

# **Aviation Investigation Final Report**

Location: West Chicago, Illinois Accident Number: CEN24LA174

Date & Time: May 2, 2024, 16:43 Local Registration: N20095

Aircraft: Cessna 172M Aircraft Damage: Substantial

**Defining Event:** Other weather encounter **Injuries:** 2 Minor

Flight Conducted Under: Part 91: General aviation - Instructional

#### **Analysis**

The flight instructor reported that he was holding short of the runway waiting for a storm with heavy precipitation to pass when a gust of wind lifted the right wing and pushed the airplane to the right side of the runway. The airplane came to rest upside down which resulted in substantial damage to the wing, vertical stabilizer, and rudder. The flight instructor reported he was holding appropriate flight control inputs for the wind at the time the accident occurred. He reported further that there were no mechanical failures or malfunctions with the airplane that would have precluded normal operations.

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

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

The flight instructor's failure to maintain control of the airplane during an encounter with wind while holding short of the runway.

## Findings

Environmental issues	High wind - Contributed to outcome	
Personnel issues	Aircraft control - Instructor/check pilot	
Aircraft	(general) - Not attained/maintained	

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## **Factual Information**

## **History of Flight**

Taxi-to runway	Other weather encounter (Defining event)	
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#### **Pilot Information**

Certificate:	Commercial; Flight instructor	Age:	39,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Right
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane single-engine; Instrument airplane	Toxicology Performed:	
Medical Certification:	Class 1 With waivers/limitations	Last FAA Medical Exam:	September 13, 2023
Occupational Pilot:	Yes	Last Flight Review or Equivalent:	February 26, 2024
Flight Time:	995 hours (Total, all aircraft), 876 hours (Total, this make and model), 836.6 hours (Pilot In Command, all aircraft), 130 hours (Last 90 days, all aircraft), 48.3 hours (Last 30 days, all aircraft), 2.7 hours (Last 24 hours, all aircraft)		

### **Student pilot Information**

Certificate:	Student	Age:	17
Airplane Rating(s):	None	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 1 Without waivers/limitations	Last FAA Medical Exam:	October 10, 2023
Occupational Pilot:	No	Last Flight Review or Equivalent:	
Flight Time:	96.4 hours (Total, all aircraft), 66.3 hours (Total, this make and model), 4.5 hours (Pilot In Command, all aircraft), 31.8 hours (Last 90 days, all aircraft), 14.4 hours (Last 30 days, all aircraft)		

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#### **Aircraft and Owner/Operator Information**

Aircraft Make:	Cessna	Registration:	N20095
Model/Series:	172M	Aircraft Category:	Airplane
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	17261005
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	April 5, 2024 100 hour	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	17374.3 Hrs as of last inspection	Engine Manufacturer:	Lycoming
ELT:	C126 installed, not activated	Engine Model/Series:	0-320-E2D
Registered Owner:	WingsLeasing LLC	Rated Power:	150 Horsepower
Operator:	On file	Operating Certificate(s) Held:	Pilot school (141)

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KDPA,749 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	04:52 Local	Direction from Accident Site:	191°
<b>Lowest Cloud Condition:</b>	Scattered / 1500 ft AGL	Visibility	0.75 miles
Lowest Ceiling:	Broken / 5500 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	11 knots / 20 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.84 inches Hg	Temperature/Dew Point:	19°C / 16°C
Precipitation and Obscuration:	Light - None - Rain		
Departure Point:	West Chicago, IL	Type of Flight Plan Filed:	None
Destination:	West Chicago, IL	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class D

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## **Airport Information**

Airport:	DUPAGE DPA	Runway Surface Type:	Concrete
Airport Elevation:	758 ft msl	<b>Runway Surface Condition:</b>	Wet
Runway Used:	02L/20R	IFR Approach:	None
Runway Length/Width:	7571 ft / 150 ft	VFR Approach/Landing:	None

## Wreckage and Impact Information

Crew Injuries:	2 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Minor	Latitude, Longitude:	41.914015,-88.247566

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#### **Administrative Information**

Investigator In Charge (IIC):	Miller, Bradley
Additional Participating Persons:	Elisa Van de Putte; FAA; Chicago, IL
Original Publish Date:	July 18, 2024
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=194205

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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