



# Aviation Investigation Final Report

<b>Location:</b>	Newaygo, Michigan	<b>Accident Number:</b>	CHI02FA262
<b>Date &amp; Time:</b>	August 28, 2002, 18:49 Local	<b>Registration:</b>	N4988J
<b>Aircraft:</b>	Piper PA-28R-180	<b>Aircraft Damage:</b>	Destroyed
<b>Defining Event:</b>		<b>Injuries:</b>	3 Fatal
<b>Flight Conducted Under:</b>	Part 91: General aviation		

## Analysis

The airplane impacted a power line over a river and then sunk into 25-30 feet of water. A witness saw the airplane fly over a dam upstream of the accident site, swooping down to an extremely low altitude. Another witness saw the airplane flying at an altitude of 20 feet above the river prior to impacting the power lines. Examination of the wreckage revealed no anomalies which would have precluded normal operation.

## Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The altitude/clearance disregarded by the pilot and his ostentatious display. The wire and low altitude flight were a contributing factor.

## Findings

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

### Findings

1. (F) OBJECT - WIRE, TRANSMISSION
2. (C) ALTITUDE/CLEARANCE - DISREGARDED - PILOT IN COMMAND
3. (C) OSTENTATIOUS DISPLAY - PILOT IN COMMAND
4. (F) LOW ALTITUDE FLIGHT/MANEUVER - INITIATED - PILOT IN COMMAND

Occurrence #2: IN FLIGHT COLLISION WITH TERRAIN/WATER  
Phase of Operation: DESCENT - UNCONTROLLED

Findings

5. TERRAIN CONDITION - WATER

## Factual Information

### HISTORY OF FLIGHT

On August 28, 2002, at 1849 eastern daylight time, a Piper PA-28R-180, N4988J, operated as a rental airplane, was destroyed following an impact with power lines which crossed the Muskegon River near Newaygo, Michigan. Visual meteorological conditions prevailed at the time of the accident. The 14 CFR Part 91 business flight was not operating on a flight plan. The private rated pilot and two passengers were fatally injured. The flight departed from Cherry Capital Airport, Traverse City, Michigan, at 1800, en route to Three Rivers Municipal Dr Haines Airport, Three Rivers, Michigan.

According to the Newaygo County Sheriff's report, a witness stated, "...he was fishing just below Hardy Dam on the Croton side of the Muskegon River. He stated the plane in question came just over the Hardy Dam, swooped all the way down the Muskegon River on the Croton side and went extremely low on the river. At the first turn, he made an extreme hard bank around the curve. [The witness] advised [the officer] that the pilot was very 'dare devilish' and also not a normal pilot that would fly a plane in a normal fashion. He was flying it very erratic."

A second witness stated, "...she witnessed a plane heading south/southeast very low to the water and saw it go underneath two power lines stretching across the Muskegon River. [The witness] explained that part of the plane hit the power wires and continued on with a very loud engine noise, yet it was not puttering at all, it was just a steady, loud engine noise. [The witness] explained the plane continued to head in the same direction losing control and going down towards the water. [The witness] explained the plane hit the water and made a large boom shaking everything in the area. [The witness] stated the plane did not float at all, but when it hit the water it continued going straight into the water. [The witness] never saw the plane again. [The witness] described the plane as a white, smaller style plane with a front engine prop."

A third witness stated, "...he was approximately 1,000 yards upstream of the crash. He advised [the officer] that the plane was only 20' above the water on the Muskegon River headed for the power lines. They did not see the power lines and the tail/fin section of the plane was severed by the power lines..."

### PERSONNEL INFORMATION

The pilot, age 55, held a private pilot certificate with a single engine land rating. Based upon logbook entries, he accumulated a total flight time of 859.3 hours. He received his last biennial flight review, which consisted of 1.5 hours of ground training and 1.8 hours of flight training, on July 27, 2001. He received a third class medical certificate on July 25, 2001, with

the following limitation: "must have available glasses for near vision."

#### AIRCRAFT INFORMATION

The 1968 Piper PA-28R-180, serial number (S/N) 28R-30743, was powered by a Lycoming IO-360-B1E engine rated at 180 horsepower. The airplane received its last inspection during an annual inspection dated March 29, 2002, at a total time and tachometer time of 3,686.8 hours and 1,473.0 hours, respectively. The engine was also inspected at that time and had accumulated a time since overhaul of 1,762.7 hours.

#### WRECKAGE AND IMPACT INFORMATION

The airplane was submerged in 25-30 feet of water in an upright position facing north-northeast. The left wing was separated from and lying in front of the fuselage. The engine and the attached propeller were located about 25 yards north of the main wreckage.

Markings consistent with a wire strike were present on the leading edge of the left wing inboard of a wing tear about seven feet from the wing root. The wing tear extended rearward and outboard at a 30 degree angle to the wing chord line. The left wing's outboard section was separated. The entire left flap and a inboard portion of the left aileron was attached to the left wing. The outboard section of the left wing was not recovered.

Examination of the flight control system confirmed flight control continuity from the control surfaces to the flight controls.

Examination of the engine revealed no anomalies.

The Hobbs meter and tachometer indications were 2,188.25 hours and 1,561.1 hours, respectively.

#### MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy of the pilot was performed on August 29, 2002.

The Federal Aviation Administration's Final Forensic Toxicology Fatal Accident Report of the pilot was negative for all substance tested.

#### SURVIVAL FACTORS

According to the Newaygo County Sheriff's Office Diver, the left front seat was occupied by a passenger who was "buckled in" and the right front seat was occupied by the pilot who was also "buckled in"

#### TESTS AND RESEARCH

Federal Aviation Regulation 91.119, Minimum safe altitudes, states: Except when necessary for takeoff or landing, no person may operate an aircraft below the following altitudes:

(a) Anywhere. An altitude allowing, if a power unit fails, an emergency landing without undue hazard to persons or property on the surface.

(b) Over congested areas. Over any congested area of a city, town, or settlement, or over any open air assembly of persons, an altitude of 1,000 feet above the highest obstacle within a horizontal radius of 2,000 feet of the aircraft.

(c) Over other than congested areas. An altitude of 500 feet above the surface, except over open water or sparsely populated areas. In those cases, the aircraft may not be operated closer than 500 feet to any person, vessel, vehicle, or structure.

#### ADDITIONAL INFORMATION

The FAA, Textron Lycoming, and The New Piper, Inc. were parties to the investigation.

The wreckage was released on August 30, 2002.

#### Pilot Information

<b>Certificate:</b>	Private	<b>Age:</b>	55, Male
<b>Airplane Rating(s):</b>	Single-engine land	<b>Seat Occupied:</b>	Right
<b>Other Aircraft Rating(s):</b>	None	<b>Restraint Used:</b>	
<b>Instrument Rating(s):</b>	None	<b>Second Pilot Present:</b>	No
<b>Instructor Rating(s):</b>	None	<b>Toxicology Performed:</b>	Yes
<b>Medical Certification:</b>	Class 3 Valid Medical--w/ waivers/lim	<b>Last FAA Medical Exam:</b>	July 25, 2001
<b>Occupational Pilot:</b>	No	<b>Last Flight Review or Equivalent:</b>	July 27, 2001
<b>Flight Time:</b>	860 hours (Total, all aircraft), 835 hours (Pilot In Command, all aircraft)		

## Aircraft and Owner/Operator Information

<b>Aircraft Make:</b>	Piper	<b>Registration:</b>	N4988J
<b>Model/Series:</b>	PA-28R-180	<b>Aircraft Category:</b>	Airplane
<b>Year of Manufacture:</b>		<b>Amateur Built:</b>	
<b>Airworthiness Certificate:</b>	Normal	<b>Serial Number:</b>	28R-30743
<b>Landing Gear Type:</b>	Tricycle	<b>Seats:</b>	4
<b>Date/Type of Last Inspection:</b>	March 29, 2002 Annual	<b>Certified Max Gross Wt.:</b>	2500 lbs
<b>Time Since Last Inspection:</b>	3682.2 Hrs	<b>Engines:</b>	1 Reciprocating
<b>Airframe Total Time:</b>		<b>Engine Manufacturer:</b>	Lycoming
<b>ELT:</b>	Installed	<b>Engine Model/Series:</b>	IO-360-B1E
<b>Registered Owner:</b>	Conrad Aero	<b>Rated Power:</b>	180 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>	Day
<b>Observation Facility, Elevation:</b>	MKG,628 ft msl	<b>Distance from Accident Site:</b>	25 Nautical Miles
<b>Observation Time:</b>	18:55 Local	<b>Direction from Accident Site:</b>	215°
<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>	8 knots / 0 knots	<b>Turbulence Type Forecast/Actual:</b>	/
<b>Wind Direction:</b>	70°	<b>Turbulence Severity Forecast/Actual:</b>	/
<b>Altimeter Setting:</b>	30.21 inches Hg	<b>Temperature/Dew Point:</b>	25°C / 13°C
<b>Precipitation and Obscuration:</b>	No Obscuration; No Precipitation		
<b>Departure Point:</b>	TRAVERSE CITY, MI (TVC )	<b>Type of Flight Plan Filed:</b>	None
<b>Destination:</b>	THREE RIVERS, MI (HAI )	<b>Type of Clearance:</b>	None
<b>Departure Time:</b>	18:00 Local	<b>Type of Airspace:</b>	Class G

## Wreckage and Impact Information

<b>Crew Injuries:</b>	1 Fatal	<b>Aircraft Damage:</b>	Destroyed
<b>Passenger Injuries:</b>	2 Fatal	<b>Aircraft Fire:</b>	None
<b>Ground Injuries:</b>	N/A	<b>Aircraft Explosion:</b>	None
<b>Total Injuries:</b>	3 Fatal	<b>Latitude, Longitude:</b>	43.466667,-85.75

## Administrative Information

**Investigator In Charge (IIC):** GALLO, MITCH

**Additional Participating Persons:** Donald W Finney; Federal Aviation Administration; Grand Rapids , MI  
Gregory Erickson; Textron Lycoming; Wayne, IL  
George Hollingsworth; The New Piper Aircraft, Inc.; Reston, VA

**Original Publish Date:** December 30, 2003

**Last Revision Date:**

**Investigation Class:** [Class](#)

**Note:** The NTSB traveled to the scene of this accident.

**Investigation Docket:** <https://data.nts.gov/Docket?ProjectID=55639>

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.

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