



# National Transportation Safety Board Aviation Accident Final Report

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<b>Location:</b>	JOHNSTOWN, CO	<b>Accident Number:</b>	FTW96LA290
<b>Date &amp; Time:</b>	07/01/1996, 1545 MDT	<b>Registration:</b>	N19682
<b>Aircraft:</b>	Cessna 172L	<b>Aircraft Damage:</b>	Substantial
<b>Defining Event:</b>		<b>Injuries:</b>	4 None

**Flight Conducted Under:** Part 91: General Aviation - Personal

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## Analysis

During a local area personal flight, the aircraft struck two power lines approximately 1 mile apart, the second of which sheared off approximately 1/3 of the vertical stabilizer and rudder. The pilot then flew the aircraft back to the point of departure, a distance of about 70 miles, and parked the aircraft in a shelter. He did not report the power line encounter. The aircraft was found the following day with evidence of substantial damage to many portions of the aircraft.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: failure of the pilot to maintain proper altitude/clearance from obstructions, while buzzing.

## Findings

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Occurrence #1: IN FLIGHT COLLISION WITH OBJECT  
Phase of Operation: MANEUVERING

### Findings

1. OBJECT - WIRE, TRANSMISSION
2. (C) ALTITUDE/CLEARANCE - IMPROPER - PILOT IN COMMAND
3. (C) BUZZING - PERFORMED - PILOT IN COMMAND

## Factual Information

On July 1, 1996, between 1545 and 1630 mountain daylight time, a Cessna 172L, N19682, struck two sets of power lines while maneuvering near Johnstown, Colorado. The private pilot and his three passengers were not injured and the aircraft sustained substantial damage. The flight was operating under Title 14 CFR Part 91 when the accident occurred and no flight plan was filed. Visual meteorological conditions prevailed for this local area flight which departed Centennial Airport, Englewood, Colorado, at 1500.

The rural electric company, whose lines were struck, reported the accident and this was collaborated by a local resident who witnessed the second wire strike and provided the power company with a part which was sheared from the aircraft. The accident was not reported by the pilot and the aircraft was located the following day parked in a shelter at Centennial Airport, Englewood, Colorado, by matching a part, which came off the aircraft during the second wire strike. Approximately 1/3 of the vertical stabilizer was recovered from the area where the second wire strike occurred.

According to the electric company, the first power lines which were struck had a span between poles of 265 feet and the wire height at the point of contact was approximately 23 feet above ground level (agl). The second strike span was 305 feet with a wire height at the point of impact of approximately 25 feet agl. The type of wire used in both lines was 8A copper weld. The two wire strikes were approximately one mile apart. The lines were not marked and according to Federal Air Regulations, they did not meet the requirements for marking.

The line locations are depicted on the attached map. This depiction provided information that the lines were located approximately 3 miles southeast of Fort Collins/Loveland Municipal Airport and the sequence provides documentation that the aircraft was flying in a northwest direction when the wire strikes occurred.

Damage to the aircraft consisted of abrasion marks on the propeller, dents in the propeller spinner, abrasion marks on the top cowl, a broken wind screen, dents in the right door, abrasion marks and dents on the right strut, a broken right rear window, dents and abrasion marks on the top fuselage aft of the cabin, dents and abrasion marks in the right horizontal stabilizer, a crease with dents and upward deformation of the right elevator, abrasion marks and dents in the leading edge of the vertical stabilizer, the top 1/3 of the vertical stabilizer and rudder sheared off, damage to the center hinge of the retained portion of the rudder, and antennas sheared off on the top side of the aircraft. (Photographs attached.)

According to the pilot's statement, provided on NTSB Form 6120.1/2, he was flying north towards Fort Collins, Colorado, at about 150 feet above the ground. He said he glanced down to adjust the mixture and apparently hit a small down draft, or pushed the nose over. He said he descended about 100 feet and when he looked out he realized he was too close to pull up so he attempted to go under the line. He stated that after he hit the power line, he dragged the line for 5 to 10 seconds and the tail came off. He said the plane flew fine so he returned to Centennial Airport. The pilot also stated he was the sole occupant of the aircraft.

In a telephone interview, the pilot said he was unaware of hitting the other power line and reiterated that he was alone in the aircraft.

On September 5, 1996, the Federal Aviation Administration (FAA) Denver Flight Standards District Office (FSDO) provided to the investigator in charge a copy of a letter from the Aurora,

Colorado, Police Department (copy attached). The letter stated that during the investigation of another matter, detectives were provided with information concerning this aircraft accident. The information was that there were three persons in addition to the pilot aboard the aircraft and that the pilot was attempting to fly under power lines when the accident occurred. In addition, two of the occupants said that following the wire strikes, the pilot landed on a road, inspected the aircraft, and then flew it back to Centennial. In further communications with the pilot both in writing (attached) and by telephone, he denied all of the above. Attempts to interview the passengers were made without success.

## Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	18, 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>	Seatbelt, Shoulder harness
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	No
<b>Medical Certification:</b>	Class 3 Valid Medical--no waivers/lim.	<b>Last FAA Medical Exam:</b>	10/13/1994
<b>Occupational Pilot:</b>	<b>Last Flight Review or Equivalent:</b>		
<b>Flight Time:</b>	200 hours (Total, all aircraft), 198 hours (Total, this make and model), 180 hours (Pilot In Command, all aircraft), 60 hours (Last 90 days, all aircraft), 15 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Cessna	<b>Registration:</b>	N19682
<b>Model/Series:</b>	172L 172L	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	No
<b>Airworthiness Certificate:</b>	Normal; Utility	<b>Serial Number:</b>	17260665
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	05/17/1996, Annual	<b>Certified Max Gross Wt.:</b>	2300 lbs
<b>Time Since Last Inspection:</b>	7 Hours	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>	4098 Hours	<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed, not activated	<b>Engine Model/Series:</b>	O-320-E2D
<b>Registered Owner:</b>	KENNETH B. CRONK	<b>Rated Power:</b>	150 hp
<b>Operator:</b>	MICHAEL M. CRONK	<b>Operating Certificate(s) Held:</b>	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	FNL, 5016 ft msl	Distance from Accident Site:	3 Nautical Miles
Observation Time:	1534 MDT	Direction from Accident Site:	330°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	40°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30 inches Hg	Temperature/Dew Point:	23° C / 8° C
Precipitation and Obscuration:			
Departure Point:	ENGLEWOOD, CO (APA)	Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	1500 MDT	Type of Airspace:	Class G

## Wreckage and Impact Information

Crew Injuries:	1 None	Aircraft Damage:	Substantial
Passenger Injuries:	3 None	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	4 None	Latitude, Longitude:	

## Administrative Information

Investigator In Charge (IIC):	NORMAN F WIEMEYER	Report Date:	12/23/1996
Additional Participating Persons:	RICHARD SLUSSER; DENVER, CO		
Publish Date:			
Investigation Docket:	NTSB accident and incident dockets serve as permanent archival information for the NTSB's investigations. Dockets released prior to June 1, 2009 are publicly available from the NTSB's Record Management Division at <a href="mailto:pubinquiry@ntsb.gov">pubinquiry@ntsb.gov</a> , or at 800-877-6799. Dockets released after this date are available at <a href="http://dms.nts.gov/pubdms/">http://dms.nts.gov/pubdms/</a> .		

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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](#).