



Aviation Investigation Final Report

Location:	TRAVERSE CITY, Michigan	Accident Number:	CHI85LA124
Date & Time:	February 26, 1985, 19:08 Local	Registration:	N1816M
Aircraft:	BEECH A36	Aircraft Damage:	Substantial
Defining Event:		Injuries:	1 None
Flight Conducted Under:	Part 135: Air taxi & commuter - Non-scheduled		

Analysis

ACCORDING TO THE PLT, NO ICING PIREPS OR SIGMETS WERE RECEIVED DURING HIS PREFLT WX BRIEFING. HOWEVER, THE NWS BRIEFER STATED THAT HE TOLD HIM OF ONE PIREP & ONE SIGMET CONCERNING ICING THAT AFFECTED HIS PROPOSED ROUTE OF FLT. EN ROUTE TO HIS DESTINATION, THE PLT HAD TO DIVERT DUE TO LOW CEILINGS. HE THEN BEGAN TO NOTICE ICE ON HIS WINGS AS HE FLEW THRU HEAVY RAIN. HE BEGAN AN INSTRUMENT APPROACH WITH A ONE INCH BUILDUP OF ICE. AS THE ICING INCREASED, HE USED FULL POWER TO MAINTAIN A SAFE SPEED MARGIN. OVER THE APPROACH LIGHTS, HE REDUCED POWER SLIGHTLY & LOWERED THE GEAR. THE AIRSPEED DROPPED RAPIDLY & THE LEFT WING STALLED. SUBSEQUENTLY, THE ACFT IMPACTED A SNOW BANK APRX 40 FT SHORT OF THE RWY & WAS DAMAGED. AN EXAM OF THE ACFT REVEALED A ONE INCH THICK LAYER OF MIXED RIME & CLEAR ICE ON THE LEADING EDGES OF THE WINGS & TAIL SURFACES.

Probable Cause and Findings

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

Findings

Occurrence #1: IN FLIGHT ENCOUNTER WITH WEATHER
Phase of Operation: APPROACH

Findings

1. (C) PLANNING/DECISION - IMPROPER - PILOT IN COMMAND
2. (F) WEATHER CONDITION - BELOW APPROACH/LANDING MINIMUMS
3. FLIGHT TO ALTERNATE DESTINATION - PERFORMED - PILOT IN COMMAND
4. (C) FLIGHT INTO KNOWN ADVERSE WEATHER - PERFORMED - PILOT IN COMMAND
5. (F) WEATHER CONDITION - RAIN
6. (F) WEATHER CONDITION - ICING CONDITIONS
7. (C) WING - ICE
8. (F) STABILIZER - ICE

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

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

Findings

9. (F) AIRCRAFT PERFORMANCE, LANDING CAPABILITY - DETERIORATED
10. STALL - INADVERTENT

Occurrence #3: IN FLIGHT COLLISION WITH TERRAIN/WATER

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

Findings

11. (F) TERRAIN CONDITION - SNOWBANK

Factual Information

Pilot Information

Certificate:	Commercial; Flight instructor	Age:	24, Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	Airplane multi-engine; Airplane single-engine; Instrument airplane	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	October 31, 1984
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	
Flight Time:	1665 hours (Total, all aircraft), 136 hours (Total, this make and model), 1477 hours (Pilot In Command, all aircraft), 264 hours (Last 90 days, all aircraft), 9 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	BEECH	Registration:	N1816M
Model/Series:	A36 A36	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	E-1801
Landing Gear Type:	Retractable - Tricycle	Seats:	6
Date/Type of Last Inspection:	October 18, 1984 100 hour	Certified Max Gross Wt.:	3600 lbs
Time Since Last Inspection:	50 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	2483 Hrs	Engine Manufacturer:	CONTINENTAL
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	IO-520-BB
Registered Owner:	J.L. ADAMS	Rated Power:	285 Horsepower
Operator:		Operating Certificate(s) Held:	On-demand air taxi (135)
Operator Does Business As:	FORTUNES UNLIMITED	Operator Designator Code:	PDQA

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night/dark
Observation Facility, Elevation:	TVC ,624 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	19:09 Local	Direction from Accident Site:	100°
Lowest Cloud Condition:	Scattered / 300 ft AGL	Visibility	3 miles
Lowest Ceiling:	Broken / 900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	15 knots / 7 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	-1°C / -2°C
Precipitation and Obscuration:	N/A - None - Fog		
Departure Point:	ALPENA , MI (APN)	Type of Flight Plan Filed:	IFR
Destination:	GAYLORD , MI (4Y4)	Type of Clearance:	IFR
Departure Time:	18:20 Local	Type of Airspace:	Class D

Airport Information

Airport:	CHERRY CAPITOL TVC	Runway Surface Type:	Asphalt
Airport Elevation:	624 ft msl	Runway Surface Condition:	Wet
Runway Used:	28	IFR Approach:	ILS
Runway Length/Width:	6501 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 None	Latitude, Longitude:	44.760929,-85.699211(est)

Administrative Information

Investigator In Charge (IIC): Benzon, Robert

Additional Participating Persons: C PINE; GRAND RAPIDS , MI

Original Publish Date:

Last Revision Date:

Investigation Class: [Class](#)

Note:

Investigation Docket: <https://data.ntsb.gov/Docket?ProjectID=13014>

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The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).