



National Transportation Safety Board Aviation Accident Final Report

Location:	LAKEVILLE, MI	Accident Number:	CHI90MA162
Date & Time:	06/26/1990, 1616 EDT	Registration:	N315RC
Aircraft:	PIPER PA-46-310P	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Business		

Analysis

DRG IFR DEP, PLT RCVD PROGRESSIVE ALT CLNCs TO CLIMB TO 15,000'. AT 1607 EDT, HE WAS VCTRD FOR 'A GOOD RATE OF CLIMB' THRU 14,000' WITH CLNC TO PROCEED ON COURSE AFTER LVG 14,000' FOR 15,000'. RADAR DATA INDCD A STEADY CLIMB TIL ACFT WAS ABV 13,000'. AS IT CLIMBED FM 13,300' TO 13,900' (MAX RECORDED ALT), ITS SPD SLOWED FM ABT 115 KTS TO BLO 80 KTS. AT 1613 EDT, PLT WAS CLRD TO PROCD DRCT & CHG FREQ. RADAR DATA SHOWED THAT AFTER RCHG 13,900', ACFT DEVIATED FM COURSE & ENTERED STEEP DSCNT. RADAR CTC WAS LOST & INFLT BREAKUP OCCURRED. PIECES OF WNGS & STABILIZERS WERE FND UP TO 1.5 MI FM FUSELAGE. TRAJECTORY STUDY DISCLOSED BREAKUP OCCURRED BTN 6000' & 9000' MSL. EXAM OF FRACTURES ON MAJOR CMPTS REVEALED CHARACTERISTICS TYPICAL OF OVERSTRESS; NO PREEEXISTING CRACKS WERE FND. NO AUTOPLT FAILURE OR BIRD STRIKE WAS FND. CLDS WERE LAYERED TO 20,000'; FRZG LVL WAS ABT 12,500'. THERE WAS EVIDENCE ACFT WAS IN OR NR CONVECTIVE PRECIP ABV FRZG LVL FOR ABT 1.5 MIN BFR RAPID DSCNT. FND PITOT HEAT SW 'OFF' & INDUCTION AIR DOOR IN ITS PRIMARY PSN. (SEE: NTLS/SIR-92/03)

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT'S FAILURE TO USE THE AIRPLANE'S ICE PROTECTION EQUIPMENT, WHICH RESULTED IN A PERFORMANCE LOSS DUE TO INDUCTION ICING, PROPELLER ICING, OR BOTH, WHILE FLYING IN CONVECTIVE INSTRUMENT METEOROLOGICAL CONDITIONS (IMC) AT AND ABOVE THE FREEZING LEVEL. THE PERFORMANCE LOSS LED TO A STALL, THE RECOVERY FROM WHICH PROBABLY WAS EXACERBATED BY THE PILOT'S IMPROPER RESPONSE TO ERRONEOUS AIRSPEED INDICATIONS THAT RESULTED FROM BLOCKAGE OF THE PITOT TUBE BY ATMOSPHERIC ICING.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: CLIMB

Findings

1. WEATHER CONDITION - CLOUDS
2. (F) WEATHER CONDITION - ICING CONDITIONS
3. (C) PITOT/STATIC SYSTEM - ICE
4. (C) ANTI-ICE/DEICE SYSTEM - NOT USED - PILOT IN COMMAND
5. (C) FLIGHT/NAV INSTRUMENTS,AIRSPEED INDICATOR - FALSE INDICATION
6. FUEL SYSTEM, RAM AIR/INDUCTION AIR - ICE
7. PROPELLER SYSTEM/ACCESSORIES - ICE
8. (C) AIRSPEED - NOT MAINTAINED - PILOT IN COMMAND
9. (C) STALL - INADVERTENT - PILOT IN COMMAND
10. (C) REMEDIAL ACTION - IMPROPER - PILOT IN COMMAND

Occurrence #2: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: DESCENT - UNCONTROLLED

Findings

11. (C) DESIGN STRESS LIMITS OF AIRCRAFT - EXCEEDED - PILOT IN COMMAND
12. STABILIZER - OVERLOAD
13. STABILIZER - SEPARATION
14. WING - OVERLOAD
15. WING - SEPARATION

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Private	Age:	57, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	01/23/1990
Occupational Pilot:	Last Flight Review or Equivalent:		
Flight Time:	983 hours (Total, all aircraft), 197 hours (Total, this make and model), 887 hours (Pilot In Command, all aircraft), 45 hours (Last 90 days, all aircraft), 17 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N315RC
Model/Series:	PA-46-310P PA-46-310P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	46-8508044
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	06/01/1990, Annual	Certified Max Gross Wt.:	4100 lbs
Time Since Last Inspection:	7 Hours	Engines:	1 Reciprocating
Airframe Total Time:	710 Hours	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, not activated	Engine Model/Series:	TSIO-520-BE
Registered Owner:	D & M EXPRESS, INC	Rated Power:	310 hp
Operator:	D & M EXPRESS, INC	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PTK, 980 ft msl	Distance from Accident Site:	16 Nautical Miles
Observation Time:	1550 EDT	Direction from Accident Site:	230°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	Broken / 6000 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	12 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	220°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.9 inches Hg	Temperature/Dew Point:	24° C / 13° C
Precipitation and Obscuration:			
Departure Point:	FLINT, MI (FNT)	Type of Flight Plan Filed:	IFR
Destination:	AKRON, OH (CAK)	Type of Clearance:	IFR
Departure Time:	1602 EDT	Type of Airspace:	Class E

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	STEPHEN A WILSON	Report Date:	03/05/1993
Additional Participating Persons:			
Publish Date:			
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 pubinquiry@ntsb.gov , or at 800-877-6799. Dockets released after this date are available at http://dms.nts.gov/pubdms/ .		

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