



# Aviation Investigation Final Report

<b>Location:</b>	ELYRIA, Ohio	<b>Accident Number:</b>	CHI89LA106
<b>Date &amp; Time:</b>	June 8, 1989, 20:45 Local	<b>Registration:</b>	N2529D
<b>Aircraft:</b>	PIPER PA-38-112	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

THE ACFT WAS ON THE ROLL-OUT AFTER LANDING WHEN IT BEGAN TO PULL TO THE RIGHT. SUBSEQUENTLY, IT WENT OFF THE RIGHT SIDE OF THE RWY & CAME TO REST WITH THE RIGHT MAIN GEAR COLLAPSED. AN EXAM REVEALED THE ATTACHING BOLTS FOR THE RIGHT MAIN GEAR HAD FAILED. THE BOLTS HAD BEEN INSTALLED IN AUGUST OF 1983 IAW AD 83-05-04. SINCE THAT TIME, THE ACFT HAD ACCUMULATED 2467 HRS OF FLT TIME. PIPER SERVICE BULLETING (S/B) #673B, DATED 10/2/86, RECOMMENDED THAT THE ATTACHING BOLTS BE REPLACED WITH NEW HIGHER STRENGTH BOLTS. S/B #673B HAD NOT BEEN INCORPORATED ON THIS ACFT.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: FAILURE (SHEARING) OF THE RIGHT MAIN GEAR ATTACHING BOLTS. A CONTRIBUTING FACTOR WAS: FAILURE OF THE OWNER/OPERATOR TO COMPLY WITH SERVICE BULLETIN #673B.

## Findings

Occurrence #1: MAIN GEAR COLLAPSED  
Phase of Operation: LANDING - ROLL

Findings

1. (C) LANDING GEAR,MAIN GEAR ATTACHMENT - SHEARED
2. (F) MAINTENANCE,SERVICE BULLETIN/LETTER - NOT FOLLOWED - COMPANY/OPERATOR MANAGEMENT

## Factual Information

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	44, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical-w/ waivers/lim	<b>Last FAA Medical Exam:</b>	March 31, 1988
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	215 hours (Total, all aircraft), 50 hours (Total, this make and model), 148 hours (Pilot In Command, all aircraft), 9 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>	PIPER	<b>Registration:</b>	N2529D
<b>Model/Series:</b>	PA-38-112 PA-38-112	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	3879A0355
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	2
<b>Date/Type of Last Inspection:</b>	June 7, 1989 Annual	<b>Certified Max Gross Wt.:</b>	1670 lbs
<b>Time Since Last Inspection:</b>	5 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4138 Hrs	<b>Engine Manufacturer:</b>	LYCOMING
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-235-L2C
<b>Registered Owner:</b>	ECM AIRWAYS INC	<b>Rated Power:</b>	112 Horsepower
<b>Operator:</b>	HURST FLIGHT TRAINING	<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>	HURST FLIGHT TRAINING	<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Dusk
<b>Observation Facility, Elevation:</b>	CLE ,792 ft msl	<b>Distance from Accident Site:</b>	14 Nautical Miles
<b>Observation Time:</b>	20:51 Local	<b>Direction from Accident Site:</b>	80°
<b>Lowest Cloud Condition:</b>	Scattered / 6000 ft AGL	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	10 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	20°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29 inches Hg	<b>Temperature/Dew Point:</b>	29°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>		<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	(22G )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	19:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	LORAIN COUNTY 225	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	794 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	7	<b>IFR Approach:</b>	None
<b>Runway Length/Width:</b>	5000 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop;Traffic pattern

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	1 None	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	41.369422,-82.100166(est)

## Administrative Information

**Investigator In Charge (IIC):** Doub, Mark

**Additional Participating Persons:** BOB KERNER; CLEVELAND , OH

**Original Publish Date:** June 18, 1990

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:**

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=14364>

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