



# National Transportation Safety Board Aviation Accident Data Summary

<b>Location:</b>	West Gardiner, ME	<b>Accident Number:</b>	MIA08MA051
<b>Date &amp; Time:</b>	02/01/2008, 1748 EST	<b>Registration:</b>	N102PT
<b>Aircraft:</b>	CESSNA 525	<b>Injuries:</b>	2 Fatal
<b>Flight Conducted Under:</b>	Part 91: General Aviation - Personal		

## Analysis

The instrument-rated private pilot departed on an instrument flight rules (IFR) cross-country flight plan in near-zero visibility with mist, light freezing rain, and moderate mixed and clear icing. After departure, and as the airplane entered a climbing right turn to a track of about 260 degrees, the pilot reported to air traffic control that she was at 1,000 feet, climbing to 10,000 feet. The flight remained on a track of about 260 degrees and continued to accelerate and climb for 38 seconds. The pilot then declared an emergency, stating that she had an attitude indicator failure. At that moment, radar data depicted the airplane at 3,500 feet and 267 knots. Thirteen seconds later, the pilot radioed she wasn't sure which way she was turning. The transmission ended abruptly. Radar data indicated that at the time the transmission ended the airplane was in a steep, rapidly descending left turn. The fragmented airplane wreckage, due to impact and subsequent explosive forces, was located in a wooded area about 6 miles south-southwest of the departure airport. Examination of the accident site revealed a near vertical high-speed impact consistent with an in-flight loss of control. The on-site examination of the airframe remnants did not show evidence of preimpact malfunction. Examination of recovered engine remnants revealed evidence that both engines were producing power at the time of impact and no preimpact malfunctions with the engines were noted.

The failure, single or dual, of the attitude indicator is listed as an abnormal event in the manufacturer's Pilot's Abbreviated Emergency/Abnormal Procedures. The airplane was equipped with three different sources of attitude information: one incorporated in the primary flight display unit on the pilot's side, another single instrument on the copilot's side, and the standby attitude indicator. In the event of a dual failure, on both the pilot and copilot sides, aircraft control could be maintained by referencing to the standby attitude indicator, which is in plain view of the pilot. The indicators are powered by separate sources and, during the course of the investigation, no evidence was identified that indicated any systems, including those needed to maintain aircraft control, failed. The pilot called for a weather briefing while en route to the airport 30 minutes prior to departure and acknowledged the deteriorating weather during the briefing. Additionally, the pilot was eager to depart, as indicated by comments that she made before her departure that she was glad to be leaving and that she had to go. Witnesses indicated that as she was departing the airport she failed to activate taxi and runway lights, taxied on grass areas off taxiways, and announced incorrect taxi instructions and runways. Additionally, no Federal Aviation Administration authorization for the pilot to operate an aircraft between 29,000 feet and 41,000 feet could be found; the IFR flight plan was filed with an en route altitude of 38,000 feet.

The fact that the airplane was operating at night in instrument meteorological conditions and the departure was an accelerating climbing turn, along with the pilot's demonstrated complacency, created an environment conducive to spatial disorientation. Given the altitude and speed of the airplane, the pilot would have only had seconds to identify, overcome, and respond to the effects of spatial disorientation.

## Flight Events

Enroute-climb to cruise - 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 spatial disorientation and subsequent failure to maintain airplane control.

### Findings

Personnel issues-Psychological-Perception/orientation/illu-sio-Spatial disorientation-Pilot - C  
Personnel issues-Action/decision-Action-Incorrect action performance-Pilot - C

### Pilot Information

Certificate:	Private	Age:	45
Airplane Rating(s):	Multi-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	None
Flight Time:	(Estimated) 3522 hours (Total, all aircraft)		

### Aircraft and Owner/Operator Information

Aircraft Manufacturer:	CESSNA	Registration:	N102PT
Model/Series:	525	Engines:	2 Turbo Fan
Operator:	Jeanette A. Symons	Engine Manufacturer:	WILLIAMS
Air Carrier Operating Certificate:	None	Engine Model/Series:	FJ 44 SERIES
Flight Conducted Under:	Part 91: General Aviation - Personal		

### Meteorological Information and Flight Plan

Observation Facility, Elevation:	AUG, 352 ft msl	Weather Information Source:	Weather Observation Facility
Conditions at Accident Site:	Instrument Conditions	Lowest Ceiling:	Overcast / 1800 ft agl
Condition of Light:	Night/Dark	Wind Speed/Gusts, Direction:	3 knots, 20°
Temperature:	-6° C / -6° C	Visibility	3 Miles
Precipitation and Obscuration:	Light - Freezing - Haze		
Departure Point:	West Gardiner, ME (AUG)	Destination:	Lincoln, NE (LNK)

### Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground

## Administrative Information

Investigator In Charge (IIC): Jose Obregon

Adopted Date: 06/27/2011

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](mailto: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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