



National Transportation Safety Board Aviation Accident Final Report

Location:	COLUMBUS, NE	Accident Number:	CHI00FA200
Date & Time:	07/15/2000, 1830 CDT	Registration:	N947V
Aircraft:	Beech 35	Aircraft Damage:	Destroyed
Defining Event:		Injuries:	1 Fatal
Flight Conducted Under:	Part 91: General Aviation - Personal		

Analysis

The airplane was destroyed after impacting power lines and terrain. Witnesses reported that the aircraft was flying at a low altitude when it hit the power lines. One witness stated that he had seen the aircraft "...flying low one time before down river." The azimuth and elevation of the sun were found to be 276.4 degrees and 25.9 degrees respectively. The wreckage path started about 100 feet from a set of approximately 60-foot high power lines and was oriented on an approximately 260-degree magnetic heading. The main wreckage was located about 440 feet from the power lines. The aircraft was equipped with a "V-tail" empennage. The tail surfaces were examined and both were found to have leading edge damage at the mid-span location. The leading edge skins of both surfaces were torn and exhibited longitudinal scratches back to the spar/stringer location. The entire tail assembly was broken loose from the airframe at the mount. The tail assembly was found about halfway between the power lines and the main wreckage. No anomalies, with regard to the airframe, engine, or systems were detected that could be associated with a preexisting condition.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: the failure of the pilot to maintain clearance from the power line. Factors were the sun glare and the wire.

Findings

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

Findings

1. (F) LIGHT CONDITION - SUNGLARE
2. (C) ALTITUDE/CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
3. (F) OBJECT - WIRE, TRANSMISSION

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

Factual Information

HISTORY OF FLIGHT

On July 15, 2000, at 1830 central daylight time, a Beech model 35, N947V, piloted by a private pilot was destroyed after impacting power lines and terrain near Columbus, Nebraska. The personal 14 CFR Part 91 flight was not on a flight plan. Visual meteorological conditions prevailed at the time of the accident. The pilot, who was the sole occupant, was fatally injured. The departure and destination points have not been determined.

Witnesses to the accident reported that the aircraft was flying at a low altitude when it hit the power lines. One witness stated that he had seen the aircraft "...flying low one time before down river."

PERSONEL INFORMATION

The pilot was born on July 10, 1977 and was the holder of a private pilot certificate issued on June 12, 1999. The pilot also held a third class medical certificate dated April 01, 1999. At the time of the medical examination, the pilot reported having 22 hours total time. A relative of the pilot estimated that the pilot had 400 hours total flight time and 200 hours in the accident airplane.

AIRCRAFT INFORMATION

The airplane was a Beechcraft model 35, N947V, serial number D-880. The aircraft logbooks indicated that an annual inspection was performed on January 20, 2000, at an aircraft total time of 3,681.7 hours and a recording tachometer time of 480.1 hours. At the time of the accident, the recording tachometer read 639.8 hours. The engine was a Continental model E-185-8, serial number 20631-D-0-8. According to the logbooks, the engine was last overhauled on November 19, 1981, at a total engine time of 3,899.0 hours. The engine was installed on the airframe at a total airframe time of 3201.6 hours.

METEOROLOGICAL INFORMATION

A weather reporting station located about 4 miles north of the accident site recorded the weather at 1855 as: Wind 120 degrees at 9 knots; Visibility 10 statute miles; Sky condition clear; Temperature 88 degrees Fahrenheit; Dew point 72 degrees Fahrenheit; Altimeter setting 29.82 inches of mercury.

A computer program was used to determine the azimuth and elevation of the sun at the time of the accident by inputting the latitude and longitude of the accident site along with the date and time. At the time of the accident, the azimuth was 276.4 degrees and the elevation was 25.9 degrees.

WRECKAGE AND IMPACT INFORMATION

A postaccident examination of the wreckage was conducted. The aircraft came to rest on a sand bar located in the middle of the Loup River. The wreckage path started about 100 feet from a set of approximately 60-foot high power lines. The wreckage path was oriented on an approximately 260-degree magnetic heading. The main wreckage was located about 440 feet from the power lines. Smaller pieces of wreckage were located between the power lines and the main wreckage.

The aircraft was equipped with a "V-tail" empennage. The tail surfaces were examined and

both were found to have leading edge damage at the mid-span location. The leading edge skins of both surfaces were torn and exhibited longitudinal scratches back to the spar/stringer location. The entire tail assembly was broken loose from the airframe at the mount. The tail assembly was found about halfway between the power lines and the main wreckage.

No anomalies, with regard to the airframe, were detected that could be associated with a preexisting condition.

The lower set of spark plugs was removed from the engine and no anomalies were noted. The forward two valve covers were removed and the valves and rocker arms were examined with no anomalies detected. The fuel screen was examined and no evidence of blockage was detected. No anomalies, with regard to the engine or engine accessories, were detected that could be associated with a preexisting condition.

The flight control system was examined and all cable breaks exhibited evidence consistent with tensile overload. No anomalies, with regard to the flight control system, were detected that could be associated with a preexisting condition.

MEDICAL AND PATHOLOGICAL INFORMATION

An autopsy was performed at the Douglas County Hospital, Douglas County, Nebraska.

A toxicology report from the Federal Aviation Administration lists negative results for all tests performed.

ADDITIONAL INFORMATION

Parties to the investigation were the Federal Aviation Administration, Lincoln, Nebraska and Raytheon Aircraft Company, Wichita, Kansas.

The wreckage was released on July 16, 2000.

Pilot Information

Certificate:	Private	Age:	23, Male
Airplane Rating(s):	Single-engine Land	Seat Occupied:	Left
Other Aircraft Rating(s):	None	Restraint Used:	
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	Yes
Medical Certification:	Class 3 Valid Medical--no waivers/lim.	Last FAA Medical Exam:	04/01/1999
Occupational Pilot:		Last Flight Review or Equivalent:	
Flight Time:	400 hours (Total, all aircraft), 200 hours (Total, this make and model)		

Aircraft and Owner/Operator Information

Aircraft Make:	Beech	Registration:	N947V
Model/Series:	35 35	Aircraft Category:	Airplane
Year of Manufacture:		Amateur Built:	No
Airworthiness Certificate:	Normal	Serial Number:	D-880
Landing Gear Type:	Retractable - Tricycle	Seats:	4
Date/Type of Last Inspection:	01/20/2000, Annual	Certified Max Gross Wt.:	2550 lbs
Time Since Last Inspection:	160 Hours	Engines:	1 Reciprocating
Airframe Total Time:	3841 Hours	Engine Manufacturer:	Continental
ELT:	Installed, not activated	Engine Model/Series:	E-185-8
Registered Owner:	ROBERT G TOD	Rated Power:	185 hp
Operator:	ROBERT G TOD	Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual Conditions	Condition of Light:	Day
Observation Facility, Elevation:	OLU, 1440 ft msl	Distance from Accident Site:	4 Nautical Miles
Observation Time:	1855 CDT	Direction from Accident Site:	339°
Lowest Cloud Condition:	Clear / 0 ft agl	Visibility	10 Miles
Lowest Ceiling:	None / 0 ft agl	Visibility (RVR):	0 ft
Wind Speed/Gusts:	9 knots /	Turbulence Type Forecast/Actual:	/
Wind Direction:	120°	Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29 inches Hg	Temperature/Dew Point:	88° C / 72° C
Precipitation and Obscuration:			
Departure Point:		Type of Flight Plan Filed:	None
Destination:		Type of Clearance:	None
Departure Time:	0000	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Fatal	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-Ground
Ground Injuries:	N/A	Aircraft Explosion:	On-Ground
Total Injuries:	1 Fatal	Latitude, Longitude:	

Administrative Information

Investigator In Charge (IIC): JOHN M BRANNEN **Report Date:** 09/06/2001

Additional Participating Persons: RICK JOHNSON; LINCOLN, NE
EDDIE WEBER; WICHITA, KS

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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