



Aviation Investigation Final Report

Location:	Glencoe, Minnesota	Accident Number:	CEN21LA083
Date & Time:	December 9, 2020, 18:30 Local	Registration:	N1956V
Aircraft:	Cessna 172	Aircraft Damage:	None
Defining Event:	AC/prop/rotor contact w person	Injuries:	1 Serious, 1 None
Flight Conducted Under:	Part 91: General aviation - Instructional		

Analysis

The pilot made a fuel stop as part of a solo cross-country flight. The pilot’s mother and sister had come out to the airport to visit. After fueling the airplane, his mother and sister returned to their car. The pilot conducted his preflight, started the engine, and was completing the checklist when he “heard and felt a violent thud.” He looked up to see his mother “sprinting towards the car.” The pilot shutdown the airplane. The pilot’s mother had returned to the airplane unexpectedly and was struck by the propeller resulting in a serious injury to her left arm. The airplane exhibited no obvious damage.

Probable Cause and Findings

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

A bystander’s inadvertent contact with the propeller while the engine was running.

Findings

Personnel issues	Identification/recognition - Other
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Factual Information

History of Flight

Standing-engine(s) operating	AC/prop/rotor contact w person (Defining event)
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Pilot Information

Certificate:	Private	Age:	22, Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 2 Without waivers/limitations	Last FAA Medical Exam:	June 14, 2018
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 3, 2020
Flight Time:	161 hours (Total, all aircraft), 136 hours (Total, this make and model), 112 hours (Pilot In Command, all aircraft), 35 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N1956V
Model/Series:	172 S	Aircraft Category:	Airplane
Year of Manufacture:	2005	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	172S9934
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	November 23, 2020 Continuous airworthiness	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	25 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5988 Hrs	Engine Manufacturer:	Lycoming
ELT:	C91A installed, not activated	Engine Model/Series:	IO-360-L2A
Registered Owner:	Medary Aviation LLC	Rated Power:	180 Horsepower
Operator:	South Dakota State University	Operating Certificate(s) Held:	Pilot school (141)

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Night
Observation Facility, Elevation:	GYL,993 ft msl	Distance from Accident Site:	0 Nautical Miles
Observation Time:	18:30 Local	Direction from Accident Site:	360°
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:	29.95 inches Hg	Temperature/Dew Point:	-16.7°C / -19.4°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Glencoe, MN	Type of Flight Plan Filed:	VFR
Destination:	Brookings, SD (BKX)	Type of Clearance:	VFR
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	Glencoe Municipal GYL	Runway Surface Type:	
Airport Elevation:	993 ft msl	Runway Surface Condition:	Dry
Runway Used:		IFR Approach:	None
Runway Length/Width:		VFR Approach/Landing:	None

Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	None
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	1 Serious	Aircraft Explosion:	None
Total Injuries:	1 Serious, 1 None	Latitude, Longitude:	44.756006,-94.081461(est)

Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Nick Halatsis; FAA Flight Standards; Minneapolis, MN
Original Publish Date:	August 24, 2021
Last Revision Date:	
Investigation Class:	Class 4
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=102398

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](#).