



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | KIMBALL, Nebraska                    | <b>Accident Number:</b> | MKC87LA056  |
| <b>Date &amp; Time:</b>        | March 5, 1987, 19:25 Local           | <b>Registration:</b>    | N5553P      |
| <b>Aircraft:</b>               | PIPER PA-24-250                      | <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 PIC RPTD LANDING RWY 10 WITH A WND FM 080 AT 7 KTS. THE ACFT BEGAN VEERING LEFT AND RAN THROUGH A SNOW BANK WHICH BORDERED THE RWY. THE LEFT MAIN LANDING GEAR COLLAPSED AND THE ACFT SPUN AROUND 180 DEG STOPPING TAIL FIRST. INSP OF THE LANDING GEAR NOTED AN OVERLOAD OF THE GEAR LOCKING MECHANISM.

## Probable Cause and Findings

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

### Findings

Occurrence #1: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

#### Findings

1. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
2. (C) GROUND LOOP/SWERVE - UNCONTROLLED - PILOT IN COMMAND

Occurrence #2: ON GROUND/WATER ENCOUNTER WITH TERRAIN/WATER  
Phase of Operation: LANDING - ROLL

#### Findings

3. TERRAIN CONDITION - SNOWBANK

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Occurrence #3: MAIN GEAR COLLAPSED

Phase of Operation: LANDING - ROLL

Findings

4. LANDING GEAR,GEAR LOCKING MECHANISM - OVERLOAD
5. LANDING GEAR,GEAR LOCKING MECHANISM - FAILURE,TOTAL

## Factual Information

### Pilot Information

|                                  |   |  |                   |
|----------------------------------|---|--|-------------------|
| <b>Certificate:</b>              | Private   | <b>Age:</b>                              | 61, 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/<br>waivers/lim   | <b>Last FAA Medical Exam:</b>            | February 28, 1986 |
| <b>Occupational Pilot:</b>       | No  | <b>Last Flight Review or Equivalent:</b> |                   |
| <b>Flight Time:</b>              | 1000 hours (Total, all aircraft), 1 hours (Total, this make and model), 999 hours (Pilot In Command, all aircraft), 20 hours (Last 90 days, all aircraft) |  |                   |

### Aircraft and Owner/Operator Information

|                                      |                         |                                       |                 |
|--------------------------------------|-------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | PIPER                   | <b>Registration:</b>                  | N5553P          |
| <b>Model/Series:</b>                 | PA-24-250 PA-24-250     | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                         | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Normal                  | <b>Serial Number:</b>                 | 24-617          |
| <b>Landing Gear Type:</b>            | Retractable - Tricycle  | <b>Seats:</b>                         | 4               |
| <b>Date/Type of Last Inspection:</b> | October 11, 1986 Annual | <b>Certified Max Gross Wt.:</b>       | 2800 lbs        |
| <b>Time Since Last Inspection:</b>   |                         | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 3944 Hrs                | <b>Engine Manufacturer:</b>           | LYCOMING        |
| <b>ELT:</b>                          | Installed, activated    | <b>Engine Model/Series:</b>           | O-540-A1A       |
| <b>Registered Owner:</b>             | DONALD J. GERNER        | <b>Rated Power:</b>                   | 250 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> | BFF ,3965 ft msl                 | <b>Distance from Accident Site:</b>         | 40 Nautical Miles |
| <b>Observation Time:</b>                | 19:52 Local                      | <b>Direction from Accident Site:</b>        | 5°                |
| <b>Lowest Cloud Condition:</b>          | Scattered                        | <b>Visibility</b>                           | 25 miles          |
| <b>Lowest Ceiling:</b>                  | Broken                           | <b>Visibility (RVR):</b>                    |                   |
| <b>Wind Speed/Gusts:</b>                | 7 knots /                        | <b>Turbulence Type Forecast/Actual:</b>     | /                 |
| <b>Wind Direction:</b>                  | 80°                              | <b>Turbulence Severity Forecast/Actual:</b> | /                 |
| <b>Altimeter Setting:</b>               | 30 inches Hg                     | <b>Temperature/Dew Point:</b>               | 4°C / -1°C        |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                   |
| <b>Departure Point:</b>                 | KIMALL , NE                      | <b>Type of Flight Plan Filed:</b>           | None              |
| <b>Destination:</b>                     |                                  | <b>Type of Clearance:</b>                   | None              |
| <b>Departure Time:</b>                  | 19:00 Local                      | <b>Type of Airspace:</b>                    | Class G           |

## Airport Information

|                             |                  |                                  |                 |
|-----------------------------|------------------|----------------------------------|-----------------|
| <b>Airport:</b>             | KIMBALL MUNI IBM | <b>Runway Surface Type:</b>      | Concrete;Snow   |
| <b>Airport Elevation:</b>   | 4911 ft msl      | <b>Runway Surface Condition:</b> | Dry             |
| <b>Runway Used:</b>         | 10               | <b>IFR Approach:</b>             | None            |
| <b>Runway Length/Width:</b> | 6200 ft / 75 ft  | <b>VFR Approach/Landing:</b>     | 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> | 41.230094,-103.650337(est) |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Thorpe, Clint   |
| <b>Additional Participating Persons:</b> | ILENE VAN LENT; LINCOLN , NE  |
| <b>Original Publish Date:</b>            | May 2, 1988   |
| <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=34346">https://data.nts.gov/Docket?ProjectID=34346</a> |

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