



# Aviation Investigation Final Report

|                                |                                      |                         |             |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| <b>Location:</b>               | CHAMBLEE, Georgia                    | <b>Accident Number:</b> | MIA99LA056  |
| <b>Date &amp; Time:</b>        | October 25, 1998, 11:10 Local        | <b>Registration:</b>    | N7357D      |
| <b>Aircraft:</b>               | Piper PA-22-150                      | <b>Aircraft Damage:</b> | Substantial |
| <b>Defining Event:</b>         |                                      | <b>Injuries:</b>        | 4 None      |
| <b>Flight Conducted Under:</b> | Part 91: General aviation - Personal |                         |             |

## Analysis

During landing, as the tail wheel touched down, the aircraft began to drift to the left. The pilot applied right rudder and then right wheel brake in an attempt to correct the drift. The aircraft then ground looped to the right and the left wing contacted the runway. Postcrash examination of the left wheel brake and tail wheel steering showed no evidence of mechanical failure or malfunction.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's excessive use of right wheel brake to correct for a left drift during landing rollout resulting in a ground loop to the right and the left wing contacting the runway.

## Findings

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

- Findings
1. (C) BRAKES(NORMAL) - EXCESSIVE - PILOT IN COMMAND
  2. GROUND LOOP/SWERVE - INADVERTENT - PILOT IN COMMAND
-

Occurrence #2: DRAGGED WING, ROTOR, POD, FLOAT OR TAIL/SKID  
Phase of Operation: LANDING - ROLL

## Factual Information

On October 25, 1998, about 1110 eastern standard time, a Piper PA-22-150, N7357D, registered to an individual, ground looped and struck the left wing on the runway, during landing at DeKalb-Peachtree Airport, Chamblee, Georgia, while on a Title 14 CFR Part 91 personal flight. Visual meteorological conditions prevailed at the time and no flight plan was filed. The aircraft received substantial damage and the airline transport-rated pilot and one passenger were not injured. The flight originated from Gainesville, Georgia, the same day, about 1040.

The pilot stated that during landing roll, as the tailwheel touched down, the aircraft began to veer to the left. He applied right rudder and then right wheel brake to control the left drift and the aircraft then ground looped to the right. As the aircraft ground looped, the left wing contacted the runway.

After the accident, examination of the aircraft's left wheel brake and tailwheel by an aircraft mechanic showed no evidence of mechanical failure or malfunction. (See attached letters)

The aircraft was reported to have received minor damage when FAA inspectors spoke with the pilot after the accident. As repairs were being made to the aircraft, the left wing spars were found to be bent. This damage was reported to FAA and NTSB on December 17, 1998.

### Pilot Information

|                                  |  |  |                |
|----------------------------------|--|--|----------------|
| <b>Certificate:</b>              | Airline transport  | <b>Age:</b>                              | 34, Male       |
| <b>Airplane Rating(s):</b>       | Single-engine land; Multi-engine land  | <b>Seat Occupied:</b>                    | Left           |
| <b>Other Aircraft Rating(s):</b> | None   | <b>Restraint Used:</b>                   |                |
| <b>Instrument Rating(s):</b>     | Airplane   | <b>Second Pilot Present:</b>             | No             |
| <b>Instructor Rating(s):</b>     | None   | <b>Toxicology Performed:</b>             | No             |
| <b>Medical Certification:</b>    | Class 1 Valid Medical--no waivers/lim.   | <b>Last FAA Medical Exam:</b>            | March 16, 1998 |
| <b>Occupational Pilot:</b>       | Yes  | <b>Last Flight Review or Equivalent:</b> |                |
| <b>Flight Time:</b>              | 3046 hours (Total, all aircraft), 391 hours (Total, this make and model), 2900 hours (Pilot In Command, all aircraft), 78 hours (Last 90 days, all aircraft), 16 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>                  | N7357D          |
| <b>Model/Series:</b>                 | PA-22-150 PA-22-150      | <b>Aircraft Category:</b>             | Airplane        |
| <b>Year of Manufacture:</b>          |                          | <b>Amateur Built:</b>                 |                 |
| <b>Airworthiness Certificate:</b>    | Normal                   | <b>Serial Number:</b>                 | 22-5155         |
| <b>Landing Gear Type:</b>            | Tailwheel                | <b>Seats:</b>                         | 4               |
| <b>Date/Type of Last Inspection:</b> | March 29, 1998 Annual    | <b>Certified Max Gross Wt.:</b>       | 2000 lbs        |
| <b>Time Since Last Inspection:</b>   | 16 Hrs                   | <b>Engines:</b>                       | 1 Reciprocating |
| <b>Airframe Total Time:</b>          | 1864 Hrs                 | <b>Engine Manufacturer:</b>           | Lycoming        |
| <b>ELT:</b>                          | Installed, not activated | <b>Engine Model/Series:</b>           | O-320-A2B       |
| <b>Registered Owner:</b>             | NEAL H.FERGUSON          | <b>Rated Power:</b>                   | 150 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> | PDK ,1002 ft msl                 | <b>Distance from Accident Site:</b>         | 1 Nautical Miles |
| <b>Observation Time:</b>                | 10:53 Local                      | <b>Direction from Accident Site:</b>        | 200°             |
| <b>Lowest Cloud Condition:</b>          | Clear                            | <b>Visibility</b>                           | 10 miles         |
| <b>Lowest Ceiling:</b>                  | None                             | <b>Visibility (RVR):</b>                    |                  |
| <b>Wind Speed/Gusts:</b>                | 4 knots /                        | <b>Turbulence Type Forecast/Actual:</b>     | /                |
| <b>Wind Direction:</b>                  | 290°                             | <b>Turbulence Severity Forecast/Actual:</b> | /                |
| <b>Altimeter Setting:</b>               | 30 inches Hg                     | <b>Temperature/Dew Point:</b>               | 24°C / 3°C       |
| <b>Precipitation and Obscuration:</b>   | No Obscuration; No Precipitation |   |                  |
| <b>Departure Point:</b>                 | GAINESVILLE , GA (GVL )          | <b>Type of Flight Plan Filed:</b>           | None             |
| <b>Destination:</b>                     |                                  | <b>Type of Clearance:</b>                   | None             |
| <b>Departure Time:</b>                  | 10:30 Local                      | <b>Type of Airspace:</b>                    | Class D          |

## Airport Information

|                             |                      |                                  |                 |
|-----------------------------|----------------------|----------------------------------|-----------------|
| <b>Airport:</b>             | PEACHTREE-DEKALB PDK | <b>Runway Surface Type:</b>      | Concrete        |
| <b>Airport Elevation:</b>   | 1002 ft msl          | <b>Runway Surface Condition:</b> | Dry             |
| <b>Runway Used:</b>         | 2R                   | <b>IFR Approach:</b>             | None            |
| <b>Runway Length/Width:</b> | 6001 ft / 100 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> | 3 None | <b>Aircraft Fire:</b>       | None                      |
| <b>Ground Injuries:</b>    | N/A    | <b>Aircraft Explosion:</b>  | None                      |
| <b>Total Injuries:</b>     | 4 None | <b>Latitude, Longitude:</b> | 33.900089,-84.300857(est) |

## Administrative Information

|  |   |
|--|---|
| <b>Investigator In Charge (IIC):</b>     | Kennedy, Jeffrey  |
| <b>Additional Participating Persons:</b> | W J SIMPSON; ATLANTA , GA   |
| <b>Original Publish Date:</b>            | August 27, 1999   |
| <b>Last Revision Date:</b>               |   |
| <b>Investigation Class:</b>              | <a href="#">Class</a>   |
| <b>Note:</b>                             |   |
| <b>Investigation Docket:</b>             | <a href="https://data.ntsb.gov/Docket?ProjectID=45535">https://data.ntsb.gov/Docket?ProjectID=45535</a> |

The National Transportation Safety Board (NTSB) is an independent federal agency charged by Congress with investigating every civil aviation accident in the United States and significant events in other modes of transportation—railroad, transit, highway, marine, pipeline, and commercial space. We determine the probable causes of the accidents and events we investigate, and issue safety recommendations aimed at preventing future occurrences. In addition, we conduct transportation safety research studies and offer information and other assistance to family members and survivors for each accident or event we investigate. We also serve as the appellate authority for enforcement actions involving aviation and mariner certificates issued by the Federal Aviation Administration (FAA) and US Coast Guard, and we adjudicate appeals of civil penalty actions taken by the FAA.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, “accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties ... and are not conducted for the purpose of determining the rights or liabilities of any person” (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB’s statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available [here](#).