

Aviation Investigation Final Report

Location: Upham, North Dakota Accident Number: CEN16LA350

Date & Time: August 30, 2016, 20:35 Local Registration: N18601

Aircraft: Cessna 150L Aircraft Damage: Substantial

Defining Event: Landing area undershoot **Injuries:** 1 Serious

Flight Conducted Under: Part 91: General aviation - Personal

Analysis

The pilot had completed a local flight and was landing at his unlighted grass airstrip toward the west shortly after sunset. While landing, the airplane impacted a riverbank short of the runway, about 6 ft below the elevation of the runway, which caused the airplane to nose over and come to rest inverted. The pilot was seriously injured, and the airplane sustained substantial damage to the fuselage and left wing. The pilot did not recall the accident but reported that there were no malfunctions with the airplane that would have contributed to the accident. It is likely that the pilot did not obtain a proper aimpoint during the approach due to reduced visibility from the setting sun, which resulted in a landing short of the runway.

Probable Cause and Findings

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

The pilot's failure to obtain a proper aimpoint during landing due to reduced visibility from the setting sun.

Findings

Aircraft Descent/approach/glide path - Not attained/maintained

Environmental issues Glare - Contributed to outcome

Environmental issues Glare - Decision related to condition

Environmental issues Glare - Effect on personnel

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Factual Information

History of Flight

Landing

Landing area undershoot (Defining event)

On August 30, 2016, about 2035 central daylight time (CDT), a Cessna 150L airplane, N18601, impacted terrain short of the grass runway at Rosenau Airport (21ND), Upham, North Dakota. The private pilot, the sole occupant, suffered serious injuries and the airplane was substantially damaged. The airplane was privately registered and operated under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a personal flight. Visual meteorological conditions prevailed for the flight, and no flight plan was filed. The local flight departed from 21ND about 1900.

The pilot reported that he was returning from a local pleasure flight and was approaching his unlighted, grass airstrip to land to the west, and into the setting sun. He said the sun had already set, but there was light to the west. He did not remember the crash. The airplane impacted a river bank near the approach end of the runway, 6 ft below the elevation of the runway, nosed over and traveled 42 ft before coming to rest upside down. Sunset occurred at 2032 and civil twilight ended at 2104.

Examination of the airplane showed that the fuselage was buckled behind the cockpit and the left wing spar was bent. The pilot indicated on his submitted NTSB Accident/Incident report there were no malfunctions with the airplane prior to the accident.

According to the Federal Aviation Administration, the pilot did not hold a current medical certificate. The pilot's reported last medical examination was for a third class medical on May 5, 2012. The last annual inspection of the airplane was November 30, 2013. No pilot or maintenance logbooks were recovered during the investigation.

Pilot Information

Certificate:	Private	Age:	80,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Unknown
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	May 22, 2012
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	292 hours (Total, all aircraft)		

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Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N18601
Model/Series:	150L M	Aircraft Category:	Airplane
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Utility	Serial Number:	15073976
Landing Gear Type:	Tricycle	Seats:	
Date/Type of Last Inspection:	November 30, 2013 Annual	Certified Max Gross Wt.:	1601 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:		Engine Manufacturer:	CONT MOTOR
ELT:		Engine Model/Series:	0-200 SERIES
Registered Owner:		Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Dusk
Observation Facility, Elevation:	KMOT,1714 ft msl	Distance from Accident Site:	26 Nautical Miles
Observation Time:	19:54 Local	Direction from Accident Site:	221°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:		Visibility (RVR):	
Wind Speed/Gusts:	10 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	130°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	28.27 inches Hg	Temperature/Dew Point:	22°C / 13°C
Precipitation and Obscuration:			
Departure Point:	Upham, ND (21ND)	Type of Flight Plan Filed:	None
Destination:	Upham, ND (21ND)	Type of Clearance:	None
Departure Time:		Type of Airspace:	

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Airport Information

Airport:	Rosenau 21ND	Runway Surface Type:	Grass/turf
Airport Elevation:	1450 ft msl	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	2500 ft / 40 ft	VFR Approach/Landing:	Full stop

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	48.582221,-100.849723(est)

Administrative Information

Investigator In Charge (IIC):	Liedler, Courtney
Additional Participating Persons:	Karmen C Johnson; FAA; Fargo, ND
Original Publish Date:	June 3, 2020
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=93948

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.

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