



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	Holland, MI	<b>Accident Number:</b>	CEN10FA101
<b>Date &amp; Time:</b>	01/17/2010, 1004 EST	<b>Registration:</b>	N8405E
<b>Aircraft:</b>	CESSNA 172	<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The pilot rented the airplane for most of the day to give rides to friends and had fueled it to capacity. He told a lineman that he planned to takeoff and, if necessary, would file an instrument-flight-rules flight plan and return to the airport. Witnesses saw the airplane take off and disappear into the overcast. Shortly thereafter, they heard an airplane make four passes over the airport. The sound became progressively louder but they could not see the airplane. On the fifth pass, the airplane was seen approximately 50 feet above the ground and it barely cleared a stand of trees. Recorded ATC transcripts revealed that the pilot contacted approach control and told the controller that he was caught in heavy fog and wanted vectors back to the airport. The airplane crashed shortly thereafter in a snow-covered field.

An examination of the airplane showed impact damage consistent with having descended to the ground in an uncontrolled spin. An examination of the airplane's systems showed no anomalies. Although the pilot was instrument rated, he had not flown with instruments since receiving his rating 2 years ago. He had logged 1.8 hours in actual instrument meteorological conditions, 50.8 in simulated IMC, and 6.7 hours in a flight simulator. Ceiling and visibility at the time of the accident was below landing minimums and was recorded as 200 feet overcast and 3/4-mile in mist. The RNAV (GPS) RWY 8 approach chart was found on the pilot's lap. Although the airplane was IFR certified, it was not RNAV or GPS equipped. Toxicology results indicated the presence of propoxyphene, a prescription narcotic medication. The concentration present was consistent with use at a time outside of 24 hours prior to the accident and would not have caused impairment. Cellular telephone records showed that the pilot had engaged in calls and text message conversations with the passenger the night before the accident. Starting at 6:00 P.M. the night before the accident, the pilot received or made calls or text messages every hour, through midnight, until 3:12 A.M. In one conversation, the passenger told the pilot that he would be in good flying shape for the next day, and the pilot replied that he needed to get 4 hours of rest before he flew. The final outgoing call to the passenger was placed at 7:59 A.M. on the day of the accident.

## Flight Events

Initial climb - VFR encounter with IMC  
Maneuvering - Loss of control in flight  
Uncontrolled descent - Collision with terr/obj (non-CFIT)

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's decision to take off in known instrument meteorological conditions without instrument currency or recent instrument experience, which led to spatial disorientation resulting in an inadvertent spin. Contributing to the accident was the pilot's lack of adequate rest prior to the flight.

## Findings

Personnel issues-Action/decision-Action-Incorrect action performance-Pilot - C  
Personnel issues-Physical-Health/Fitness-Use of medication/drugs-Pilot  
Personnel issues-Experience/knowledge-Experience/qualifications-Recent instrument experience-Pilot - C  
Personnel issues-Physical-Alertness/Fatigue-Lack of sleep-Pilot - F  
Environmental issues-Conditions/weather/phenomena-Ceiling/visibility/precip-Low ceiling-Contributed to outcome  
Environmental issues-Conditions/weather/phenomena-Ceiling/visibility/precip-Low visibility-Contributed to outcome

## Pilot Information

<b>Certificate:</b>	Commercial	<b>Age:</b>	23
<b>Airplane Rating(s):</b>	Multi-engine Land; Single-engine Land	<b>Instrument Rating(s):</b>	Airplane
<b>Other Aircraft Rating(s):</b>	None	<b>Instructor Rating(s):</b>	None
<b>Flight Time:</b>	322 hours (Total, all aircraft), 189 hours (Total, this make and model), 273 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft), 1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	CESSNA	<b>Registration:</b>	N8405E
<b>Model/Series:</b>	172 N	<b>Engines:</b>	1 Reciprocating
<b>Operator:</b>	Tulip City Air Service	<b>Engine Manufacturer:</b>	LYCOMING
<b>Operating Certificate(s) Held:</b>	None	<b>Engine Model/Series:</b>	O-320-H2AD
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Instrument Conditions	<b>Condition of Light:</b>	Day
<b>Observation Facility, Elevation:</b>	BIV, 687 ft msl	<b>Weather Information Source:</b>	Weather Observation Facility
<b>Lowest Ceiling:</b>	Overcast / 200 ft agl	<b>Wind Speed/Gusts, Direction:</b>	/ ,
<b>Temperature:</b>	-3°C	<b>Visibility</b>	1 Miles
<b>Precipitation and Obscuration:</b>			
<b>Departure Point:</b>	Tulip City, MI (BIV)	<b>Destination:</b>	Tulip City, MI (BIV)

## Airport Information

Airport:	Tulip City (BIV)	Runway Surface Type:	
Runway Used:	N/A	Runway Surface Condition:	
Runway Length/Width:			

## 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
Latitude, Longitude:	42.675556, -86.125556		

## Administrative Information

Investigator In Charge (IIC):	Arnold W Scott	Adopted Date:	01/07/2011
Investigation Docket:	<a href="http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=75286">http://dms.nts.gov/pubdms/search/dockList.cfm?mKey=75286</a>		

---

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.