



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | THREE RIVERS, Michigan               | <b>Accident Number:</b> | CHI85LA098  |
| <b>Date &amp; Time:</b>        | January 27, 1985, 16:00 Local        | <b>Registration:</b>    | N5603C      |
| <b>Aircraft:</b>               | CESSNA 140A                          | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                                      | <b>Injuries:</b>        | 1 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

## Analysis

THE SKI EQUIPPED AIRCRAFT WAS TAXIING ON THE FROZEN SURFACE OF THE LAKE WHEN THE TWO BOTTOM BOLTS THAT ATTACHED THE RIGHT SKI TO THE GEAR LEG FAILED THE OVERLOAD FAILED THE TWO TOP BOLTS AND THE SKI FAILED OUT AND UP AT A FORTY FIVE DEGREE ANGLE THIS PERMITTED THE GEAR LEG TO DIG INTO THE ICE AND NOSE THE ACFT OVER INVERTED.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

### Findings

Occurrence #1: AIRFRAME/COMPONENT/SYSTEM FAILURE/MALFUNCTION  
Phase of Operation: TAXI - FROM LANDING

#### Findings

1. (C) LANDING GEAR,SKI ASSEMBLY - DISCONNECTED

## Factual Information

### Pilot Information

|                                  |                                                                                                                                                                                                    |                                          |                 |
|----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------|-----------------|
| <b>Certificate:</b>              | Private                                                                                                                                                                                            | <b>Age:</b>                              | 45, 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--no waivers/lim.                                                                                                                                                             | <b>Last FAA Medical Exam:</b>            | August 30, 1984 |
| <b>Occupational Pilot:</b>       | No                                                                                                                                                                                                 | <b>Last Flight Review or Equivalent:</b> |                 |
| <b>Flight Time:</b>              | 1030 hours (Total, all aircraft), 750 hours (Total, this make and model), 970 hours (Pilot In Command, all aircraft), 33 hours (Last 90 days, all aircraft), 2 hours (Last 24 hours, all aircraft) |                                          |                 |

### Aircraft and Owner/Operator Information

|                                      |                          |                                       |                 |
|--------------------------------------|--------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | CESSNA                   | <b>Registration:</b>                  | N5603C          |
| <b>Model/Series:</b>                 | 140A 140A                | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                          | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Normal                   | <b>Serial Number:</b>                 | 15536           |
| <b>Landing Gear Type:</b>            | Tailwheel                | <b>Seats:</b>                         | 2               |
| <b>Date/Type of Last Inspection:</b> | September 5, 1984 Annual | <b>Certified Max Gross Wt.:</b>       | 1500 lbs        |
| <b>Time Since Last Inspection:</b>   | 24 Hrs                   | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          |                          | <b>Engine Manufacturer:</b>           | CONTINENTAL     |
| <b>ELT:</b>                          | Not installed            | <b>Engine Model/Series:</b>           | C90 SERIES      |
| <b>Registered Owner:</b>             | HARRIS BOULETTE          | <b>Rated Power:</b>                   | 95 Horsepower   |
| <b>Operator:</b>                     |                          | <b>Operating Certificate(s) Held:</b> | None            |
| <b>Operator Does Business As:</b>    |                          | <b>Operator Designator Code:</b>      |                 |

## Meteorological Information and Flight Plan

|                                         |                                  |                                             |                   |
|-----------------------------------------|----------------------------------|---------------------------------------------|-------------------|
| <b>Conditions at Accident Site:</b>     | Visual (VMC)                     | <b>Condition of Light:</b>                  | Day               |
| <b>Observation Facility, Elevation:</b> | SBN ,790 ft msl                  | <b>Distance from Accident Site:</b>         | 36 Nautical Miles |
| <b>Observation Time:</b>                | 16:00 Local                      | <b>Direction from Accident Site:</b>        | 45°               |
| <b>Lowest Cloud Condition:</b>          | Unknown                          | <b>Visibility</b>                           | 8 miles           |
| <b>Lowest Ceiling:</b>                  | Broken / 3600 ft AGL             | <b>Visibility (RVR):</b>                    |                   |
| <b>Wind Speed/Gusts:</b>                | 14 knots /                       | <b>Turbulence Type Forecast/Actual:</b>     | /                 |
| <b>Wind Direction:</b>                  | 220°                             | <b>Turbulence Severity Forecast/Actual:</b> | /                 |
| <b>Altimeter Setting:</b>               | 29 inches Hg                     | <b>Temperature/Dew Point:</b>               | -6°C / -10°C      |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |                                             |                   |
| <b>Departure Point:</b>                 | (HAI )                           | <b>Type of Flight Plan Filed:</b>           | None              |
| <b>Destination:</b>                     | COREY LAKE , MI                  | <b>Type of Clearance:</b>                   | None              |
| <b>Departure Time:</b>                  | 15:50 Local                      | <b>Type of Airspace:</b>                    | Class G           |

## Airport Information

|                             |             |                                  |                           |
|-----------------------------|-------------|----------------------------------|---------------------------|
| <b>Airport:</b>             |             | <b>Runway Surface Type:</b>      | Ice                       |
| <b>Airport Elevation:</b>   | 0 ft msl    | <b>Runway Surface Condition:</b> | Snow                      |
| <b>Runway Used:</b>         | 0           | <b>IFR Approach:</b>             |                           |
| <b>Runway Length/Width:</b> | 0 ft / 0 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> |        | <b>Aircraft Fire:</b>       | None                      |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                      |
| <b>Total Injuries:</b>     | 1 None | <b>Latitude, Longitude:</b> | 41.939411,-85.630844(est) |

## Administrative Information

|                                          |                                                                                                       |
|------------------------------------------|-------------------------------------------------------------------------------------------------------|
| <b>Investigator In Charge (IIC):</b>     | Mc avoy, Edward                                                                                       |
| <b>Additional Participating Persons:</b> | D. HEITER; SOUTH BEND , IN                                                                            |
| <b>Original Publish Date:</b>            |                                                                                                       |
| <b>Last Revision Date:</b>               |                                                                                                       |
| <b>Investigation Class:</b>              | <a href="#">Class</a>                                                                                 |
| <b>Note:</b>                             |                                                                                                       |
| <b>Investigation Docket:</b>             | <a href="https://data.nts.gov/Docket?ProjectID=12994">https://data.nts.gov/Docket?ProjectID=12994</a> |

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