



National Transportation Safety Board Aviation Accident Final Report

Location:	BARTONVILLE, IL	Accident Number:	CHI90FA096
Date & Time:	03/10/1990, 1228 CST	Registration:	N410HC
Aircraft:	PIPER PA-60-601P	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Personal

Analysis

BEFORE TAKEOFF, THE PLT RCVD A WX BRIEFING & WAS ADZD OF TSTMS & HVY RAIN ALONG THE ROUTE. THE BRIEFING INCLUDED A WARNING OF A SEVERE TSTM WATCH WITH HAIL, WIND GUSTS TO 65 KTS & A SIGMET (31C). THE PLT FILED AN IFR FLT PLAN & TOOK OFF AT 1148 CST. WHILE EN ROUTE AT 15,000 MSL, HE REQD & RCVD CLNC TO DIVERT 10 DEG LEFT TO AVOID 'SOME CLOUDS.' SOON THEREAFTER, THE ATC CTLR NOTICED THE ACFT WAS ABOUT 500' HI & REMINDED THE PLT TO MAINT 15,000'. THE PLT ACKNOWLEDGED, THEN THERE WAS NO FURTHER COMMUNICATION WITH THE ACFT. SUBSEQUENTLY, AN IN-FLT BREAKUP OF THE ACFT OCCURRED & THE PLANE CRASHED. THE LEFT OUTBOARD WING PANEL SEPD FM POSITIVE OVERLOAD FAILURE & WAS FOUND ABOUT 1 MI FM THE MAIN WRECKAGE. NO PREIMPACT FATIGUE WAS FND. A WITNESS, WHO SAW THE ACFT DSCNDG OUT OF THE CLOUDS, SAW A FUNNEL CLOUD IN THE AREA BEFORE THE ACDNT.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE PILOT ALLOWED THE AIRCRAFT TO EXCEED ITS DESIGN STRESS LIMITS AFTER ENCOUNTERING ADVERSE WEATHER. FACTORS RELATED TO THE ACCIDENT WERE: THE PILOT'S IMPROPER EVALUATION OF THE WEATHER AND THE ADVERSE WEATHER CONDITONS.

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER

Phase of Operation: CRUISE - NORMAL

Findings

1. (F) WEATHER EVALUATION - IMPROPER - PILOT IN COMMAND
2. (F) WEATHER CONDITION - THUNDERSTORM
3. (F) WEATHER CONDITION - UPDRAFT
4. (F) WEATHER CONDITION - DOWNDRAFT
5. (F) WEATHER CONDITION - TURBULENCE

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

Phase of Operation: UNKNOWN

Findings

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

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Factual Information

Pilot Information

Certificate:	Commercial	Age:	60, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	Glider	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):		Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	06/19/1989
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	3312 hours (Total, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	PIPER	Registration:	N410HC
Model/Series:	PA-60-601P PA-60-601P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	61P-0367-116
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	6000 lbs
Time Since Last Inspection:	0 Hours	Engines:	2 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:		Engine Model/Series:	IO-540-S1A5
Registered Owner:	BHP, INC.	Rated Power:	290 hp
Operator:	BHP, INC.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	PIA, 660 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	1230 CST	Direction from Accident Site:	320°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	0 Miles
Lowest Ceiling:	Obscured / 400 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	18 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:	CAHOKIA, IL (CPS)	Type of Flight Plan Filed:	IFR
Destination:	ROCHELLE, IL (12C)	Type of Clearance:	IFR
Departure Time:	1148 CST	Type of Airspace:	

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
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	STEPHEN A WILSON	Report Date:	06/16/1992
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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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).