



# **Aviation Investigation Final Report**

Location: Las Cruces, New Mexico Accident Number: WPR24LA058

Date & Time: November 27, 2023, 10:20 Local Registration: N5495K

Aircraft: Cessna 172P Aircraft Damage: Substantial

**Defining Event:** Hard landing **Injuries:** 2 None

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

At the time of the accident, the student pilot was on a solo cross-country flight to obtain a private, single engine airplane add-on to his certificate.

He reported that during a landing attempt he noted that the approach was stable at a constant airspeed and power setting. The pilot said that at an unknown point in the approach, he experienced a downdraft as he felt "a little push down" and observed a rapid change in his rate of descent. The pilot could not recall at what altitude he encountered the downdraft. The airplane landed hard and sustained substantial damage to the fuselage.

The weather station at the airport reported that the wind was calm at the time of the accident.

The pilot reported no preimpact mechanical malfunctions or anomalies that could have precluded normal operation.

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

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

An encounter with a downdraft during an approach to land, which resulted in a hard landing.

### **Findings**

Aircraft Altitude - Not attained/maintained

Personnel issues Aircraft control - Pilot

Environmental issues Downdraft - Effect on equipment

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### **Factual Information**

### History of Flight

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#### **Pilot Information**

Certificate:	Commercial; Student	Age:	46,Male
Airplane Rating(s):	None	Seat Occupied:	Left
Other Aircraft Rating(s):	Helicopter	Restraint Used:	3-point
Instrument Rating(s):	Helicopter	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1	Last FAA Medical Exam:	December 14, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	November 27, 2023
Flight Time:	1158 hours (Total, all aircraft), 32 hours (Total, this make and model), 1 hours (Last 24 hours, all aircraft)		

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

Aircraft Make:	Cessna	Registration:	N5495K
Model/Series:	172P	Aircraft Category:	Airplane
Year of Manufacture:	1980	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	17274160
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	October 3, 2023 100 hour	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	98.3 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	12530 Hrs at time of accident	Engine Manufacturer:	Lycoming Engines
ELT:	Installed, not activated	Engine Model/Series:	0-320-D2J
Registered Owner:	BELL AIR LLC	Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

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### Meteorological Information and Flight Plan

Visual (VMC)	Condition of Light:	Day
KLRU,4456 ft msl	Distance from Accident Site:	0 Nautical Miles
10:15 Local	Direction from Accident Site:	
Clear	Visibility	10 miles
None	Visibility (RVR):	
/	Turbulence Type Forecast/Actual:	/
	Turbulence Severity Forecast/Actual:	/
30.27 inches Hg	Temperature/Dew Point:	7°C / -5°C
El Paso, TX (ELP)	Type of Flight Plan Filed:	None
El Paso, TX (ELP)	Type of Clearance:	VFR
09:30 Local	Type of Airspace:	Class E
	KLRU,4456 ft msl 10:15 Local Clear None / 30.27 inches Hg El Paso, TX (ELP) El Paso, TX (ELP)	KLRU,4456 ft msl Distance from Accident Site:  10:15 Local Direction from Accident Site:  Clear Visibility  None Visibility (RVR):  / Turbulence Type Forecast/Actual:  Turbulence Severity Forecast/Actual:  30.27 inches Hg Temperature/Dew Point:  El Paso, TX (ELP) Type of Flight Plan Filed:  Type of Clearance:

### **Airport Information**

Airport:	LAS CRUCES INTL LRU	Runway Surface Type:	Asphalt
Airport Elevation:	4456 ft msl	<b>Runway Surface Condition:</b>	Dry
Runway Used:	08	IFR Approach:	None
Runway Length/Width:	6069 ft / 100 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:	32.289414,-106.92196

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#### **Administrative Information**

Investigator In Charge (IIC):	Stein, Stephen
Additional Participating Persons:	Joseph Kluk; Federal Aviation Adminstration; Albuquerque, NM
Original Publish Date:	February 1, 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=193539

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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