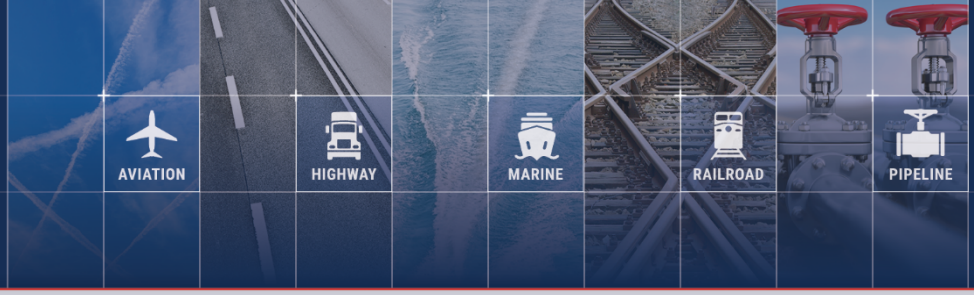

Aviation Investigation Final Report

Location:	ALTUS, Arkansas	**Accident Number:**	FTW99FA171
Date & Time:	June 18, 1999, 11:00 Local	**Registration:**	N3751
Aircraft:	Heilig-Reading EMERAUDE CP 301A	**Aircraft Damage:**	Substantial
Defining Event:		**Injuries:**	1 Fatal
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

A witness, who resided near the departure end of the runway, reported that the pilot had contacted him by radio. The pilot stated that he was 'down and taxiing back.' That was the last communication the resident had with the pilot. About 2 hours after the last transmission, the resident realized that he had not heard from the pilot, so he went out to the runway to see if he could see the airplane. He looked down the runway and saw that the aircraft had crashed on the approach end of the runway. Examination of the accident site revealed that an electrical wire and its support cable that extended diagonally across the approach path to the runway were down. No structural or mechanical anomalies were observed during an examination of the airplane. There was damage sustained by the right wing consistent with a wire strike.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be: The pilot's failure to maintain clearance with a wire, during an approach to a private airstrip.

Findings

Occurrence #1: IN FLIGHT COLLISION WITH OBJECT
Phase of Operation: APPROACH - VFR PATTERN - FINAL APPROACH

Findings

1. (C) CLEARANCE - NOT MAINTAINED - PILOT IN COMMAND
2. OBJECT - WIRE,TRANSMISSION

Factual Information

HISTORY OF FLIGHT

On June 18, 1999, approximately 1100 central daylight time, a Heilig-Reading Emeraude CP 301A amateur built experimental airplane, N3751, owned and operated by the pilot, was substantially damaged when it collided with a power line during landing at the Winfield Airpark near Altus, Arkansas. The pilot, sole occupant of the airplane, was fatally injured. Visual meteorological conditions prevailed, and a flight plan was not filed for the 14 Code of Federal Regulations Part 91 personal flight. The local flight originated from the Winfield Airpark at an undetermined time.

A witness, who resided near the departure end of runway 09, reported that the pilot had contacted him by radio sometime before 1100. The pilot stated that he was "down and taxiing back." That was the last communications he had with the pilot.

The resident further reported that about 1300 he realized that he had not heard from the pilot so he went out to the runway to see if he could see the airplane. The pilot had a hangar near the approach end of runway 09. He looked down the runway and saw that the aircraft had crashed on the approach end of runway 09.

PERSONNNEL INFORMATION

According to FAA records, the pilot was issued a private pilot certificate on March 25, 1985, with an airplane single-engine land rating. The pilot held a second class medical certificate, issued October 16, 1998. The certificate stipulated a limitation to wear corrective lenses when operating an aircraft.

An examination of the pilot's logbook revealed that he had accumulated a total flight time of 3,104 hours, of which 11 hours were in the same make and model as the accident airplane. The date of the pilot's last biennial flight review was October 19, 1998. The pilot had previously flown from the private airstrip.

AIRCRAFT INFORMATION

The 1970 model Heilig-Reading Emeraude CP 301A, was a single-engine, fabric covered, tailwheel equipped, low wing experimental amateur-built airplane. It was powered by a Textron Lycoming O-290-D2 engine, rated at 135 horsepower, and a Sensenich, two-blade, fixed pitch wooden propeller.

The aircraft's last condition inspection was completed on March 8, 1999, at a total aircraft time

of 1,120.0 hours. At the time of the accident, the airplane had accumulated a total of 1,125 flight hours.

A review of the airframe and engine maintenance records, by the NTSB investigator-in-charge, did not reveal evidence of any uncorrected maintenance defects. The aircraft's maximum gross weight was 1,595 pounds, and an estimate of the aircraft's weight at the time of the accident placed it within weight and balance limits.

AERODROME INFORMATION

The Winfield Airpark is a private airstrip, and it is located about 3.7 miles south of Altus. The airstrip's grass runway is 2,600 feet long and oriented 270/090 degrees.

WRECKAGE IMPACT INFORMATION

Examination of the accident site revealed that an electrical wire and its support cable, located prior to the approach end of runway 09 was down. The wire and cable had extended 71.5 feet from an approximately 20-foot-tall pole, located 167 feet from the runway and next to a barn, diagonally across the flight path of runway 09 to an approximately 24-foot-tall pole, located about 98 feet from the runway. The downed support cable displayed a mark 13 feet and 10 inches from the pole located next to the barn. There was also a red paint transfer mark on the support cable and scrapes on the wire and cable near the insulator, which had attached the wire to the pole. The airplane impacted the ground and a barbed wire fence at the edge of the approach end of runway 09. It came to rest inverted, on a heading of 040 degrees magnetic, approximately 26.5 feet from the initial ground scar.

Examination of the airframe revealed that the left wing was separated from the fuselage, and the left flap and aileron were separated from the wing. The right wing was attached to the fuselage, and displayed an area, 41 inches from the tip, that had damage to the leading edge. At this area of damage, there was a tear consistent with a wire strike. The vertical stabilizer was fractured at the fuselage, and the rudder was deflected to the right. The left horizontal stabilizer had a tear on the leading edge near the fuselage. Continuity was established from the cockpit controls to all flight control surfaces except for the separated left wing.

Examination of the engine revealed that the propeller remained attached. One blade was shattered, and its tip was found stuck in the ground prior to the ground scar. The other blade displayed some leading edge damage. The crankshaft was rotated by hand with the valve covers and top spark plugs removed. Continuity was confirmed to all cylinders and to the rear of the engine. Finger compression was noted on all cylinders. Both magnetos sparked at all terminals when rotated by hand.

MEDICAL AND PATHOLOGICAL INFORMATION

The Arkansas State Crime Laboratory in Little Rock, Arkansas, performed an autopsy of the

pilot. Toxicological tests performed by the FAA's Toxicology and Accident Research Laboratory were negative.

ADDITIONAL DATA

The aircraft wreckage was released to the owner's representative on June 16, 1999.

Pilot Information

Certificate:	Private	**Age:**	66,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 2 Valid Medical--w/ waivers/lim	**Last FAA Medical Exam:**	October 16, 1998
Occupational Pilot:	UNK	**Last Flight Review or Equivalent:**	
Flight Time:	3104 hours (Total, all aircraft), 11 hours (Total, this make and model), 1828 hours (Pilot In Command, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Heilig-Reading	**Registration:**	N3751
Model/Series:	EMERAUDE CP 301A EMERAUDE C	**Aircraft Category:**	Airplane
Year of Manufacture:		**Amateur Built:**	Yes
Airworthiness Certificate:	Experimental (Special)	**Serial Number:**	RH1-1135
Landing Gear Type:	Tailwheel	**Seats:**	2
Date/Type of Last Inspection:	March 8, 1999 Annual	**Certified Max Gross Wt.:**	1595 lbs
Time Since Last Inspection:	5 Hrs	**Engines:**	1 Reciprocating
Airframe Total Time:	1125 Hrs	**Engine Manufacturer:**	Lycoming
ELT:	Installed, not activated	**Engine Model/Series:**	O-290-D2
Registered Owner:	SAM MCREYNOLDS	**Rated Power:**	135 Horsepower
Operator:		**Operating Certificate(s) Held:**	None
Operator Does Business As:		**Operator Designator Code:**	

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	**Condition of Light:**	Day
Observation Facility, Elevation:	FSM ,469 ft msl	**Distance from Accident Site:**	30 Nautical Miles
Observation Time:	10:53 Local	**Direction from Accident Site:**	250°
Lowest Cloud Condition:	Clear	**Visibility**	10 miles
Lowest Ceiling:	None	**Visibility (RVR):**	
Wind Speed/Gusts:	10 knots /	**Turbulence Type Forecast/Actual:**	/
Wind Direction:	100°	**Turbulence Severity Forecast/Actual:**	/
Altimeter Setting:	30 inches Hg	**Temperature/Dew Point:**	23°C / 12°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	(NONE)	**Type of Flight Plan Filed:**	None
Destination:		**Type of Clearance:**	None
Departure Time:	00:00 Local	**Type of Airspace:**	Class G

Airport Information

Airport:	WINFIELD AIRPARK NONE	**Runway Surface Type:**	Grass/turf
Airport Elevation:		**Runway Surface Condition:**	Dry
Runway Used:	9	**IFR Approach:**	None
Runway Length/Width:	2600 ft	**VFR Approach/Landing:**	Traffic pattern

Wreckage and Impact Information

Crew Injuries:	1 Fatal	**Aircraft Damage:**	Substantial
Passenger Injuries:		**Aircraft Fire:**	None
Ground Injuries:	N/A	**Aircraft Explosion:**	None
Total Injuries:	1 Fatal	**Latitude, Longitude:**	35.440166,-93.75901(est)

Administrative Information

Investigator In Charge (IIC):	Wigington, Douglas
Additional Participating Persons:	CURTIS L WEEDMAN; LITTLE ROCK , AR GERALD R JAMES; WILLIAMSPORT , PA
Original Publish Date:	April 6, 2001
Last Revision Date:	
Investigation Class:	Class
Note:	
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=46583

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.

The NTSB does not assign fault or blame for an accident or incident; rather, as specified by NTSB regulation, "accident/incident investigations are fact-finding proceedings with no formal issues and no adverse parties … and are not conducted for the purpose of determining the rights or liabilities of any person" (Title 49 *Code of Federal Regulations* section 831.4). Assignment of fault or legal liability is not relevant to the NTSB's statutory mission to improve transportation safety by investigating accidents and incidents and issuing safety recommendations. In addition, statutory language prohibits the admission into evidence or use of any part of an NTSB report related to an accident in a civil action for damages resulting from a matter mentioned in the report (Title 49 *United States Code* section 1154(b)). A factual report that may be admissible under 49 *United States Code* section 1154(b) is available here.