

Aviation Investigation Final Report

MARINE

PAIL POAD

PIPELINE

| Location: | New Roads, Louisiana | Accident Number: | DFW05CA196 |
|-------------------------|--------------------------------------|----------------------|-------------|
| Date & Time: | July 31, 2005, 13:00 Local | Registration: | N1703N |
| Aircraft: | Cessna 120 | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

After the 5,883-hour commercial pilot touched down, at about 45-50 miles per hour (MPH) on Runway 36 (a 5,002-foot by 75-foot asphalt runway), the airplane started an uncomanded slow right turn. The pilot corrected with left rudder and the airplane responded left back towards the runway centerline. When a small amount of right rudder pedal did not arrest the now left turn, the pilot applied full right rudder pedal to no avail. The left turn continued until the airplane was perpendicular with the runway centerline and began to "hop" on the right main landing gear. On the third "hop" the right main landing gear collapsed, the windscreen broke out, and the right wing tip contacted the edge of the runway. After turning approximately 150 degrees the airplane came to rest in an upright position halfway over the edge of the runway. No anomalies were found with the flight controls, rudder system, or tail-wheel of the airplane. The closest weather reporting facility, located 20 nautical miles southeast from the site of the accident, was reporting no wind seven minutes before the accident.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain control during the landing roll.

Findings

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

Findings 1. (C) AIRCRAFT CONTROL - NOT MAINTAINED - PILOT IN COMMAND 2. GROUND LOOP/SWERVE - ENCOUNTERED - PILOT IN COMMAND

Occurrence #2: MAIN GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Factual Information

On July 31, 2005, about 1300 central daylight time, a single-engine Cessna 120 tail-wheel equipped airplane, N1703N, was substantially damaged following a loss of control during the landing roll at the False River Regional Airport (HZR), near New Roads, Louisiana. The commercial pilot, sole occupant of the airplane, was not injured. The airplane was registered to a private corporation and operated by the pilot. Visual meteorological conditions prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The cross-country flight originated from the Granbury Municipal Airport (GDJ) near Granbury, Texas, at 0900, and was en route to the Yellow River Airstrip (FD93), near Holt, Florida, with a planned fuel stop at HZR.

According to the 5,883-hour pilot, after touching down, at about 45-50 miles per hour (MPH), on Runway 36 (a 5,002-foot by 75-foot asphalt runway), the airplane initiated an uncomanded slow right turn. The pilot corrected with left rudder and the airplane responded back towards the runway centerline. When a small amount of right rudder pedal did not arrest the now left turn, the pilot applied full right rudder pedal to no avail. The left turn continued until the airplane was perpendicular with the runway centerline and began to "hop" on the right main landing gear. On the third "hop" the right main landing gear collapsed, the windscreen broke out, and the right wing tip contacted the edge of the runway. After turning approximately 150 degrees the airplane came to rest in an upright position halfway over the edge of the runway.

The pilot reported that anexamination of the airplane revealed that both right wing spars were found broken and the right main landing gear box sustained structural damage. Around 1530, while the pilot was arranging to recover the airplane, a "level three or four thunderstorm" came through the area and "picked the aircraft up and body slammed it on its back" causing further structural damage.

The pilot further reported that he held an Airframe and Powerplant (A&P) certificate with Inspection Authorization (IA). After the accident he inspected the flight controls, rudder system, and tail-wheel and was not able to find any anomalies that could have contributed to his loss of control.

At 1253, the weather observation facility at Baton Rouge Metropolitan Airport, Ryan Field (BTR), near Baton Rouge, Louisiana, located 20 nautical miles southeast from the site of the accident, was reporting no wind, visibility 10 statute miles, scattered clouds at 4,300 feet, temperature 93 degrees Fahrenheit, dew point 73 degrees Fahrenheit, and barometric pressure setting of 29.93 inches of Mercury.

Pilot Information

| Certificate: | Airline transport; Commercial; Flight instructor | Age: | 69,Male |
|---------------------------|---|-----------------------------------|-----------------|
| Airplane Rating(s): | Single-engine land; Multi-engine land | Seat Occupied: | |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | |
| Instructor Rating(s): | Airplane multi-engine; Airplane single-engine; Instrument airplane | Toxicology Performed: | No |
| Medical Certification: | Class 3 | Last FAA Medical Exam: | March 1, 2004 |
| Occupational Pilot: | | Last Flight Review or Equivalent: | October 1, 2004 |
| Flight Time: | 5883 hours (Total, all aircraft), 35 hours (Total, this make and model) | | |

Aircraft and Owner/Operator Information

| Aircraft Make: | Cessna | Registration: | N1703N |
|----------------------------------|--------------------------|-----------------------------------|----------------------|
| Model/Series: | 120 | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 11947 |
| Landing Gear Type: | Tailwheel | Seats: | 2 |
| Date/Type of Last Inspection: | | Certified Max Gross Wt.: | 1450 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | Teledyne Continental |
| ELT: | Installed, not activated | Engine Model/Series: | C85-12F |
| Registered Owner: | Day Aviation Inc. | Rated Power: | 85 Horsepower |
| Operator: | | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|----------------------------------|------------------------------|---|-------------|
| Observation Facility, Elevation: | BTR | Distance from Accident Site: | |
| Observation Time: | 12:53 Local | Direction from Accident Site: | |
| Lowest Cloud Condition: | Scattered / 4300 ft AGL | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | 0 knots / 0 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 29.93 inches Hg | Temperature/Dew Point: | 34°C / 23°C |
| Precipitation and Obscuration: | No Obscuration; No Precipita | ation | |
| Departure Point: | GRANBURY, TX (GDJ) | Type of Flight Plan Filed: | None |
| Destination: | New Roads, LA (HZR) | Type of Clearance: | None |
| Departure Time: | | Type of Airspace: | |

Airport Information

| Airport: | False River Regional Airport HZR | Runway Surface Type: | Asphalt |
|----------------------|----------------------------------|---------------------------|-----------------|
| Airport Elevation: | | Runway Surface Condition: | Dry |
| Runway Used: | 36 | IFR Approach: | None |
| Runway Length/Width: | 5002 ft / 75 ft | VFR Approach/Landing: | Traffic pattern |

Wreckage and Impact Information

| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
|------------------------|--------|-------------------------|----------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | Latitude, Longitude: | 30.711389,-91.479164 |

Administrative Information

| Investigator In Charge (IIC): | LeBaron, Timothy |
|--------------------------------------|---|
| Additional Participating Persons: | Jim Coppit; Federal Aviation Administration; Baton Rouge, LA |
| Original Publish Date: | October 27, 2005 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=62096 |

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.