



National Transportation Safety Board Aviation Accident Final Report

| | | | |
|--------------------------------|--------------------------------------|-------------------------|-------------|
| Location: | Lowell, MI | Accident Number: | CEN10CA155 |
| Date & Time: | 03/02/2010, 1700 EST | Registration: | N103DG |
| Aircraft: | Schulke Avid Magnum | Aircraft Damage: | Substantial |
| Defining Event: | Loss of control on ground | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General Aviation - Personal | | |

Analysis

The pilot was returning to the departure airport after having flown for approximately two hours at various cruise altitudes. The pilot attempted a landing on runway 30 (2,394 feet by 48 feet), which was slush-covered. During the landing rollout, the airplane "swerved hard right" and into a snowbank, where it nosed over. The airplane sustained substantial damage, which included damage to the wing ribs, wing trailing edge, and rudder. A weather reporting station about 9 miles from the accident site recorded variable winds at 4 knots at the time of the accident. Examination of the airplane revealed that the brake pin lubrication had dried out and the right brake caliper would not release.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's inability to maintain directional control while landing on a slush-covered runway due to inadequate maintenance of the airplane brakes by maintenance personnel.

Findings

| | |
|-------------------------|--|
| Aircraft | Directional control - Not specified (Cause) Brake - Incorrect service/maintenance (Cause) |
| Personnel issues | Maintenance - Maintenance personnel (Cause) |

Factual Information

History of Flight

| | |
|----------------------|--|
| Landing-landing roll | Sys/Comp malf/fail (non-power) Loss of control on ground (Defining event) Collision with terr/obj (non-CFIT) |
|----------------------|--|

Pilot Information

| | | | |
|---------------------------|--|-----------------------------------|----------------------------|
| Certificate: | Private | Age: | 51, Male |
| Airplane Rating(s): | Single-engine Land; Single-engine Sea | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | Seatbelt, Shoulder harness |
| Instrument Rating(s): | None | Second Pilot Present: | |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | Class 3 With Waivers/Limitations | Last Medical Exam: | 02/14/2010 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | 02/14/2010 |
| Flight Time: | 800 hours (Total, all aircraft), 300 hours (Total, this make and model), 800 hours (Pilot In Command, all aircraft), 8 hours (Last 90 days, all aircraft), 6 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft) | | |

Aircraft and Owner/Operator Information

| | | | |
|-------------------------------|--------------------------|------------------------------------|-----------------|
| Aircraft Manufacturer: | Schulke | Registration: | N103DG |
| Model/Series: | Avid Magnum | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | Yes |
| Airworthiness Certificate: | Experimental | Serial Number: | 6M |
| Landing Gear Type: | Tailwheel | Seats: | 2 |
| Date/Type of Last Inspection: | 05/01/2009, Conditional | Certified Max Gross Wt.: | 1750 lbs |
| Time Since Last Inspection: | | Engines: | 1 Reciprocating |
| Airframe Total Time: | 589 Hours | Engine Manufacturer: | Lycoming |
| ELT: | Installed, not activated | Engine Model/Series: | O-320-H2AD |
| Registered Owner: | D&R Aviation LLC | Rated Power: | 160 hp |
| Operator: | Pilot | Air Carrier Operating Certificate: | None |

Meteorological Information and Flight Plan

| | | | |
|----------------------------------|----------------------------------|------------------------------|-------------------|
| Observation Facility, Elevation: | GRR | Observation Time: | 1653 EST |
| Distance from Accident Site: | 9 Nautical Miles | Condition of Light: | Day |
| Direction from Accident Site: | 225° | Conditions at Accident Site: | Visual Conditions |
| Lowest Cloud Condition: | Few / 4000 ft agl | Temperature/Dew Point: | 4°C / -7°C |
| Lowest Ceiling: | None | Visibility | 10 Miles |
| Wind Speed/Gusts, Direction: | 4 knots, Variable | Visibility (RVR): | |
| Altimeter Setting: | 29.97 inches Hg | Visibility (RVV): | |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Lowell, MI (24C) | Type of Flight Plan Filed: | None |
| Destination: | Lowell, MI (24C) | Type of Clearance: | None |
| Departure Time: | 1500 EST | Type of Airspace: | |

Airport Information

| | | | |
|----------------------|---------------------------|---------------------------|----------------------------|
| Airport: | Lowell City Airport (24C) | Runway Surface Type: | Asphalt |
| Airport Elevation: | 681 ft | Runway Surface Condition: | Dry |
| Runway Used: | 30 | IFR Approach: | None |
| Runway Length/Width: | 2394 ft / 48 ft | VFR Approach/Landing: | Full Stop; Traffic Pattern |

Wreckage and Impact Information

| | | | |
|---------------------|--------|---------------------|-------------|
| Crew Injuries: | 1 None | Aircraft Damage: | Substantial |
| Passenger Injuries: | N/A | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 None | | |

Administrative Information

| | | | |
|-----------------------------------|---|---------------|------------|
| Investigator In Charge (IIC): | Mitchell F Gallo | Adopted Date: | 07/01/2010 |
| Additional Participating Persons: | John Miller; Federal Aviation Administration; Grand Rapids, MI | | |
| Publish Date: | 07/01/2010 | | |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. | | |
| Investigation Docket: | http://dms.ntsb.gov/pubdms/search/dockList.cfm?mKey=75486 | | |

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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.