



National Transportation Safety Board Aviation Accident Final Report

Location:	BEMIDJI, MN	Accident Number:	CHI92LA021
Date & Time:	11/01/1991, 1806 CST	Registration:	N8283E
Aircraft:	CESSNA 172	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Minor

Flight Conducted Under: Part 91: General Aviation - Positioning

Analysis

THE PILOT OF A SINGLE ENGINED AIRPLANE HAD JUST RECEIVED AN IFR CLEARANCE. THE AIRPLANE PERFORMED AN INTERSECTION TAKEOFF AT NIGHT WITH WINDS GUSTING TO 30 KNOTS AND BLOWING SNOW. JUST PRIOR TO ROTATION THE PILOT STATED HE OBSERVED THE AIRSPEED INDICATOR DISPLAYING '0'. HE DECIDED TO TAKEOFF BECAUSE HE BELIEVED INSUFFICIENT RUNWAY REMAINED FOR AN ABORTED TAKEOFF. AFTER TAKEOFF THE PILOT STATED HIS OTHER PRESSURE INSTRUMENTS WERE NOT FUNCTIONING PROPERLY. THE AIRPLANE COLLIDED WITH TREE AND TERRAIN APPROXIMATELY 2 MILES FROM THE AIRPORT'S CENTER. THE ON SCENE INVESTIGATION REVEALED A SLIGHT TRACE OF ICE WAS ON THE WINGS LEADING EDGE. ONE OF THE TWO STATIC PORTS WAS FOUND WITH ICE BLOCKING IT. THE SECOND STATIC PORT WAS DESTROYED DURING THE CRASH SEQUENCE. THE ALTERNATE STATIC SOURCE SWITCH WAS FOUND IN THE 'STANDBY' POSITION. THE PILOT STATED, 'I FIGURED I COULD USE THE ALTERNATE STATIC SOURCE ONCE I WAS UP HIGH ENOUGH TO CLEAR THE TREES.'

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: INADEQUATE PREFLIGHT PLANNING AND PREPARATION BY THE PILOT IN COMMAND, THE NON PERFORMANCE OF FAN EMERGENCY PROCEDURE AND NOT MAINTAINING A POSITIVE RATE OF CLIMB ON BEHALF OF THE PILOT IN COMMAND. FACTORS CONTRIBUTING TO THE ACCIDENT WERE THE PILOT IN COMMAND'S NOT REMOVING ICE FROM THE AIRPLANE, NOT OBTAINING ALTITUDE DURING THE CLIMB, AND NOT MAINTAINING DIRECTIONAL CONTROL.

Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

1. PITOT/STATIC SYSTEM - BLOCKED(TOTAL)
2. (C) PREFLIGHT PLANNING/PREPARATION - INADEQUATE - PILOT IN COMMAND
3. (F) ICE/FROST REMOVAL FROM AIRCRAFT - NOT PERFORMED - PILOT IN COMMAND

Occurrence #2: LOSS OF CONTROL - IN FLIGHT

Phase of Operation: TAKEOFF - INITIAL CLIMB

Findings

4. (C) EMERGENCY PROCEDURE - NOT PERFORMED - PILOT IN COMMAND
5. (F) SPATIAL DISORIENTATION - PILOT IN COMMAND
6. (C) CLIMB - NOT MAINTAINED - PILOT IN COMMAND
7. (F) ALTITUDE - NOT OBTAINED - PILOT IN COMMAND
8. (F) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND

Occurrence #3: IN FLIGHT COLLISION WITH OBJECT

Phase of Operation: DESCENT - UNCONTROLLED

Findings

9. OBJECT - TREE(S)

Occurrence #4: IN FLIGHT COLLISION WITH TERRAIN/WATER

Phase of Operation: DESCENT - UNCONTROLLED

Findings

10. TERRAIN CONDITION - SNOW COVERED

Factual Information

Pilot Information

Certificate:	Commercial	Age:	24, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Unknown
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt, Shoulder harness
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 1 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	10/25/1991
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	286 hours (Total, all aircraft), 30 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N8283E
Model/Series:	172 172	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:		Serial Number:	17272169
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	Unknown	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	0 Hours	Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	LYCOMING
ELT:	Installed, activated	Engine Model/Series:	0320H2AD
Registered Owner:	THIEF RIVER AVIATION	Rated Power:	160 hp
Operator:	THIEF RIVER AVIATION	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Night/Dark
Observation Facility, Elevation:	BJI, 1390 ft msl	Distance from Accident Site:	2 Nautical Miles
Observation Time:	1745 CST	Direction from Accident Site:	155°
Lowest Cloud Condition:	Partial Obscuration / 400 ft agl	Visibility	1 Miles
Lowest Ceiling:	Overcast / 400 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	15 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:		Temperature/Dew Point:	-18°C / -18°C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	IFR
Destination:	THIEF RIVER FLS, MN (TVF)	Type of Clearance:	IFR
Departure Time:	1806 CST	Type of Airspace:	

Airport Information

Airport:	BEMIDJI BELTRAMI COUNTY (BJI)	Runway Surface Type:	Asphalt
Airport Elevation:	1390 ft	Runway Surface Condition:	Snow--dry
Runway Used:	31	IFR Approach:	None
Runway Length/Width:	6598 ft / 150 ft	VFR Approach/Landing:	None

Wreckage and Impact Information

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

Administrative Information

Investigator In Charge (IIC):	Frank S Gattolin	Report Date:	12/04/1992
Additional Participating Persons:	MARLAN PERHUS; MINNEAPOLIS, MN		
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 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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