Aviation Investigation Final Report

Location:	Lincoln, Illinois	**Accident Number:**	CEN23LA145
Date & Time:	March 29, 2023, 19:15 Local	**Registration:**	N56793
Aircraft:	Piper PA32	**Aircraft Damage:**	Substantial
Defining Event:	Unknown or undetermined	**Injuries:**	2 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot and the flight instructor departed for the local area flight to conduct instrument training. After completion of the instrument training, the pilot, acting as the pilot-in-command, performed takeoffs and landings in the traffic pattern. The pilot reported that he activated the carburetor heat before turning onto final approach. While on the final approach, the airplane sustained a total loss of engine power, and the pilot performed a forced landing to a parking lot. The airplane sustained substantial damage to both wings and the fuselage. Postaccident examination of the airframe and engine did not reveal any preimpact mechanical malfunctions or failures that would have precluded normal operation.

While the airplane was likely operating in an area conducive to the formation of carburetor icing (for glide and cruise power) and serious carburetor icing (for glide power), the pilot reported he had previously activated the carburetor heat.

The pilot reported that all four fuel tanks were full before the flight. Both wing fuel tanks were breached from the accident sequence, no fuel was able to be recovered, and the fuel amount onboard at the time of the accident could not be determined.

At the accident site, the fuel tank selector was found positioned between the left tip tank and the left main tank positions. However, it could not be determined if the selector was possibly moved into this position while in flight or if the selector was possibly moved into this position after the impact.

The reason for the total loss of engine power could not be determined.

Probable Cause and Findings

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

A total loss of engine power during an approach for landing for undetermined reasons.

Findings

Aircraft	(general) - Unknown/Not determined

Factual Information

History of Flight

Approach-VFR pattern final	Unknown or undetermined (Defining event)
Approach-VFR pattern final	Attempted remediation/recovery
Landing	Off-field or emergency landing
Landing	Collision during takeoff/land

On March 29, 2023, about 1915 central daylight time, a Piper PA-32-260 airplane, N56793, sustained substantial damage when it was involved in an accident near Lincoln, Illinois. The private pilot and the flight instructor sustained serious injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

Before the local area flight, the pilot "completely filled" all four fuel tanks with 100 low lead fuel. The purpose of the flight was to conduct instrument flight training in visual meteorological conditions with the flight instructor. A review of automatic dependent surveillance - broadcast data showed that the airplane departed from the Logan County Airport (AAA), Lincoln, Illinois, about 1823. The airplane departed to the east of the airport, where it performed the training. Once the training was completed, the airplane flew back to the airport, where the private pilot, now acting as the pilot-in-command, performed takeoffs and landings in the traffic pattern.

The pilot reported that he activated the carburetor heat before turning onto final approach for runway 3. While on final approach, the pilot attempted to add power, and the engine did not respond. The airplane continued to descend, and the pilot had no further recollection after that point. The flight instructor, who was a passenger at the time, confirmed the total loss of engine power and reported that the pilot performed a forced landing. The airplane impacted a church parking lot and came to rest upright against a garden structure.

The airplane came to rest about 1/2 mile to the southwest of the approach end for runway 3. The airplane sustained substantial damage to both wings and the fuselage. Both wing fuel tanks were breached from the accident sequence, no fuel was able to be recovered, and the fuel amount onboard at the time of the accident could not be determined.

At the accident site, the fuel tank selector was found positioned between the left tip tank and the left main tank positions. Postaccident examination of the airframe and engine did not reveal any preimpact mechanical malfunctions or failures that would have precluded normal operation. A review of meteorological data showed that the airplane was likely operating in an

area conducive to the formation of carburetor icing (for glide and cruise power) and serious carburetor icing (for glide power).

Pilot Information

Certificate:	Private	**Age:**	40,Male
Airplane Rating(s):	Single-engine land	**Seat Occupied:**	Left
Other Aircraft Rating(s):	None	**Restraint Used:**	3-point
Instrument Rating(s):	None	**Second Pilot Present:**	Yes
Instructor Rating(s):	None	**Toxicology Performed:**	
Medical Certification:	Class 3 Without waivers/limitations	**Last FAA Medical Exam:**	December 18, 2018
Occupational Pilot:	No	**Last Flight Review or Equivalent:**	March 3, 2022
Flight Time:	(Estimated) 186 hours (Total, all aircraft), 102.4 hours (Total, this make and model), 147.9 hours (Pilot In Command, all aircraft), 1 hours (Last 90 days, all aircraft), 1 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Piper	**Registration:**	N56793
Model/Series:	PA32 260	**Aircraft Category:**	Airplane
Year of Manufacture:	1974	**Amateur Built:**	
Airworthiness Certificate:	Normal	**Serial Number:**	32-7400009
Landing Gear Type:	Tricycle	**Seats:**	6
Date/Type of Last Inspection:	February 7, 2023 Annual	**Certified Max Gross Wt.:**	3400 lbs
Time Since Last Inspection:	1.57 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	4415.68 Hrs at time of accident	**Engine Manufacturer:**	Lycoming Engines
ELT:	Installed	**Engine Model/Series:**	O-540-E3B5
Registered Owner:	On file	**Rated Power:**	250 Horsepower
Operator:	On file	**Operating Certificate(s) Held:**	None
Operator Does Business As:	On file	**Operator Designator Code:**	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	KAAA,597 ft msl	**Distance from Accident Site:**	1 Nautical Miles
Observation Time:	19:15 Local	**Direction from Accident Site:**	36°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	5 knots /	**Turbulence Type Forecast/Actual:**	None / None
Wind Direction:	30°	**Turbulence Severity Forecast/Actual:**	N/A / N/A
Altimeter Setting:	30.23 inches Hg	**Temperature/Dew Point:**	7°C / -2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Lincoln, IL	**Type of Flight Plan Filed:**	None
Destination:	Lincoln, IL	**Type of Clearance:**	None
Departure Time:		**Type of Airspace:**	Class E

Wreckage and Impact Information

Crew Injuries:	1 Serious	**Aircraft Damage:**	Substantial
Passenger Injuries:	1 Serious	**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	2 Serious	**Latitude, Longitude:**	40.147925,-89.344573(est)

Administrative Information

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Clyde Zellers; FAA Springfield FSDO; Springfield, IL Kathryn Whitaker; Piper Aircraft; Vero Beach, FL Michael Childers; Lycoming Engines; Williamsport, PA Les Doud; Hartzell Propeller; Piqua, OH
Original Publish Date:	March 28, 2024
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=106985