

**Brief of Accident**

**Adopted 03/16/2011**

CEN10FA063 File No. 27515	12/04/2009	Harrison, MI	Aircraft Reg No. N85EM	Time (Local): 18:45 EST
Make/Model: Piper / PA-31T2				Fatal
Engine Make/Model: P&w Canada / PT6A-60A				Serious
Aircraft Damage: Destroyed				Minor/None
Number of Engines: 2			Crew 1	0
Operating Certificate(s): On-demand Air Taxi			Pass 0	0
Type of Flight Operation: Business				
Reg. Flight Conducted Under: Part 91: General Aviation				
Last Depart. Point: Charlevoix, MI				Condition of Light: Night
Destination: Tifin, OH				Weather Info Src: Unknown
Airport Proximity: Off Airport/Airstrip				Basic Weather: Visual Conditions
				Lowest Ceiling: 4300 Ft. AGL, Overcast
				Visibility: 10.00 SM
				Wind Dir/Speed: 220 / 011 Kts
				Temperature (°C): -2
				Precip/Obscuration: No Obscuration; No Precipitation

Pilot-in-Command	Age: 58	Flight Time (Hours)
Certificate(s)/Rating(s)		Total All Aircraft: 13000
Airline Transport; Flight Instructor; Commercial; Multi-engine Land; Single-engine Land		Last 90 Days: Unk/Nr
Instrument Ratings		Total Make/Model: Unk/Nr
Airplane		Total Instrument Time: UnK/Nr

\*\*\* Note: NTSB investigators either traveled in support of this investigation or conducted a significant amount of investigative work without any travel, and used data obtained from various sources to prepare this aircraft accident report. \*\*\*

Shortly after takeoff in the pressurized twin-engine airplane, the pilot was cleared to climb and maintain 16,000 feet. The pilot reported passing through instrument conditions with heavy snow and that he cleared the tops of the clouds at 7,000 feet. The pilot was then cleared to climb and maintain flight level (FL) 230. Radar data showed the airplane's altitude and course varied throughout the flight after having reached FL 230. Several times during the flight the air traffic controller questioned the pilot regarding his altitude and/or course. Each time the pilot responded that he was at the correct altitude and/or course. The radar data showed that after each of these conversations, the airplane would return to the assigned altitude and/or course. The controller then informed the pilot that, because radar showed the airplane's altitude fluctuating between FL 224 and FL 237, he was going to have to descend out of positive controller airspace. The pilot acknowledged this transmission. The controller instructed the pilot to descend to 17,000 feet. The last transmission from the pilot was when he acknowledged the descent. Radar data showed that one minute later the airplane was at FL 234. During the last minute and 12 seconds of radar data, the airplane reversed its course and descended from FL 233 to FL 214, at which time radar data was lost. Witnesses reported hearing loud engine sounds and seeing the airplane in a spiraling descent until ground impact. Postaccident inspection of the engines did not identify any anomalies that would have precluded normal operation. Most of the fuselage was consumed by fire; however, flight control continuity was established. Given the pilot's experience and the flight's altitude and course variations the investigation considered that the pilot may have suffered from hypoxia; however, due to the postimpact fire the

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functionality of the airplane's pressurization system could not be observed and no conclusive determination could be made that the pilot was impaired.

Updated at Mar 16 2011 10:54AM

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OCCURRENCES

Enroute-descent - Loss of control in flight  
Uncontrolled descent - Collision with terr/obj (non-CFIT)

FINDINGS

Not determined-Not determined-(general)-(general)-Unknown/Not determined - C

Findings Legend: (C) = Cause, (F) = Factor

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The National Transportation Safety Board determines the probable cause(s) of this accident to be:  
A loss of aircraft control for undetermined reasons.