. ABOUT 14 MINUTES AFTER ENTERING MANSFIELD APPROACH CONTROL AIRSPACE, THE PILOT REQUESTED AND RECEIVED AN ALTITUDE CHANGE FROM 5,000 TO 3,000 FT BECAUSE HE 'WAS PICKING UP A LOT OF ICE.' AFTER ENTERING CLEVELAND APPROACH AIRSPACE HE REPORTED THE RIGHT ENGINE HAD FAILED AND REQUESTED TO RETURN TO MANSFIELD. THE PILOT WAS INFORMED OF MANSFIELD WEATHER. HE THEN INDICATED HE WANTED TO TRY CLEVELAND, THEN REPORTED HE COULD NOT MAINTAIN ALTITUDE AND WANTED TO GO TO MANSFIELD. THE PILOT WAS RECEIVING VECTORS FROM MANSFIELD FOR AN ASR APPROACH TO RUNWAY 23 AND AT ABOUT 1 1/2 MILES FROM THE THRESHOLD THE PILOT REPORTED HE WAS LOWERING THE LANDING GEAR. THE AIRCRAFT THEN DISAPPEARED FROM THE RADAR SCOPE. INVESTIGATION REVEALED IMPROPER WELD REPAIRS TO THE RIGHT ENGINE CASE AND SEPARATION OF THE NUMBER SIX CYLINDER FROM THE CASE DUE TO FATIGUE CRACKING IN THE THROUGH BOLTS AND STUDS.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

Findings

Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - MECH FAILURE/MALF

Phase of Operation: CRUISE - NORMAL

Findings

1. 1 ENGINE - FAILURE, TOTAL
 2. ENGINE ASSEMBLY, CRANKCASE - CRACKED
 3. (C) MAINTENANCE, MAJOR REPAIR - IMPROPER - OTHER MAINTENANCE PERSONNEL
 4. (C) ENGINE ASSEMBLY, OTHER - FATIGUE
 5. (C) ENGINE ASSEMBLY, CYLINDER - SEPARATION
 6. (F) OPERATION WITH KNOWN DEFICIENCIES IN EQUIPMENT - CONTINUED - PILOT IN COMMAND
 7. (F) COMPANY-INDUCED PRESSURE - PILOT IN COMMAND
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Occurrence #2: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: APPROACH - FAF/OUTER MARKER TO THRESHOLD (IFR)

Findings

- 8. (F) OBJECT - TREE(S)
 - 9. (F) WEATHER CONDITION - ICING CONDITIONS
 - 10. (F) WEATHER CONDITION - BELOW APPROACH/LANDING MINIMUMS
 - 11. (F) LIGHT CONDITION - DARK NIGHT
 - 12. (C) IN-FLIGHT PLANNING/DECISION - DELAYED - PILOT IN COMMAND
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Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER
Phase of Operation: DESCENT - UNCONTROLLED

Pilot Information

Certificate:	Commercial	Age:	49
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	6870 hours (Total, all aircraft), 1170 hours (Total, this make and model), 6370 hours (Pilot In Command, all aircraft), 337 hours (Last 90 days, all aircraft), 7 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N500TS
Model/Series:	PA-60-600 PA-60-600	Engines:	2 Reciprocating
Operator:	AIR CONTINENTAL, INC.	Engine Manufacturer:	LYCOMING
Operating Certificate(s) Held:	On-demand Air Taxi (135)	Engine Model/Series:	IO-540-K1J5
Flight Conducted Under:	Part 135: Air Taxi & Commuter - Non-scheduled		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	MFD, 1297 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Obscured / 0 ft agl	Wind Speed/Gusts, Direction:	4 knots / , 310°
Temperature:	0° C	Visibility	0 Miles
Precipitation and Obscuration:			
Departure Point:	CINCINNATI, OH (LUK)	Destination:	CLEVELAND, OH (CLE)

Airport Information

Airport:	MANSFIELD LAHM MUNICIPAL (MFD)	Runway Surface Type:	Asphalt
Runway Used:	23	Runway Surface Condition:	Dry
Runway Length/Width:	6795 ft / 150 ft		

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	WALTER G STINER	Adopted Date:	12/27/1988
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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