Aviation Investigation Final Report

Location:	Sparta, Michigan	**Accident Number:**	CEN21LA112
Date & Time:	January 12, 2021, 16:58 Local	**Registration:**	N35718
Aircraft:	Piper PA-32R-301	**Aircraft Damage:**	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	**Injuries:**	2 None
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The airplane touched down short of the runway and encountered a snowbank adjacent to the approach threshold. The landing gear collapsed, and the airplane skidded along the runway before coming to rest. The pilot reported that he "misjudged the end of the runway" during landing after executing a GPS approach. There were no malfunctions associated with the airplane before the accident. He noted that maintaining the glideslope guidance provided by the precision approach path indicator would have prevented the accident. Additionally, canceling his instrument flight plan while on the approach "proved distracting." The snowbank was less than 3-ft high and would not have been an issue had the pilot maintained the proper approach glideslope. Although the airframe accumulated about 1/2 inch of ice during the descent and approach, there is no evidence that it contributed to the accident.

Probable Cause and Findings

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

The pilot's failure to maintain the proper glideslope during final approach, which resulted in contact with a snowbank at the approach end of the runway.

Findings

Aircraft	Descent/approach/glide path - Not attained/maintained
Personnel issues	Identification/recognition - Pilot

Factual Information

History of Flight

Approach-VFR pattern final	Collision with terr/obj (non-CFIT) (Defining event)
Landing	Abnormal runway contact
Landing	Landing gear collapse

On January 12, 2021, at 1658 eastern standard time, a Piper PA-32R-301, N35718, was substantially damaged when it was involved in an accident at Paul C. Miller Airport (8D4), Sparta, Michigan. The pilot and passenger were not injured. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

According to a Federal Aviation Administration inspector, main landing gear tire tracks in the snow cover indicated that the airplane touched down about 18 ft short of the runway. It subsequently encountered a snowbank less than 3 ft in height adjacent to the runway threshold. The landing gear collapsed, and the airplane skidded down the runway before coming to rest about 1,000 ft. from the approach threshold.

The pilot reported that he "misjudged the end of the runway" after executing a GPS approach and the airplane impacted a snowbank at the end of the runway. There were no malfunctions associated with the airplane before the accident. He noted that maintaining the glideslope guidance provided by the precision approach path indicator might have prevented the accident. Additionally, cancelling his instrument flight plan while still on the approach "proved distracting." He added that the airframe accumulated about 1/2 inch of ice during the descent and approach in instrument meteorological conditions, but that the airplane was "flying well."

The pilot obtained a preflight weather briefing before the accident flight. He was advised of the airman's meteorological information (AIRMET) advisories in effect for icing and instrument conditions. Multiple pilot reports (PIREPS) for in-flight airframe icing were received by air traffic control, along with one negative icing report. The airplane was not certificated for flight into icing conditions.

Pilot Information

Certificate:	Private	**Age:**	65,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:	None	**Last FAA Medical Exam:**	
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	July 4, 2020
Flight Time:	1546 hours (Total, all aircraft), 1335 hours (Total, this make and model), 1546 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N35718
Model/Series:	PA-32R-301	**Aircraft Category:**	Airplane
Year of Manufacture:	1979	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	32R-8013032
Landing Gear Type:	Retractable - Tricycle	**Seats:**	6
Date/Type of Last Inspection:	November 4, 2020 Annual	**Certified Max Gross Wt.:**	3600 lbs
Time Since Last Inspection:		**Engines:**	1 Reciprocating
Airframe Total Time:	5293 Hrs as of last inspection	**Engine Manufacturer:**	LYCOMING
ELT:	Installed, not activated	**Engine Model/Series:**	IO-540-K1G5D
Registered Owner:	On file	**Rated Power:**	300 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	**Condition of Light:**	Night
Observation Facility, Elevation:	KGRR,794 ft msl	**Distance from Accident Site:**	16 Nautical Miles
Observation Time:	16:53 Local	**Direction from Accident Site:**	155°
Lowest Cloud Condition:		**Visibility**	4 miles
Lowest Ceiling:	Overcast / 900 ft AGL	**Visibility (RVR):**	
Wind Speed/Gusts:	7 knots / None	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	190°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30.01 inches Hg	**Temperature/Dew Point:**	-1°C / -3°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	Washington Court House, OH (I23)	**Type of Flight Plan Filed:**	IFR
Destination:	Sparta, MI	**Type of Clearance:**	IFR
Departure Time:	15:01 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	Paul C Miller 8D4	**Runway Surface Type:**	Asphalt
Airport Elevation:	775 ft msl	**Runway Surface Condition:**	Dry;Snow
Runway Used:	25	**IFR Approach:**	Global positioning system
Runway Length/Width:	4032 ft / 75 ft	**VFR Approach/Landing:**	Full stop

Wreckage and Impact Information

Crew Injuries:	1 None	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 None	**Aircraft Fire:**	None
Ground Injuries:		**Aircraft Explosion:**	None
Total Injuries:	2 None	**Latitude, Longitude:**	43.13002,-85.67238

Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	Tom Kozura; FAA ; Grand Rapids, MI
Original Publish Date:	July 19, 2022
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=102521

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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.