



National Transportation Safety Board Aviation Accident Final Report

Location:	MINTONVILLE, KY	Accident Number:	MIA95FA070
Date & Time:	02/02/1995, 1341 EST	Registration:	N734KV
Aircraft:	CESSNA 172N	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	2 Fatal

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

THE FLIGHT WAS REPORTED TO BE A DUAL INSTRUCTIONAL FLIGHT FROM CAHOKIA, IL TO GREENSBORO, NC. BOTH PILOTS WERE INSTRUMENT RATED. PRIOR TO DEPARTURE, THEY RECEIVED SEPARATE WEATHER BRIEFINGS DURING WHICH EACH WAS TOLD THAT VFR FLIGHT WAS NOT RECOMMENDED. NO FURTHER VOICE CONTACT WAS MADE WITH THE PILOTS. AN AIRCRAFT, WHICH WAS NOT RADAR IDENTIFIED, WITH TRANSPONDER CODE 1200 AND ALTITUDE REPORTING, WAS OBSERVED TO DEPART THE CAHOKIA AREA AND FLY SOUTHEASTERLY. THIS AIRCRAFT WAS LOST FROM RADAR AT THE CRASH SITE OF N734KV. IT WAS LAST OBSERVED AT 2,500 FT MSL. EXAMINATION OF THE CRASH SITE SHOWED THAT THE AIRCRAFT HAD STRUCK A GUY WIRE OF A RADIO TOWER AT THE 2,440-FT MSL LEVEL. EYEWITNESSES STATED THAT THE WEATHER WAS LOW CLOUDS AT THE TIME OF THE ACCIDENT, AND THAT THE TOP PORTION OF THE TOWER WAS NOT VISIBLE DUE TO THE CLOUDS.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: THE FLIGHTCREW'S INTENTIONAL VFR FLIGHT INTO KNOWN INSTRUMENT METEOROLOGICAL CONDITIONS. A FACTOR WAS THE INADEQUATE ALTITUDE TO PREVENT AN INADVERTENT COLLISION WITH AN OBSTRUCTION.

Findings

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

Findings

1. (F) WEATHER CONDITION - LOW CEILING
2. (C) VFR FLIGHT INTO IMC - INTENTIONAL - FLIGHTCREW
3. OBJECT - TOWER(MARKED)
4. (F) ALTITUDE - INADEQUATE - FLIGHTCREW

Factual Information

HISTORY OF THE FLIGHT

On February 2, 1995, about 1341 (all times eastern standard time), a Cessna 172N, N734KV, registered to the pilot, collided with a radio tower guy wire and crashed at Mintonville, Kentucky, while on a 14 CFR Part 91 personal flight. Instrument meteorological conditions prevailed at the time and no flight plan was filed. The aircraft was destroyed and the commercial-rated pilot flight instructor and commercial-rated dual student were fatally injured. The flight originated from the St. Louis Downtown-Parks Airport, Cahokia, Illinois on February 2, 1995, about 1128.

The flight was reported to be a dual instructional flight from Cahokia, Illinois, to Greensboro, North Carolina. The dual student was working toward a certified flight instructor certificate. A person who identified himself as a pilot on N734KV called the FAA St. Louis Flight Service Station (FSS) at 0823. He requested a weather briefing for a flight from Cahokia to Greensboro with an en route stop at London, Kentucky. The person was told VFR flight was not recommended. At 0859, another person who was later identified as the pilot of N734KV called the St. Louis FSS. He requested a weather briefing for the flight from Cahokia to Greensboro. The pilot was told of instrument flight rule conditions along the route of flight. Neither of these persons that called FSS filed a flight plan. Flight logs which were found in the aircraft wreckage indicated a stop was planned at London, Kentucky.

The flight departed St. Louis Downtown-Parks Airport at 1057. At 1109, the pilot requested to return to the airport and stated that he did not have an emergency. At 1128, the flight again departed St. Louis Downtown-Parks Airport. No further voice contact with the flight was made. The pilot's family notified the FAA on February 3, 1995, about 1330, that the flight had not arrived in Greensboro. A search was begun and the wreckage of the aircraft was located on February 5, 1995, about 1700, at the base of a 2,500-foot msl radio tower at Mintonville, Kentucky.

Radar data which was recorded at the FAA Kansas City, Indianapolis, and Atlanta Air Route Traffic Control Centers showed an aircraft with transponder code 1200 and reporting altitude appear on radar southeast of St. Louis Downtown-Parks shortly after N734KV departed the airport. This aircraft was flying southeasterly at 3,500 feet from the Cahokia, Illinois area. This aircraft began to descend in the area of Mintonville, Kentucky, and was lost from radar at 1340:49, while at 2,500 feet, at the location of the radio tower and crash site of N734KV. Voice contact with the pilot of this aircraft was not made and the aircraft was not radar identified.

Witnesses in the area of the crash site reported the weather on February 2, 1995, was raining with low clouds and visibility. The top of the radio tower was obscured by the clouds. Between 1330 and 1345 they heard a loud noise similar to thunder but did not see anything unusual.

PERSONNEL INFORMATION

Information on the pilot/flight instructor is contained in this report under pilot information. The pilot's family reported that the pilot started keeping his logbook records on a computer in 1989. They were unable to retrieve the logbook information from the computer after the accident. No records which showed the pilot had a current biennial flight review were located.

Information on the dual student is contained in Supplement E to this report. The dual

student's pilot logbook showed he last received a biennial flight review on September 7, 1991, when he took the FAA multiengine rating flight check.

AIRCRAFT INFORMATION

Information on the aircraft is contained in this report under aircraft information.

METEOROLOGICAL INFORMATION

Instrument meteorological conditions prevailed at the time of the accident. Additional meteorological information is contained in this report under weather information and in attachments to this report.

WRECKAGE AND IMPACT INFORMATION

The aircraft collided with the guy wire of a radio tower located at latitude 37 degrees 10 minutes 00 seconds North, longitude 84 degrees 49 minutes 28 seconds West. The tower is 1,000 feet tall and is built on a 1,530 foot hill, making the top of the tower 2,530 above mean sea level. The tower is depicted on the sectional aeronautical chart and is lighted during hours of darkness. The lighting system was off at the time of the accident. Examination of the tower showed that the top guy wire on the north side of the tower had a white paint transfer mark on it. This wire extends about 900 feet above ground level.

The collision occurred on the aircraft's inboard wing leading edge at the fuel tank area. After impact the left wing separated and came to rest 250 feet southeast of the tower. The main wreckage of the aircraft continued on a southeasterly heading and was located in a ravine, 1/4 mile from the tower.

Postcrash examination of the aircraft showed all components necessary for flight were located at the base of the tower or with the aircraft's main wreckage. Continuity of all flight control cables were confirmed. All separation points within the flight control systems were typical of overstress separation.

Examination of the engine showed the engine rotated normally. Compression was produced from each cylinder and valve train, crankshaft, camshaft, and accessory drive continuity was established. The single drive, dual magneto operated normally. Each spark plug had coloring consistent with normal operation. Teardown examination of the carburetor showed all jets were free of obstructions and the float and shut off valve operated normally. Examination of the muffler and exhaust system showed no evidence of exhaust leakage before the accident. Examination of the propeller showed each blade bending consistent with rotation with engine power at ground impact. One blade separated due to overload and was located adjacent to the main wreckage.

Examination of the engine-driven vacuum pump showed the drive shaft was not sheared. The pump had sustained impact damage and the internal carbon block was cracked. The vanes were intact and no rotational scars were visible inside the housing. The vacuum driven attitude indicator gyro rotor had rotational scars on it.

The emergency locator transmitter had sustained impact damage to the circuit board and did not operate.

MEDICAL AND PATHOLOGICAL INFORMATION

The pilot was located in the left front seat of the aircraft. Post-mortem examination of the

pilot was performed by Dr. John Hunsaker, State Medical Examiner's Office, Frankfort, Kentucky. The cause of death was attributed to multiple blunt trauma. No findings which could be considered causal to the accident were reported.

Toxicology tests on specimens obtained from the pilot was performed by Dr. John W. Soper, Forensic Toxicology Laboratory, Federal Aviation Administration, Oklahoma City, Oklahoma. The tests were negative for carbon monoxide, cyanide, alcohol, basic, acidic, and neutral drugs.

The dual student was located in the right front seat of the aircraft after the accident. Post-mortem examination was performed by Dr. Carolyn Coyne, State Medical Examiner's Office, Frankfort, Kentucky. The cause of death was attributed to multiple blunt trauma. No findings which could be considered causal to the accident were reported.

Toxicology tests on specimens from the dual student were performed by Dr. Dennis V. Canfield, Forensic Toxicology Laboratory, Federal Aviation Administration, Oklahoma City, Oklahoma. The tests were negative for carbon monoxide, cyanide, and alcohol. The tests were positive for pseudoephedrine and acetaminophen.

For additional medical and pathological information see Supplements K and attachments to this report.

ADDITIONAL INFORMATION

The aircraft wreckage was released on February 8, 1995, to the registered owner.

Pilot Information

Certificate:	Flight Instructor; Commercial	Age:	52, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	Seatbelt
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 2 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	08/30/1994
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	4800 hours (Total, all aircraft), 150 hours (Last 90 days, all aircraft), 50 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CESSNA	Registration:	N734KV
Model/Series:	172N 172N	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal; Utility	Serial Number:	17268922
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	11/07/1994, 100 Hour	Certified Max Gross Wt.:	2300 lbs
Time Since Last Inspection:	62 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3477 Hours	Engine Manufacturer:	LYCOMING
ELT:	Installed, not activated	Engine Model/Series:	O-320-H2AD
Registered Owner:	FARMER, JOHN E.	Rated Power:	160 hp
Operator:	FARMER, JOHN E.	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Instrument Conditions	Condition of Light:	Day
Observation Facility, Elevation:	SME, 927 ft msl	Distance from Accident Site:	13 Nautical Miles
Observation Time:	1255 EST	Direction from Accident Site:	135°
Lowest Cloud Condition:	Unknown / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	Overcast / 700 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	Light and Variable /	Turbulence Type Forecast/Actual:	/
Wind Direction:	Variable	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	7° C / 3° C
Precipitation and Obscuration:			
Departure Point:	CAHOKIA, IL (CSP)	Type of Flight Plan Filed:	None
Destination:	LONDON, KY (LOZ)	Type of Clearance:	None
Departure Time:	1028 CST	Type of Airspace:	Class E

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	2 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): JEFFREY L KENNEDY **Report Date:** 10/26/1995

Additional Participating Persons: JOHN W RHOADS; LOUISVILLE, KY
CLAUDE C UNDERWOOD; WICHITA, KS
EDWARD G ROGALSKI; WILLIAMSPORT, PA

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 pubinq@ntsb.gov, or at 800-877-6799. Dockets released after this date are available at <http://dms.nts.gov/pubdms/>.

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