



Aviation Investigation Final Report

Location: Yellow Pine, Idaho **Accident Number:** WPR19CA197

Date & Time: July 20, 2019, 10:15 Local Registration: N777DV

Aircraft: Avid AVID MAGNUM Aircraft Damage: Substantial

Defining Event: Collision during takeoff/land **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot reported that, after the airplane touched down on the grass airstrip and rolled about 130 ft, the nose landing gear impacted a depression and then bent aft. The nosewheel dragged through the grass about 30 ft, and the airplane then nosed over and came to rest inverted. The pilot added that this was the first time he had landed at this airstrip and that he was not aware of the hazards on the rough surface. The airplane sustained substantial damage to the rudder and wing struts. The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Probable Cause and Findings

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

The pilot's improper decision to land on a rough, grass airstrip, which resulted in the nose landing gear collapsing and a subsequent nose-over.

Findings

Personnel issues Decision making/judgment - Pilot

Environmental issues Rough terrain - Decision related to condition

Environmental issues Rough terrain - Effect on operation

Page 2 of 6 WPR19CA197

Factual Information

History of Flight

| Landing-landing roll | Collision during takeoff/land (Defining event) | |
|----------------------|--|--|
| Landing-landing roll | Collision with terr/obj (non-CFIT) | |
| Landing-landing roll | Nose over/nose down | |
| Landing-landing roll | Roll over | |

Pilot Information

| Certificate: | Private | Age: | 65,Male |
|---------------------------|--|-----------------------------------|------------------|
| Airplane Rating(s): | Single-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | 3-point |
| Instrument Rating(s): | None | Second Pilot Present: | No |
| Instructor Rating(s): | None | Toxicology Performed: | No |
| Medical Certification: | BasicMed | Last FAA Medical Exam: | June 12, 2019 |
| Occupational Pilot: | No | Last Flight Review or Equivalent: | October 31, 2017 |
| Flight Time: | 561 hours (Total, all aircraft), 332.8 hours (Total, this make and model), 17.1 hours (Last 90 days, all aircraft), 10.3 hours (Last 30 days, all aircraft), 1.1 hours (Last 24 hours, all aircraft) | | |

Page 3 of 6 WPR19CA197

Aircraft and Owner/Operator Information

| Aircraft Make: | Avid | Registration: | N777DV |
|-------------------------------|--------------------------------|-----------------------------------|-----------------|
| Model/Series: | AVID MAGNUM No Series | Aircraft Category: | Airplane |
| Year of Manufacture: | 1998 | Amateur Built: | Yes |
| Airworthiness Certificate: | Normal; Experimental (Special) | Serial Number: | 105M |
| Landing Gear Type: | Tricycle | Seats: | 2 |
| Date/Type of Last Inspection: | April 24, 2019 Condition | Certified Max Gross Wt.: | 1750 lbs |
| Time Since Last Inspection: | 17 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | 843 Hrs at time of accident | Engine Manufacturer: | Lycoming |
| ELT: | Installed | Engine Model/Series: | 0-320-E20 |
| Registered Owner: | On file | Rated Power: | 150 Horsepower |
| Operator: | On file | Operating Certificate(s) Held: | None |
| | | | |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|----------------------------------|----------------------------------|--------------------------------------|-------------------|
| Observation Facility, Elevation: | 4157 ft msl | Distance from Accident Site: | 16 Nautical Miles |
| Observation Time: | 09:51 Local | Direction from Accident Site: | 270° |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | None | Visibility (RVR): | |
| Wind Speed/Gusts: | / | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.11 inches Hg | Temperature/Dew Point: | 13°C / 2°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Yellow Pine, ID (3U2) | Type of Flight Plan Filed: | None |
| Destination: | Yellow Pine, ID (I92) | Type of Clearance: | None |
| Departure Time: | 10:00 Local | Type of Airspace: | |
| | | | |

Page 4 of 6 WPR19CA197

Airport Information

| Airport: | Reed Ranch 192 | Runway Surface Type: | Dirt;Grass/turf |
|----------------------|------------------|----------------------------------|-----------------|
| Airport Elevation: | 4157 ft msl | Runway Surface Condition: | Dry;Soft |
| Runway Used: | 34 | IFR Approach: | None |
| Runway Length/Width: | 2175 ft / 100 ft | VFR Approach/Landing: | Straight-in |

Wreckage and Impact Information

| Crew Injuries: | 1 Minor | Aircraft Damage: | Substantial |
|------------------------|---------|-------------------------|-----------------------|
| Passenger Injuries: | | Aircraft Fire: | None |
| Ground Injuries: | N/A | Aircraft Explosion: | None |
| Total Injuries: | 1 Minor | Latitude, Longitude: | 44.883888,-115.707496 |

Page 5 of 6 WPR19CA197

Administrative Information

| Investigator In Charge (IIC): | Stein, Stephen | |
|-----------------------------------|---|--|
| Additional Participating Persons: | Brian Lord; Federal Aviation Administration; Boise, ID | |
| Original Publish Date: | May 21, 2020 | |
| Last Revision Date: | | |
| Investigation Class: | Class | |
| Note: | This accident report documents the factual circumstances of this accident as described to the NTSB. | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=99912 | |

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.

Page 6 of 6 WPR19CA197