



# Aviation Investigation Final Report

<b>Location:</b>	Elizabethtown, Kentucky	<b>Accident Number:</b>	ERA23LA031
<b>Date &amp; Time:</b>	October 15, 2022, 01:00 Local	<b>Registration:</b>	N63663
<b>Aircraft:</b>	Cessna 172P	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>	Collision with terr/obj (non-CFIT)	<b>Injuries:</b>	2 None
<b>Flight Conducted Under:</b>	Part 91: General aviation - Instructional		

## Analysis

The private pilot and flight instructor were performing a cross-country instrument flight rules training flight at night, and while enroute, diverted from their planned destination to a non-towered airport to refuel. After landing at the diversion airport, the pilot attempted to navigate via taxiways toward the ramp environment. As the taxi progressed toward the ramp, the blue taxiway edge lights ended, and a “significant glare” from the hangar lights directly ahead obscured the pilot’s forward view through the dirty windshield. Believing that they had entered the ramp area, the pilot turned toward the fueling area, but the airplane then departed the paved surface onto grass and slid into a ditch. The airplane sustained substantial damage to the left wing and horizontal stabilizer. The pilot stated that there were no preimpact anomalies or malfunctions affecting the airplane’s operation. Had the pilot and flight instructor elected to discontinue taxiing the airplane after losing sight of the ground ahead due to the darkness and glare, it is likely that the accident would not have occurred.

## Probable Cause and Findings

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

The pilot’s decision to continue the taxi without visual reference to the surface, due to his vision being impaired by darkness and glare, which resulted in the airplane’s departure from the paved surface and impact with a ditch. Contributing was the flight instructor’s inadequate monitoring of the pilot.

## Findings

<b>Personnel issues</b>	Decision making/judgment - Pilot
<b>Environmental issues</b>	Dark - Effect on personnel
<b>Environmental issues</b>	Glare - Effect on personnel
<b>Personnel issues</b>	Monitoring other person - Instructor/check pilot

## Factual Information

### History of Flight

<b>Taxi-from runway</b>	Collision with terr/obj (non-CFIT) (Defining event)
-------------------------	---

### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	47, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Left
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	BasicMed None	<b>Last FAA Medical Exam:</b>	May 1, 2014
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	January 19, 2022
<b>Flight Time:</b>	202.8 hours (Total, all aircraft), 132.4 hours (Total, this make and model), 168.6 hours (Pilot In Command, all aircraft), 36.3 hours (Last 90 days, all aircraft), 5.1 hours (Last 30 days, all aircraft), 5.1 hours (Last 24 hours, all aircraft)		

### Flight instructor Information

<b>Certificate:</b>	Commercial; Flight instructor	<b>Age:</b>	20, Female
<b>Airplane Rating(s):</b>	Single-engine land; Multi-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	3-point
<b>Instrument Rating(s):</b>	Airplane	<b>Second Pilot Present:</b>	Yes
<b>Instructor Rating(s):</b>	Airplane single-engine; Instrument airplane	<b>Toxicology Performed:</b>	
<b>Medical Certification:</b>	Class 1 Without waivers/limitations	<b>Last FAA Medical Exam:</b>	May 19, 2020
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	February 1, 2021
<b>Flight Time:</b>	745.9 hours (Total, all aircraft), 185.6 hours (Total, this make and model), 654.9 hours (Pilot In Command, all aircraft), 83.4 hours (Last 90 days, all aircraft), 32.9 hours (Last 30 days, all aircraft), 5.1 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N63663
<b>Model/Series:</b>	172P	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>	1981	<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	17275465
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	May 25, 2022 Annual	<b>Certified Max Gross Wt.:</b>	2400 lbs
<b>Time Since Last Inspection:</b>		<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	8846.1 Hrs at time of accident	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	O-320-D2J
<b>Registered Owner:</b>		<b>Rated Power:</b>	160 Horsepower
<b>Operator:</b>		<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

<b>Conditions at Accident Site:</b>	Visual (VMC)	<b>Condition of Light:</b>	Night
<b>Observation Facility, Elevation:</b>	EKX,775 ft msl	<b>Distance from Accident Site:</b>	0 Nautical Miles
<b>Observation Time:</b>	00:55 Local	<b>Direction from Accident Site:</b>	161°
<b>Lowest Cloud Condition:</b>	Clear	<b>Visibility</b>	10 miles
<b>Lowest Ceiling:</b>	None	<b>Visibility (RVR):</b>	
<b>Wind Speed/Gusts:</b>	9 knots /	<b>Turbulence Type Forecast/Actual:</b>	/ None
<b>Wind Direction:</b>	200°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	29.82 inches Hg	<b>Temperature/Dew Point:</b>	15°C / 2°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	Springfield, KY (216)	<b>Type of Flight Plan Filed:</b>	IFR
<b>Destination:</b>	Elizabethtown, KY	<b>Type of Clearance:</b>	IFR
<b>Departure Time:</b>	22:30 Local	<b>Type of Airspace:</b>	Class G

## Airport Information

<b>Airport:</b>	ADDINGTON FLD EKX	<b>Runway Surface Type:</b>	Concrete
<b>Airport Elevation:</b>	775 ft msl	<b>Runway Surface Condition:</b>	Dry
<b>Runway Used:</b>	23	<b>IFR Approach:</b>	Practice;VOR/DME
<b>Runway Length/Width:</b>	6001 ft / 100 ft	<b>VFR Approach/Landing:</b>	Full stop

## Wreckage and Impact Information

<b>Crew Injuries:</b>	2 None	<b>Aircraft Damage:</b>	Substantial
<b>Passenger Injuries:</b>	N/A	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	2 None	<b>Latitude, Longitude:</b>	37.687774,-85.925779

## Administrative Information

<b>Investigator In Charge (IIC):</b>	Freeze, Christopher		
<b>Additional Participating Persons:</b>	Sean Smith; FAA/FSDO; Louisville, KY		
<b>Original Publish Date:</b>	February 23, 2023	<b>Investigation Class:</b>	4
<b>Note:</b>	The NTSB did not travel to the scene of this accident.		
<b>Investigation Docket:</b>	<a href="https://data.nts.gov/Docket?ProjectID=106171">https://data.nts.gov/Docket?ProjectID=106171</a>		

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

The Independent Safety Board Act, as codified at 49 U.S.C. Section 1154(b), precludes the admission into evidence or use of any part of an NTSB report related to an incident or accident in a civil action for damages resulting from a matter mentioned in the report. A factual report that may be admissible under 49 U.S.C. § 1154(b) is available [here](#).