



# National Transportation Safety Board Aviation Accident Data Summary

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|--------------------------------|--------------------------------------|-------------------------|--------------------|
| <b>Location:</b>               | SUGARLOAF KEY, FL                    | <b>Accident Number:</b> | MIA97LA032         |
| <b>Date &amp; Time:</b>        | 12/01/1996, 1200 EST                 | <b>Registration:</b>    | N9545J             |
| <b>Aircraft:</b>               | Piper PA-28-180                      | <b>Injuries:</b>        | 1 Serious, 1 Minor |
| <b>Flight Conducted Under:</b> | Part 91: General Aviation - Personal |                         |                    |

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## Analysis

While in cruise flight the engine lost power, and the pilot elected to land on a road. As the airplane touched down the left wing struck the brush on the side of the road, veered left, and turned 180 degrees opposite the direction of travel. Witnesses reported seeing black smoke coming from the engine before impact. The airplane's engine was disassembled, and the examination revealed that the No. 3 connecting rod cap had become detached from the crankshaft assembly, resulting in external damage to the engine. In addition, the remaining connecting rod assemblies were found to be incorrectly installed, and the nuts were all found opposite end down. The No. 2 and No. 4 assemblies were found to be loose.

## Probable Cause

The National Transportation Safety Board determines the probable cause(s) of this accident to be: a complete loss of engine power due to a disconnected connecting rod cap.

## Findings

Occurrence #1: LOSS OF ENGINE POWER(PARTIAL) - MECH FAILURE/MALF  
Phase of Operation: CRUISE

### Findings

1. (C) ENGINE ASSEMBLY,CONNECTING ROD CAP - DISCONNECTED
2. MAINTENANCE,INSTALLATION - IMPROPER - OTHER MAINTENANCE PERSONNEL

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Occurrence #2: FORCED LANDING  
Phase of Operation: EMERGENCY DESCENT/LANDING

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Occurrence #3: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: LANDING - FLARE/TOUCHDOWN

### Findings

3. TERRAIN CONDITION - HIGH VEGETATION

## Pilot Information

|                                  |  |                              |      |
|----------------------------------|--|------------------------------|------|
| <b>Certificate:</b>              | Private  | <b>Age:</b>                  | 35   |
| <b>Airplane Rating(s):</b>       | None   | <b>Instrument Rating(s):</b> | None |
| <b>Other Aircraft Rating(s):</b> | None   | <b>Instructor Rating(s):</b> | None |
| <b>Flight Time:</b>              | 330 hours (Total, all aircraft), 2 hours (Total, this make and model), 4 hours (Last 24 hours, all aircraft) |                              |      |

## Aircraft and Owner/Operator Information

|                                       |                                      |                             |                 |
|---------------------------------------|--------------------------------------|-----------------------------|-----------------|
| <b>Aircraft Make:</b>                 | Piper                                | <b>Registration:</b>        | N9545J          |
| <b>Model/Series:</b>                  | PA-28-180 PA-28-180                  | <b>Engines:</b>             | 1 Reciprocating |
| <b>Operator:</b>                      | EDIG EXECUTIVE AIRCRAFT INC.         | <b>Engine Manufacturer:</b> | Lycoming        |
| <b>Operating Certificate(s) Held:</b> | None                                 | <b>Engine Model/Series:</b> | O-360-A4A       |
| <b>Flight Conducted Under:</b>        | Part 91: General Aviation - Personal |                             |                 |

## Meteorological Information and Flight Plan

|   |                      |                                     |                              |
|---|----------------------|-------------------------------------|------------------------------|
| <b>Conditions at Accident Site:</b>     | Unknown              | <b>Condition of Light:</b>          | Day                          |
| <b>Observation Facility, Elevation:</b> | KEY, 5 ft msl        | <b>Weather Information Source:</b>  | Weather Observation Facility |
| <b>Lowest Ceiling:</b>                  | Broken / 4800 ft agl | <b>Wind Speed/Gusts, Direction:</b> | 5 knots / , Variable         |
| <b>Temperature:</b>                     | 27° C                | <b>Visibility</b>                   | 10 Miles                     |
| <b>Precipitation and Obscuration:</b>   |                      |                                     |                              |
| <b>Departure Point:</b>                 | KEY WEST, FL (EYW)   | <b>Destination:</b>                 | FT LUADERDALE, FL (FXE)      |

## Wreckage and Impact Information

|                             |           |                            |             |
|-----------------------------|-----------|----------------------------|-------------|
| <b>Crew Injuries:</b>       | 1 Serious | <b>Aircraft Damage:</b>    | Substantial |
| <b>Passenger Injuries:</b>  | 1 Minor   | <b>Aircraft Fire:</b>      | None        |
| <b>Ground Injuries:</b>     | N/A       | <b>Aircraft Explosion:</b> | None        |
| <b>Latitude, Longitude:</b> |           |                            |             |

## Administrative Information

|                                      |  |                      |            |
|--------------------------------------|--|----------------------|------------|
| <b>Investigator In Charge (IIC):</b> | ALAN J YURMAN  | <b>Adopted Date:</b> | 08/25/1997 |
| <b>Investigation Docket:</b>         | 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:pubinq@ntsb.gov">pubinq@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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