



# **Aviation Investigation Final Report**

Location: Charlevoix, Michigan Accident Number: CHI01LA078

Date & Time: February 2, 2001, 16:30 Local Registration: N4123K

Aircraft: Piper PA-34-220T Aircraft Damage: Substantial

**Defining Event:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

The airplane impacted a snow bank following a loss of control during landing roll. The landing was being made on runway 27. The pilot reported that during the landing roll, the airplane veered to the right of the runway due to too much right aileron input. He reported he neutralized the aileron and steered with the rudder. A gust of wind along with the crosswind then lifted the right wing and the airplane veered to the left where it contacted ice on the runway and slid into a snow bank. Inspection revealed the center of the runway was clear, however, there were patches of ice along the left side of the runway. The snow along the sides of the runway was high enough so that only the tops of the runway lights were visible. The pilot reported winds from 330 at 12 knots, gusting to 17 knots. A weather observation at the airport taken 6 minutes after the accident reported winds from 320 degrees at 9 knots.

### **Probable Cause and Findings**

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot failed to maintain directional control of the airplane due to inadequate compensation for the wind conditions. Factors associated with the accident were the gusty crosswind, the icy runway, and the snow bank.

### **Findings**

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER

Phase of Operation: LANDING - ROLL

#### Findings

- 1. (F) WEATHER CONDITION CROSSWIND
- 2. (F) WEATHER CONDITION GUSTS
- 3. (C) COMPENSATION FOR WIND CONDITIONS INADEQUATE PILOT IN COMMAND
- 4. (C) DIRECTIONAL CONTROL NOT MAINTAINED PILOT IN COMMAND
- 5. (F) TERRAIN CONDITION ICY

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Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER

Phase of Operation: LANDING - ROLL

#### **Findings**

6. (F) TERRAIN CONDITION - SNOWBANK

Page 2 of 6 CHI01LA078

#### **Factual Information**

On February 2, 2001, at 1630 eastern standard time, a Piper PA-34-220T, N4123K, operated by a private pilot, collided with a runway light and snow bank following a loss of directional control during landing. The landing was being made on runway 27 (4,550 feet by 75 feet), at the Charlevoix Municipal Airport, Charlevoix, Michigan. The pilot and his passenger were not injured. The airplane was substantially damaged. The 14 CFR Part 91 flight was operating in visual meteorological conditions and an IFR flight plan was filed. The flight originated from Pontiac, Michigan, at 1500 est.

The pilot reported that during the landing roll, the "...aircraft veered right due to too much right aileron into right crosswind. I neutralized aileron and steered to left with rudder. Wind gust and right crosswind lifted right wing and aircraft veered left, hit ice and slid into left snow bank while moving in forward direction." The pilot reported the left propeller, left main gear, and left flap contacted the snow bank.

The pilot reported the winds were from 330 degrees at 12 knots, gusting to 17 knots, during the landing. A weather observation taken at the Charlevoix Municipal Airport, 6 minutes after the accident, reported the winds were from 320 degrees at 9 knots.

An inspector from the Federal Aviation Administration, Grand Rapids, Michigan, Flight Standards District Office, inspected the runway after the accident. He reported the center of the runway was clear, however, there were patches of ice along the left side of the runway. He reported that the snow along the sides of the runway was high enough so that only the tops of the runway lights were visible.

Page 3 of 6 CHI01LA078

### **Pilot Information**

Certificate:	Private	Age:	51,Male
Airplane Rating(s):	Single-engine land; Multi-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 2 Valid Medical-w/ waivers/lim	Last FAA Medical Exam:	January 25, 2000
Occupational Pilot:	UNK	Last Flight Review or Equivalent:	March 29, 2000
Flight Time:	1337 hours (Total, all aircraft), 235 hours (Total, this make and model), 1239 hours (Pilot In Command, all aircraft), 46 hours (Last 90 days, all aircraft), 21 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## **Aircraft and Owner/Operator Information**

Aircraft Make:	Piper	Registration:	N4123K
Model/Series:	PA-34-220T	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	3449052
Landing Gear Type:	Retractable - Tricycle	Seats:	5
Date/Type of Last Inspection:	February 1, 2001 Annual	Certified Max Gross Wt.:	4750 lbs
Time Since Last Inspection:	162 Hrs	Engines:	2 Reciprocating
Airframe Total Time:	537 Hrs as of last inspection	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	TSIO-360-RB1B
Registered Owner:	On file	Rated Power:	220 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Page 4 of 6 CHI01LA078

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	CVX,680 ft msl	Distance from Accident Site:	
Observation Time:	16:36 Local	Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>		Visibility	10 miles
Lowest Ceiling:	Overcast / 2900 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	320°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	-8°C / -13°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Pontiac, MI (PTK)	Type of Flight Plan Filed:	IFR
Destination:	Charlevoix, MI (CVX)	Type of Clearance:	VFR
Departure Time:	15:00 Local	Type of Airspace:	Class D

## **Airport Information**

Airport:	Charlevoix Municipal Airport CVX	Runway Surface Type:	Asphalt
Airport Elevation:	680 ft msl	<b>Runway Surface Condition:</b>	Ice
Runway Used:	27	IFR Approach:	Visual
Runway Length/Width:	4550 ft / 75 ft	VFR Approach/Landing:	Full stop

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	1 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 None	Latitude, Longitude:	

Page 5 of 6 CHI01LA078

#### **Administrative Information**

Investigator In Charge (IIC):

Additional Participating Persons:

Original Publish Date:

November 1, 2001

Last Revision Date:

Investigation Class:

Class

Note:

The NTSB traveled to the scene of this accident.

Investigation Docket:

https://data.ntsb.gov/Docket?ProjectID=51443

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 Code of Federal Regulations section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 United States Code section 1154(b)). A factual report that may be admissible under 49 United States Code section 1154(b) is available here.

Page 6 of 6 CHI01LA078