



# National Transportation Safety Board Aviation Accident Final Report

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|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | YODER, CO                            | <b>Accident Number:</b> | DEN85LA056  |
| <b>Date &amp; Time:</b>        | 01/02/1985, 1707 MST                 | <b>Registration:</b>    | N2112K      |
| <b>Aircraft:</b>               | PIPER PA-28-181                      | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                                      | <b>Injuries:</b>        | 3 None      |
| <b>Flight Conducted Under:</b> | Part 91: General Aviation - Personal |                         |             |

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## Analysis

ENGINE QUIT DURING CRUISE FLIGHT. PILOT MADE FORCED LANDING ON DIRT ROAD DURING WHICH THE ACFT VEERED OFF THE ROAD AND COLLIDED WITH A FENCE POST. FIRE DEPARTMENT OFFICIALS REPORTED NO EVIDENCE OF FUEL EITHER IN THE FUEL TANKS OR AROUND THE ACFT.

## Probable Cause and Findings

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

## Findings

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Occurrence #1: LOSS OF ENGINE POWER(TOTAL) - NONMECHANICAL  
Phase of Operation: CRUISE - NORMAL

### Findings

1. FLUID,FUEL - EXHAUSTION
  2. (C) PREFLIGHT PLANNING/PREPARATION - POOR - PILOT IN COMMAND
  3. (C) FUEL CONSUMPTION CALCULATIONS - INACCURATE - PILOT IN COMMAND
  4. REFUELING - NOT PERFORMED - PILOT IN COMMAND
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Occurrence #2: FORCED LANDING  
Phase of Operation: DESCENT - EMERGENCY

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Occurrence #3: LOSS OF CONTROL - ON GROUND/WATER  
Phase of Operation: LANDING - ROLL

### Findings

5. TERRAIN CONDITION - LOOSE GRAVEL/SANDY
  6. LIGHT CONDITION - DUSK
  7. (C) DIRECTIONAL CONTROL - NOT MAINTAINED - PILOT IN COMMAND
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Occurrence #4: ON GROUND/WATER COLLISION WITH OBJECT  
Phase of Operation: LANDING - ROLL

### Findings

8. OBJECT - FENCE

## Factual Information

### Pilot Information

|                                  |  |  |                            |
|----------------------------------|--|--|----------------------------|
| <b>Certificate:</b>              | Private  | <b>Age:</b>                              | 30, Male                   |
| <b>Airplane Rating(s):</b>       | Multi-engine Land; Single-engine Land  | <b>Seat Occupied:</b>                    | Left                       |
| <b>Other Aircraft Rating(s):</b> | None   | <b>Restraint Used:</b>                   | Seatbelt, Shoulder harness |
| <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 2 Valid Medical--w/ waivers/lim.   | <b>Last FAA Medical Exam:</b>            | 06/07/1984                 |
| <b>Occupational Pilot:</b>       |  | <b>Last Flight Review or Equivalent:</b> |                            |
| <b>Flight Time:</b>              | 194 hours (Total, all aircraft), 9 hours (Total, this make and model), 139 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 10 hours (Last 30 days, all aircraft), 4 hours (Last 24 hours, all aircraft) |  |                            |

### Aircraft and Owner/Operator Information

|                                      |                         |                                       |                 |
|--------------------------------------|-------------------------|---------------------------------------|-----------------|
| <b>Aircraft Make:</b>                | PIPER                   | <b>Registration:</b>                  | N2112K          |
| <b>Model/Series:</b>                 | PA-28-181 PA-28-181     | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                         | <b>Amateur Built:</b>                 | No              |
| <b>Airworthiness Certificate:</b>    | Normal; Utility         | <b>Serial Number:</b>                 | 287990234       |
| <b>Landing Gear Type:</b>            | Tricycle                | <b>Seats:</b>                         | 4               |
| <b>Date/Type of Last Inspection:</b> | 10/07/1984, Annual      | <b>Certified Max Gross Wt.:</b>       | 2550 lbs        |
| <b>Time Since Last Inspection:</b>   | 6515 Hours              | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 121829 Hours            | <b>Engine Manufacturer:</b>           | LYCOMING        |
| <b>ELT:</b>                          | Installed               | <b>Engine Model/Series:</b>           | O-360-A4M       |
| <b>Registered Owner:</b>             | DOUGLAS J. LENNOX       | <b>Rated Power:</b>                   | 180 hp          |
| <b>Operator:</b>                     | DOUGLAS J. LENNOX       | <b>Operating Certificate(s) Held:</b> | None            |
| <b>Operator Does Business As:</b>    | CASTLEWOOD AVIATION INC | <b>Operator Designator Code:</b>      | PSS             |

## Meteorological Information and Flight Plan

|                                  |                      |   |                   |
|----------------------------------|----------------------|---|-------------------|
| Conditions at Accident Site:     | Visual Conditions    | Condition of Light:                     | Dusk              |
| Observation Facility, Elevation: | COS, 6172 ft msl     | Distance from Accident Site:            | 35 Nautical Miles |
| Observation Time:                | 1650 MST             | Direction from Accident Site:           | 245°              |
| Lowest Cloud Condition:          | Unknown / 0 ft agl   | Visibility                              | 100 Miles         |
| Lowest Ceiling:                  | Broken / 7500 ft agl | Visibility (RVR):                       | 0 ft              |
| Wind Speed/Gusts:                | 9 knots /            | Turbulence Type<br>Forecast/Actual:     | /                 |
| Wind Direction:                  | 350°                 | Turbulence Severity<br>Forecast/Actual: | /                 |
| Altimeter Setting:               | 30 inches Hg         | Temperature/Dew Point:                  | -1° C / -12° C    |
| Precipitation and Obscuration:   |                      |   |                   |
| Departure Point:                 | TULSA, OK (TUL)      | Type of Flight Plan Filed:              | VFR               |
| Destination:                     | ENGLEWOOD, CO (APA)  | Type of Clearance:                      | VFR               |
| Departure Time:                  | 1352 CST             | Type of Airspace:                       | Class E           |

## Wreckage and Impact Information

|                     |        |                      |             |
|---------------------|--------|----------------------|-------------|
| Crew Injuries:      | 1 None | Aircraft Damage:     | Substantial |
| Passenger Injuries: | 2 None | Aircraft Fire:       | None        |
| Ground Injuries:    | N/A    | Aircraft Explosion:  | None        |
| Total Injuries:     | 3 None | Latitude, Longitude: |             |

## Administrative Information

|                                   |  |              |  |
|-----------------------------------|--|--------------|--|
| Investigator In Charge (IIC):     | ARNOLD W SCOTT   | Report Date: |  |
| Additional Participating Persons: | BLAIN E ROBBINS; BROOMFIELD, CO  |              |  |
| Publish Date:                     |  |              |  |
| 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 <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> . |              |  |

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The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).