

Aviation Investigation Final Report

| Location: | Harrison, Arkansas | Accident Number: | FTW04LA051 |
|-------------------------|--------------------------------------|----------------------|-------------|
| Date & Time: | December 20, 2003, 16:15 Local | Registration: | N69RS |
| Aircraft: | Piper PA-28RT-201T | Aircraft Damage: | Substantial |
| Defining Event: | | Injuries: | 1 None |
| Flight Conducted Under: | Part 91: General aviation - Personal | | |

Analysis

The 8,521-hour commercial pilot reported that he departed on Runway 22, and just after lift off, the aircraft impacted a deer with the right main landing gear. According to the pilot, "deer routinely cross the runway at this spot." Once airborne, the pilot reported some control difficulty and elected to return to the airport. The pilot circled the airport for approximately one hour to burn fuel. Due to the prevailing crosswind, the pilot elected to land at another airport. During the landing roll out, the right gear collapsed. An examination of the aircraft by the FAA inspector revealed the landing gear showed no indication of having collided with an object or animal on the runway.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The collapsing of the right main landing gear during the landing roll out as a result of impacting an animal on the runway during takeoff.

Findings

Occurrence #1: ON GROUND/WATER COLLISION WITH OBJECT Phase of Operation: TAKEOFF - ROLL/RUN

Findings 1. OBJECT - ANIMAL(S) Occurrence #2: FORCED LANDING Phase of Operation: DESCENT - EMERGENCY

Occurrence #3: GEAR COLLAPSED Phase of Operation: LANDING - ROLL

Findings 2. (C) LANDING GEAR - COLLAPSED

Factual Information

On December 20, 2003, at approximately 1615 central standard time, a Piper PA-28RT-201T single-engine airplane, N69RS, registered to North Star Aviation of Harrison, Arkansas, and operated by a private individual, was substantially damaged following a forced landing at the Boone County Airport (HRO), near Harrison, Arkansas. The commercial pilot, sole occupant of the airplane, was not injured. Visual meteorological conditions prevailed and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The local flight originated from Flippin Airport (FLP), near Flippin, Arkansas, at 1500.

The 8,521-hour pilot stated in the Pilot/Operator Aircraft Accident Report (NTSB Form 6120.1/2) that he departed from Runway 22 at FLP, and just after lift off, the aircraft impacted a deer with the right main landing gear. According to the pilot, "deer routinely cross the runway at this spot." Once airborne, the pilot reported some control difficulty and elected to return to the airport. The pilot circled the airport for approximately one hour to burn fuel. Due to the prevailing crosswind at FLP, the pilot elected to land at HRO. During the landing roll out, the right main landing gear collapsed, resulting in structural damage to the right wing.

To alleviate the problem with deer on the runway, the pilot recommended deer eradication.

According to the FAA inspector, who responded to the accident site, the landing gear showed no indication of a collision with an object or animal on the runway.

| Certificate: | Commercial; Flight instructor | Age: | 57,Male |
|---------------------------|--|-----------------------------------|--------------------|
| Airplane Rating(s): | Single-engine land; Multi-engine land | Seat Occupied: | Left |
| Other Aircraft Rating(s): | None | Restraint Used: | |
| Instrument Rating(s): | Airplane | Second Pilot Present: | No |
| Instructor Rating(s): | Airplane single-engine | Toxicology Performed: | No |
| Medical Certification: | Class 2 Valid Medicalw/ waivers/lim | Last FAA Medical Exam: | August 1, 2003 |
| Occupational Pilot: | UNK | Last Flight Review or Equivalent: | September 10, 2003 |
| Flight Time: | 8521 hours (Total, all aircraft), 3000 hours (Total, this make and model), 8121 hours (Pilot In Command, all aircraft), 172 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 5 hours (Last 24 hours, all aircraft) | | |

Pilot Information

Aircraft and Owner/Operator Information

| Aircraft Make: | Piper | Registration: | N69RS |
|----------------------------------|--|-----------------------------------|-----------------|
| Model/Series: | PA-28RT-201T | Aircraft Category: | Airplane |
| Year of Manufacture: | | Amateur Built: | |
| Airworthiness Certificate: | Normal | Serial Number: | 28R-7931305 |
| Landing Gear Type: | Retractable - Tricycle | Seats: | 4 |
| Date/Type of Last Inspection: | July 30, 2003 Annual | Certified Max Gross Wt.: | 2900 lbs |
| Time Since Last Inspection: | 14 Hrs | Engines: | 1 Reciprocating |
| Airframe Total Time: | | Engine Manufacturer: | Continental |
| ELT: | Installed, activated, did not aid in locating accident | Engine Model/Series: | TSIO-360-FB |
| Registered Owner: | North Star Aviation, Inc. | Rated Power: | 200 Horsepower |
| Operator: | David Franklin Davis | Operating Certificate(s) Held: | None |

Meteorological Information and Flight Plan

| Conditions at Accident Site: | Visual (VMC) | Condition of Light: | Day |
|---|----------------------------------|---|-------------|
| Observation Facility, Elevation: | | Distance from Accident Site: | |
| Observation Time: | | Direction from Accident Site: | |
| Lowest Cloud Condition: | Clear | Visibility | 10 miles |
| Lowest Ceiling: | | Visibility (RVR): | |
| Wind Speed/Gusts: | 9 knots / 0 knots | Turbulence Type Forecast/Actual: | / |
| Wind Direction: | 180° | Turbulence Severity Forecast/Actual: | / |
| Altimeter Setting: | 30.2 inches Hg | Temperature/Dew Point: | 11°C / -6°C |
| Precipitation and Obscuration: | No Obscuration; No Precipitation | | |
| Departure Point: | Flippin , AR (FLP) | Type of Flight Plan Filed: | None |
| Destination: | | Type of Clearance: | None |
| Departure Time: | 15:00 Local | Type of Airspace: | Class G |

Airport Information

| Airport: | Boone County Airport HRO | Runway Surface Type: | Asphalt |
|----------------------|--------------------------|---------------------------|----------------|
| Airport Elevation: | 1365 ft msl | Runway Surface Condition: | Dry |
| Runway Used: | 18 | IFR Approach: | None |
| Runway Length/Width: | 6161 ft / 150 ft | VFR Approach/Landing: | Forced landing |

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: | 36.256942,-93.152778 |

Administrative Information

| Investigator In Charge (IIC): | Lemishko, Alexander |
|--------------------------------------|--|
| Additional Participating Persons: | Mike Church; Flight Standards District Office; Little Rock, AR |
| Original Publish Date: | March 30, 2004 |
| Last Revision Date: | |
| Investigation Class: | <u>Class</u> |
| Note: | |
| Investigation Docket: | https://data.ntsb.gov/Docket?ProjectID=58560 |

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 <u>here</u>.