



# **Aviation Investigation Final Report**

Location: Cortland, Illinois Accident Number: CEN23LA330

Date & Time: July 27, 2023, 12:30 Local Registration: N30632

Aircraft: Cessna 177 Aircraft Damage: Substantial

**Defining Event:** Fuel exhaustion **Injuries:** 2 Serious

Flight Conducted Under: Part 91: General aviation - Personal

#### **Analysis**

The pilot and the passenger were conducting a personal cross-country flight. While on approach to the airport, which was a planned fuel stop, the airplane sustained a total loss of engine power. The pilot performed a forced landing to a corn field and the airplane came to rest nose-down. The two occupants were extracted from the airplane by first responders. The airplane sustained substantial damage to both wings and the fuselage.

The pilot reported to first responders that the airplane "ran out of fuel." The pilot did not report any preimpact mechanical malfunctions or failures with the airframe or the engine that would have precluded normal operation.

#### **Probable Cause and Findings**

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

The pilot's improper fuel planning, that resulted in a total loss of engine power due to fuel exhaustion, and a subsequent forced landing.

# **Findings**

Aircraft Fuel - Fluid level
Personnel issues Fuel planning - Pilot

Personnel issues Decision making/judgment - Pilot

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# **Factual Information**

# **History of Flight**

Prior to flight	Preflight or dispatch event
Approach	Fuel exhaustion (Defining event)
Approach	Loss of engine power (total)
Landing	Off-field or emergency landing
Landing	Collision during takeoff/land

### **Pilot Information**

Certificate:	Private	Age:	34,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:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	February 28, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	February 19, 2023
Flight Time:	109 hours (Total, all aircraft), 4 hours (Total, this make and model), 39 hours (Pilot In Command, all aircraft), 10 hours (Last 90 days, all aircraft), 9 hours (Last 30 days, all aircraft)		

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# **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N30632
Model/Series:	177 B	Aircraft Category:	Airplane
Year of Manufacture:	1969	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17701371
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 14, 2022 Annual	Certified Max Gross Wt.:	2500 lbs
Time Since Last Inspection:	69.67 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	5200.48 Hrs at time of accident	Engine Manufacturer:	Lycoming Engines
ELT:	Installed	Engine Model/Series:	O-360-A1F6
Registered Owner:	On file	Rated Power:	180 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:	KDKB,915 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	12:15 Local	Direction from Accident Site:	352°
Lowest Cloud Condition:		Visibility	10 miles
Lowest Ceiling:	Broken / 3400 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	None / None
Wind Direction:	190°	Turbulence Severity Forecast/Actual:	N/A / N/A
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	30°C / 23°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Evansville, IN (EVV)	Type of Flight Plan Filed:	None
Destination:	DeKalb, IL (DKB)	Type of Clearance:	VFR;VFR flight following
Departure Time:	10:10 Local	Type of Airspace:	Class E

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# **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:	41.911378,-88.704219(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Hodges, Michael
Additional Participating Persons:	Richard Wojs; FAA Greater Chicago FSDO; Des Plaines, IL
Original Publish Date:	September 21, 2023
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=192730

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.

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