



National Transportation Safety Board Aviation Accident Data Summary

Location:	Grand Rapids, MI	Accident Number:	CHI03LA063
Date & Time:	02/01/2003, 0800 EST	Registration:	N5677X
Aircraft:	Beech A36	Injuries:	2 None
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Analysis

The airplane received substantial damage during a high speed pull-up while recovering from an unusual attitude after a loss of control during an instrument training flight in actual instrument meteorological conditions. The ceiling was reported to be overcast at 700 feet above ground level. The airplane subsequently returned to the departure airport. The certified flight instructor who was on-board the airplane reported that pre-departure checks of the flight instruments were normal. He said that, during the flight the gyroscopic flight instrument became unusable. A postaccident examination revealed that the turn coordinator circuit breaker was in the open position. Further testing revealed no detectable defects in the gyroscopic flight instruments and instrument pressure system.

Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain aircraft control which resulted in the overload of the aircraft. Spatial disorientation, an inoperative turn coordinator, and the pilot's misinterpretation of the flight instruments were contributing factors.

Findings

Occurrence #1: LOSS OF CONTROL - IN FLIGHT
Phase of Operation: CRUISE

Findings

1. (F) ELECTRICAL SYSTEM,CIRCUIT BREAKER - DISENGAGED
2. (F) FLIGHT/NAV INSTRUMENTS,TURN AND BANK INDICATOR - INOPERATIVE
3. (F) WEATHER CONDITION - LOW CEILING
4. (C) FLIGHT/NAVIGATION INSTRUMENT(S) - MISJUDGED - PILOT IN COMMAND(CFI)
5. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND(CFI)
6. (F) SPATIAL DISORIENTATION - PILOT IN COMMAND(CFI)

Occurrence #2: ABRUPT MANEUVER
Phase of Operation: DESCENT - UNCONTROLLED

Findings

7. (C) AIRFRAME - OVERLOAD
8. (C) PULL-UP - ABRUPT - PILOT IN COMMAND(CFI)
9. (F) AIRSPEED - HIGH - PILOT IN COMMAND(CFI)

Flight Instructor Information

Certificate:	Commercial	Age:	37
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Instrument Rating(s):	Airplane
Other Aircraft Rating(s):	None	Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane
Flight Time:	1230 hours (Total, all aircraft), 16 hours (Total, this make and model), 1160 hours (Pilot In Command, all aircraft), 87 hours (Last 90 days, all aircraft), 25 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Pilot Information

Certificate:	Age:
Airplane Rating(s):	Instrument Rating(s):
Other Aircraft Rating(s):	Instructor Rating(s):
Flight Time:	

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N5677X
Model/Series:	A36	Engines:	1 Reciprocating
Operator:	Larry L. Brown	Engine Manufacturer:	Continental
Operating Certificate(s) Held:	None	Engine Model/Series:	IO 550B
Flight Conducted Under:	Part 91: General Aviation - Instructional		

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	GRR, 793 ft msl	Weather Information Source:	Weather Observation Facility
Lowest Ceiling:	Overcast / 700 ft agl	Wind Speed/Gusts, Direction:	9 knots / , 300°
Temperature:	0°C	Visibility	7 Miles
Precipitation and Obscuration:			
Departure Point:	Grand Rapids, MI (GRR)	Destination:	Unknown

Airport Information

Airport:	Gerald R. Ford International (KGRR)	Runway Surface Type:	
Runway Used:		Runway Surface Condition:	
Runway Length/Width:			

Wreckage and Impact Information

Crew Injuries:	2 None	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Latitude, Longitude:	42.880833, -85.522778		

Administrative Information

Investigator In Charge (IIC): John M Brannen

Adopted Date: 09/30/2003

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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