



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Cleveland, Texas	Accident Number:	CEN23LA097
Date & Time:	January 29, 2023, 21:38 Local	Registration:	N621EW
Aircraft:	Cessna 172L	Aircraft Damage:	Substantial
Defining Event:	Collision with terr/obj (non-CFIT)	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The instrument-rated pilot was positioning the airplane in preparation for an annual inspection. The flight was conducted under night visual flight rules (VFR); however, instrument meteorological conditions (IMC) prevailed along the route of flight. The pilot reported that the cloud ceiling at the departure airport was about 700 ft above ground level (agl). The pilot inadvertently flew into clouds while en route and remained in instrument conditions for about 10 minutes. During the final approach the airplane descended below the clouds, but the pilot was unable to locate the airport and “saw only pitch black” with no visual references. The airplane subsequently struck trees shortly before the pilot intended to initiate a go-around. It subsequently came to rest nose down in a wooded area. The airplane sustained substantial damage to the fuselage and both wings. The pilot reported that there were no preaccident mechanical failures or malfunctions with the airplane that would have precluded normal operation. A Notice to Air Mission (NOTAM) pertaining to the destination airport indicated that the runway lights were unserviceable during the time of the accident flight.

Probable Cause and Findings

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

The pilot’s decision to attempt the night flight under visual flight rules when instrument meteorological conditions prevailed resulting in the airplane striking trees while on final approach. Contributing to the accident were the unserviceable runway lights at the destination airport.

Findings

Personnel issues	Decision making/judgment - Pilot
Aircraft	Descent/approach/glide path - Not attained/maintained
Environmental issues	Runway lighting - Contributed to outcome

Factual Information

History of Flight

Approach-VFR pattern final	Collision with terr/obj (non-CFIT) (Defining event)
----------------------------	---

Pilot Information

Certificate:	Private	Age:	18,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	3-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 1 Without waivers/limitations	Last FAA Medical Exam:	July 2, 2020
Occupational Pilot:	No	Last Flight Review or Equivalent:	September 6, 2022
Flight Time:	329 hours (Total, all aircraft), 304 hours (Total, this make and model), 219 hours (Pilot In Command, all aircraft), 58 hours (Last 90 days, all aircraft), 18 hours (Last 30 days, all aircraft), 0 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N621EW
Model/Series:	172L	Aircraft Category:	Airplane
Year of Manufacture:	1972	Amateur Built:	
Airworthiness Certificate:	Normal; Utility	Serial Number:	17260545
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	January 8, 2022 Annual	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	84 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	6520 Hrs at time of accident	Engine Manufacturer:	Lycoming
ELT:	Installed, activated, did not aid in locating accident	Engine Model/Series:	O-320-E2D
Registered Owner:	On file	Rated Power:	160 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None
Operator Does Business As:	On file	Operator Designator Code:	N/A

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument (IMC)	Condition of Light:	Night
Observation Facility, Elevation:	KCXO, 228 ft msl	Distance from Accident Site:	20 Nautical Miles
Observation Time:	21:53 Local	Direction from Accident Site:	274°
Lowest Cloud Condition:		Visibility	4 miles
Lowest Ceiling:	Overcast / 300 ft AGL	Visibility (RVR):	
Wind Speed/Gusts:	9 knots / 0 knots	Turbulence Type Forecast/Actual:	/
Wind Direction:	340°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.11 inches Hg	Temperature/Dew Point:	10°C / 10°C
Precipitation and Obscuration:	Moderate - None - Mist		
Departure Point:	Cypress, TX (T51)	Type of Flight Plan Filed:	None
Destination:	Cleveland, TX (6R3)	Type of Clearance:	None
Departure Time:	09:00 Local	Type of Airspace:	Class G

Airport Information

Airport:	Cleveland Municipal 6R3	Runway Surface Type:	Asphalt
Airport Elevation:	150 ft msl	Runway Surface Condition:	Dry
Runway Used:	34	IFR Approach:	None
Runway Length/Width:	5001 ft / 75 ft	VFR Approach/Landing:	Straight-in

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	30.338417,-95.0255

Administrative Information

Investigator In Charge (IIC):	Sorensen, Timothy
Additional Participating Persons:	William Stricker; FAA Flight Standards; Houston, TX
Original Publish Date:	March 15, 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=106657

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](#).