



# Aviation Investigation Final Report

<b>Location:</b>	DOUGLAS, Wyoming	<b>Accident Number:</b>	FTW98LA391
<b>Date &amp; Time:</b>	September 11, 1998, 05:58 Local	<b>Registration:</b>	N4612U
<b>Aircraft:</b>	Cessna 180F	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	1 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Personal		

## Analysis

The pilot was taking off from Converse County Airport's runway 28 (6,750 feet x 100 feet, asphalt) in the predawn darkness, en route to Casper, Wyoming, about 47 miles to the west. As the airplane lifted off the runway, a small deer (weighing an estimated 75 pounds) struck the rear of the airplane. Because the airplane remained under control at all times, the pilot elected to continue to Casper, where he landed without incident. Examination of the airplane disclosed the leading edge of the left horizontal stabilizer was crushed inward and bent.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: A collision with a deer during take-off.

## Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: TAKEOFF - INITIAL CLIMB

- Findings  
1. (C) OBJECT - ANIMAL(S)

## Factual Information

On September 11, 1998, at 0558 mountain daylight time, a Cessna 180F, N4612U, registered to and operated by the pilot, was substantially damaged when it collided with a deer during the takeoff roll at Douglas, Wyoming. The airline transport-rated pilot, the sole occupant aboard, was not injured. Visual meteorological conditions prevailed, and no flight plan had been filed for the personal flight being operated under Title 14 CFR Part 91. The flight was originating at the time of the accident.

According to the pilot, he was taking off from Converse County Airport's runway 28 (6,750 feet x 100 feet, asphalt) in the predawn darkness, en route to Casper, Wyoming, about 47 miles to the west. As the airplane lifted off the runway, a small deer, weighing an estimated 75 pounds, struck the rear of the airplane. Because the airplane remained under control at all times, the pilot elected to continue to Casper, where he landed without incident. Examination of the airplane disclosed the leading edge of the left horizontal stabilizer was crushed inward and bent.

### Pilot Information

<b>Certificate:</b>	Airline transport	<b>Age:</b>	59, Male
<b>Airplane Rating(s):</b>	Single-engine land; Single-engine sea; Multi-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	Airplane multi-engine; Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 1 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	March 9, 1998
<b>Occupational Pilot:</b>	UNK	<b>Last Flight Review or Equivalent:</b>	
<b>Flight Time:</b>	14558 hours (Total, all aircraft), 1000 hours (Total, this make and model), 11582 hours (Pilot In Command, all aircraft), 41 hours (Last 90 days, all aircraft), 38 hours (Last 30 days, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N4612U
<b>Model/Series:</b>	180F 180F	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	18051312
<b>Landing Gear Type:</b>	Tailwheel	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	September 16, 1997 Annual	<b>Certified Max Gross Wt.:</b>	2650 lbs
<b>Time Since Last Inspection:</b>	31 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	2668 Hrs	<b>Engine Manufacturer:</b>	Continental
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-470-R
<b>Registered Owner:</b>	ROBERT W. DUNCAN	<b>Rated Power:</b>	230 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None
<b>Operator Does Business As:</b>		<b>Operator Designator Code:</b>	

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night/dark
<b>Observation Facility, Elevation:</b>	DGW ,4929 ft msl	<b>Distance from Accident Site:</b>	
<b>Observation Time:</b>	05:53 Local	<b>Direction from Accident Site:</b>	
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	5 knots /	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	300°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30 inches Hg	<b>Temperature/Dew Point:</b>	13°C / 10°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	(DGW )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	CASPER , WY (CPR )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	05:58 Local	<b>Type of Airspace:</b>	Class E

## Airport Information

<b>Airport:</b>	CONVERSE COUNTY DGW	<b>Runway Surface Type:</b>	Asphalt
<b>Airport Elevation:</b>	4929 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	28	<b>IFR Approach:</b>	
<b>Runway Length/Width:</b>	6750 ft / 100 ft	<b>VFR Approach/Landing:</b>	

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>		<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	1 None	<b>Latitude, Longitude:</b>	42.749362,-105.389663(est)

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Scott, Arnold
<b>Additional Participating Persons:</b>	OWEN R JONES; CASPER , WY
<b>Original Publish Date:</b>	February 15, 2001
<b>Last Revision Date:</b>	
<b>Investigation Class:</b>	<a href="#">Class</a>
<b>Note:</b>	
<b>Investigation Docket:</b>	<a href="https://data.ntsb.gov/Docket?ProjectID=43972">https://data.ntsb.gov/Docket?ProjectID=43972</a>

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](#).