



National Transportation Safety Board Aviation Accident Final Report

Location:	HALLETT, OK	Accident Number:	FTW96FA058
Date & Time:	12/02/1995, 0141 CST	Registration:	N98003
Aircraft:	Cessna 172P	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	3 Fatal

Flight Conducted Under: Part 91: General Aviation - Instructional

Analysis

The flight instructor, his student, and a passenger departed Stillwater Municipal Airport at 0120 for a night instructional cross country flight. They flew east climbing to 3,500 feet MSL and parallel to the Cimarron Turnpike. The Cimarron Turnpike, elevation 980 feet, is a 4 lane white cement highway with a 10 foot wide grass strip separating the east and westbound lanes. The spacing of the eastbound traffic, at that time of night, was 5 to 8 miles apart and the moon was approximately 85% full. At 0138:20, radar showed the airplane flying a descending box pattern over the turnpike culminating with impacting the 7/16 inch stainless steel static wires which were 64 feet over the turnpike. The airplane impacted on the eastbound lanes and slid east, 3 feet north of the center line and exactly parallel to it for a 162 feet. Moments before the impact, witnesses 'noticed a bright, single light practically directly behind' them. Because no other vehicles arrived at the accident scene for approximately 5 minutes, they believe the bright light they saw was that of the airplane.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The flight instructor's intentional low altitude flight maneuver. Factors were the static wire and the bright night condition.

Findings

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

Findings

1. (C) LOW ALTITUDE FLIGHT/MANEUVER - INTENTIONAL - PILOT IN COMMAND(CFI)
2. (C) TERRAIN CONDITION - ROADWAY/HIGHWAY
3. (F) LIGHT CONDITION - BRIGHT NIGHT
4. (F) OBJECT - WIRE,STATIC

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

Factual Information

HISTORY OF FLIGHT

On December 2, 1995, at 0141 central standard time, a Cessna 172P, N98003, was destroyed upon impact with static wires near Hallett, Oklahoma. The flight instructor, the commercial pilot rated student, and the passenger were fatally injured. The aircraft was registered to Christiansen Aviation, Inc. and was being operated by Spartan School of Aeronautics of Tulsa, Oklahoma, under Title 14 CFR Part 91. The flight originated from Stillwater Municipal Airport near Stillwater, Oklahoma, at 0120, with Tulsa, Oklahoma, as its intended destination. Visual meteorological conditions prevailed for the night cross country dual instructional flight for which a flight plan was not filed.

The first leg of the night cross training flight began with the filing of a VFR flight plan with McAlester AFSS at approximately 2000 on the evening of December 1, 1995. The flight plan was opened with McAlester AFSS at 2035 and the airplane proceeded from Richard Lloyd Jones Jr. Airport (commonly known by the old name of Riverside Airport) to Stillwater Municipal Airport. At approximately 2105, the flight instructor called McAlester AFSS and closed their flight plan. Approximately 15 minutes later the airplane was on the ground and the fuel tanks were immediately topped off.

The second leg of the flight began at approximately 0120 on December 2, 1995 with no flight plan filed. The first radar contact with the accident aircraft was due east of Stillwater Municipal Airport at 0125 at 2,600 feet MSL which is approximately 1,600 feet above the ground. Approximately two minutes later the aircraft leveled off at 3,500 feet MSL and continued eastbound for 12 to 13 minutes. For the last 6 minutes of this time period, the aircraft was flying parallel to and within 1/2 mile to the south of the Cimarron Turnpike.

The Cimarron Turnpike is a 4 lane white cement highway with a 10 foot wide grass strip separating the east and westbound lanes. The vehicle traffic volume in the eastbound lanes at that time of night would space the surface vehicles at an estimated 5 to 8 miles apart (see enclosed documentation). The moon on December 2, 1995 was approximately 85% full which contributed to making a bright clear night.

ATC radar data showed that, at 0138:20, the aircraft made a left turn northbound and, as it crossed over the Cimarron Turnpike, began to descend. The aircraft's turn continued until a westbound heading was established. The last radar contact was made at 0140:04 and the airplane had descended to 1,800 feet MSL or approximately 800 feet above the ground.

Witnesses in an automobile driving east on the Cimarron Turnpike during this time period "noticed a bright, single light practically directly behind" them. The driver of the car "wondered if the light may have been a motorcycle with it's bright light on." Later, after she had time to think about the events, she decided that it was not a motorcycle because "1) it was too large and too bright, and 2) it was placed too high off the ground."

The above mentioned witnesses next observed "a large fire ball rising in the air 100 to 200 yards behind" them. The witnesses turned their car around and drove to the accident scene to discover that an airplane was on fire. The witnesses reported that they stood near the burning airplane "for probably 5 minutes before anyone else appeared." The witnesses further reported that they believed the bright light they saw earlier "could have been the airplane's landing lights behind us."

WRECKAGE AND IMPACT INFORMATION

A 7/16 inch stainless steel static wire, sixty-four feet off of the ground, was found separated approximately 132 feet from the accident site. The north end of the wire exhibited black and reddish brown paint transfers. The south end of the wire was examined later, after the power company completed repairs. The south end also exhibited black and reddish brown paint transfers. The power company noted that a power interruption occurred at 0141:25 on the day of the accident.

The aircraft impacted on the eastbound lanes of the Cimarron Turnpike. Ground scars were noted 3 feet north of the turnpike centerline and parallel to it for a 162 feet. The airplane came to rest on a measured magnetic heading of 360 degrees at mile marker 52.9.

All primary and secondary controls were accounted for in the wreckage. According to the aircraft recovery personnel, the control cables were cut in the salvage operation. Control cable continuity was established to all flight surfaces from the cut cable ends. The left outboard wing section exhibited aft, downward crushing, and the right wing leading edge exhibited symmetrical aft crushing.

Examination of the engine revealed no anomalies which could have affected its performance. Twenty inches were melted from one propeller blade and the other exhibited jagged leading edge damage, chordwise scoring, and "S" twisting. The cabin environment was consumed by the post crash fire.

MEDICAL AND PATHOLOGICAL INFORMATION

Autopsies and toxicological tests were ordered and performed on both pilots. The autopsies were performed by the Office of the Chief Medical Examiner at Tulsa, Oklahoma, on December 27, 1995.

ADDITIONAL DATA

The airplane was released to the owner's representative.

Pilot Information

Certificate:	Commercial	Age:	30, Male
Airplane Rating(s):	Multi-engine Land; Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	Airplane	Second Pilot Present:	Yes
Instructor Rating(s):	Airplane Multi-engine; Airplane Single-engine; Instrument Airplane	Toxicology Performed:	Yes
Medical Certification:	Class 1 Valid Medical--w/ waivers/lim.	Last FAA Medical Exam:	10/02/1995
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	1254 hours (Total, all aircraft), 173 hours (Total, this make and model), 1173 hours (Pilot In Command, all aircraft), 82 hours (Last 90 days, all aircraft), 20 hours (Last 30 days, all aircraft), 2 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cessna	Registration:	N98003
Model/Series:	172P 172P	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	17276247
Landing Gear Type:	Tricycle	Seats:	4
Date/Type of Last Inspection:	11/15/1995, 100 Hour	Certified Max Gross Wt.:	2400 lbs
Time Since Last Inspection:	16 Hours	Engines:	1 Reciprocating
Airframe Total Time:	6371 Hours	Engine Manufacturer:	Lycoming
ELT:	Installed	Engine Model/Series:	O-320-D2J
Registered Owner:	CHRISTIANSEN AVIATION, INC.	Rated Power:	160 hp
Operator:	SPARTAN FLIGHT SCHOOL	Operating Certificate(s) Held:	None
Operator Does Business As:	SPARTAN SCHOOL OF AERONAUTICS	Operator Designator Code:	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Night/Bright
Observation Facility, Elevation:	TUL, 677 ft msl	Distance from Accident Site:	30 Nautical Miles
Observation Time:	0056 CST	Direction from Accident Site:	90°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	7 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	3 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	150°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	11° C / 9° C
Precipitation and Obscuration:			
Departure Point:	STILLWATER, OK (SWO)	Type of Flight Plan Filed:	None
Destination:	TULSA, OK (RVS)	Type of Clearance:	None
Departure Time:	0120 CST	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	2 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	1 Fatal	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	3 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC):	JAMES F STRUHSAKER	Report Date:	07/17/1996
Additional Participating Persons:	WAYNE E COOK; OKLAHOMA CITY, OK GERALD R JAMES; WILLIAMSPORT, PA DAVID S RYAN; WICHITA, KS JOHN ABCZYNSKI; TULSA, OK		
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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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](#).