

# **Aviation Investigation Final Report**

Location:	Harrison, Arkansas	Accident Number:	FTW04LA051
Date & Time:	December 20, 2003, 16:15 Local	<b>Registration:</b>	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
<b>Observation Facility, Elevation:</b>		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>.