



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	BISMARCK, ND	<b>Accident Number:</b>	CHI91DTG01
<b>Date &amp; Time:</b>	06/01/1991, 0100 CDT	<b>Registration:</b>	N5478K
<b>Aircraft:</b>	CESSNA 172P	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	1 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

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## Analysis

THE NON-INSTRUMENT RATED PILOT HAD ONLY THREE HOURS OF NIGHT TIME AND DID NOT OBTAIN A PREFLIGHT WEATHER BRIEF. HE ELECTED TO TAKE OFF AT 0050 AND MAKE THE RETURN FLIGHT HOME IN ORDER TO MAKE A MILITARY RESERVE COMMITMENT. THE TEMPERATURE WAS 58 DEGREES F, DEW POINT 56 DEGREES F. THE PILOT TOLD A FRIEND AT THE AIRPORT THAT HE WAS GOING TO FOLLOW THE INTERSTATE HIGHWAY. THE WRECKAGE WAS FOUND THE FOLLOWING MORNING EIGHT MILES NORTHEAST OF THE AIRPORT, AND THREE QUARTERS OF A MILE NORTH OF THE INTERSTATE. A STATE TROOPER ON DUTY AT THE TIME OF THE ACCIDENT REPORTED THAT FOG WAS FORMING AT THE TIME OF THE ACCIDENT, AND THAT THE ACCIDENT SITE WAS AN AREA WHERE FOG IS VERY COMMON.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: SPATIAL DISORIENTATION. FACTORS RELATED TO THE ACCIDENT ARE FAILURE TO OBTAIN A PREFLIGHT WEATHER BRIEF, VRF FLIGHT INTO IMC CONDITIONS AND LACK OF TOTAL EXPERIENCE.

## Findings

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

### Findings

1. WEATHER CONDITION - FOG
2. (F) PREFLIGHT BRIEFING SERVICE - NOT OBTAINED - PILOT IN COMMAND
3. (F) VFR FLIGHT INTO IMC - ENCOUNTERED - PILOT IN COMMAND
4. (F) LACK OF TOTAL EXPERIENCE - PILOT IN COMMAND

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Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT

### Findings

5. (C) SPATIAL DISORIENTATION - PILOT IN COMMAND

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	26, Male
<b>Airplane Rating(s):</b>	Single-engine Land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim.	<b>Last FAA Medical Exam:</b>	12/02/1989
<b>Occupational Pilot:</b>		<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	70 hours (Total, all aircraft), 10 hours (Total, this make and model), 30 hours (Pilot In Command, all aircraft), 12 hours (Last 90 days, all aircraft), 2 hours (Last 30 days, all aircraft)		

### Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N5478K
<b>Model/Series:</b>	172P 172P	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	17274144
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	05/15/1991, 100 Hour	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>	34 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4193 Hours	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, activated, did not aid in locating accident	<b>Engine Model/Series:</b>	O-320-DJ2
<b>Registered Owner:</b>	CLIFF HAMILTON, JR.	<b>Rated Power:</b>	160 hp
<b>Operator:</b>	FLIGHT TRAINING, LTD.	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Unknown	Condition of Light:	Night/Dark
Observation Facility, Elevation:	BIS, 1677 ft msl	Distance from Accident Site:	8 Nautical Miles
Observation Time:	1250 CDT	Direction from Accident Site:	210°
Lowest Cloud Condition:	Scattered / 9500 ft agl	Visibility	12 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	5 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	300°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	14° C / 13° C
Precipitation and Obscuration:			
Departure Point:	BISMARCK, ND (BIS)	Type of Flight Plan Filed:	None
Destination:	FARGO, ND (FAR)	Type of Clearance:	None
Departure Time:	0050 CDT	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):	Leslie B Ellingson	Report Date:	03/09/1993
Additional Participating Persons:	CARL R WELKE; FARGO, ND		
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 <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).