



AVIATION



HIGHWAY



MARINE



RAILROAD



PIPELINE

Aviation Investigation Final Report

Location:	Browns Valley, California	Accident Number:	WPR18LA107
Date & Time:	March 18, 2018, 08:30 Local	Registration:	N1951B
Aircraft:	CUBCRAFTERS INC CC11-160	Aircraft Damage:	Substantial
Defining Event:	Miscellaneous/other	Injuries:	1 Serious
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The private pilot reported that he was maneuvering at an altitude of about 500 ft over an unpopulated area and studying the river when the airplane must have gone below 500 ft and hit something. A fire started, and the airplane subsequently crashed in the river and sustained substantial damage to the fuselage and both wings. The pilot reported that he was later told that he hit a power line.

The river runs generally east to west. The power lines were about 200 ft tall, ran across the river generally north and south, and extended about 1 mile. The wreckage was located about 2,000 ft east of the power lines in about 3 ft of water. Power line company personnel reported that six power lines were found separated.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation. The pilot likely was not vigilant in monitoring the environment for obstructions and did not maintain a sufficient altitude to avoid the power lines.

Probable Cause and Findings

The National Transportation Safety Board determines the probable cause(s) of this accident to be:

The pilot's failure to adequately monitor the environment and maintain a sufficient altitude to avoid power lines.

Findings

Personnel issues	Monitoring environment - Pilot
Aircraft	Altitude - Not attained/maintained
Environmental issues	Wire - Effect on operation
Environmental issues	Water - Contributed to outcome

Factual Information

History of Flight

Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)
Maneuvering-low-alt flying	Miscellaneous/other (Defining event)
Uncontrolled descent	Fire/smoke (non-impact)

On March 18, 2018, about 0830 Pacific daylight time, a Cubcrafters CC11-160 airplane, N1951B, crashed in a river following a wire strike near Browns Valley, California. The private pilot sustained serious injuries. The airplane sustained substantial damage to the fuselage and both wings. The airplane was registered to Plane Fun LLC., Roseville, California, and operated by the pilot under the provisions of Title 14 *Code of Federal Regulations* Part 91 as a local personal flight. Visual meteorological conditions prevailed, and no flight plan was filed. The flight originated from the Lincoln Regional Airport (LHM), Lincoln, California at 0800.

The pilot reported that he was maneuvering about 500 ft over the unpopulated area and studying the river when the airplane must have lost altitude and hit something. A fire broke out and the airplane subsequently crashed in the river. The pilot reported that he was later told that he hit a power line.

A witness located on the rivers shore, near the accident site, reported that he observed a yellow airplane maneuvering at a height a little higher than a telephone pole. The airplane circled his location a few times before he lost sight of it behind a pile of dredger tailings. He then heard what he described as an explosion. When he reacquired the airplane, he noticed that there were flames coming out of the right side of the fuselage. He again lost sight of the airplane just before it impacted the river.

The river runs generally east to west. The height of the powerlines was about 200 ft and run across the river generally north and south and extend approximately 1 mile. The wreckage was located approximately 2,000 ft east of the powerlines, in about 3 ft of water.

The powerline company sent a representative to assess the damage to the power lines. The representative reported that six power lines were separated, and 16 residences were without power.

The pilot reported that there were no preaccident mechanical malfunctions or failures with the airplane that would have precluded normal operation.

Pilot Information

Certificate:	Private	Age:	66,Male
Airplane Rating(s):	Single-engine land; Single-engine sea	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	None	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	No
Medical Certification:	Class 3 With waivers/limitations	Last FAA Medical Exam:	April 25, 2016
Occupational Pilot:	No	Last Flight Review or Equivalent:	August 5, 2017
Flight Time:	(Estimated) 937 hours (Total, all aircraft), 101 hours (Total, this make and model), 816 hours (Pilot In Command, all aircraft), 13 hours (Last 90 days, all aircraft), 3 hours (Last 30 days, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	CUBCRAFTERS INC	Registration:	N1951B
Model/Series:	CC11-160 NO SERIES	Aircraft Category:	Airplane
Year of Manufacture:	2016	Amateur Built:	
Airworthiness Certificate:	Normal	Serial Number:	CC11-00406
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 21, 2017 Condition	Certified Max Gross Wt.:	1350 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	135 Hrs	Engine Manufacturer:	Titan
ELT:	C126 installed, activated, aided in locating accident	Engine Model/Series:	OX-340CC-B3J3
Registered Owner:		Rated Power:	180 Horsepower
Operator:		Operating Certificate(s) Held:	None

Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:	KBAB, 113 ft msl	Distance from Accident Site:	5 Nautical Miles
Observation Time:	15:58 Local	Direction from Accident Site:	191°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	4 knots /	Turbulence Type Forecast/Actual:	/ None
Wind Direction:	330°	Turbulence Severity Forecast/Actual:	/ N/A
Altimeter Setting:	30.19 inches Hg	Temperature/Dew Point:	6°C / 2°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	LINCOLN, CA (LHM)	Type of Flight Plan Filed:	None
Destination:	LINCOLN, CA (LHM)	Type of Clearance:	None
Departure Time:	08:00 Local	Type of Airspace:	Class G

Wreckage and Impact Information

Crew Injuries:	1 Serious	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	In-flight
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Serious	Latitude, Longitude:	39.219722,-121.411392(est)

Administrative Information

Investigator In Charge (IIC):	Vanover, Jackie
Additional Participating Persons:	Craig Miller; FAA; Sacramento, CA
Original Publish Date:	May 29, 2019
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=96886

The National Transportation Safety Board (NTSB), established in 1967, is an independent federal agency mandated by Congress through the Independent Safety Board Act of 1974 to investigate transportation accidents, determine the probable causes of the accidents, issue safety recommendations, study transportation safety issues, and evaluate the safety effectiveness of government agencies involved in transportation. The NTSB makes public its actions and decisions through accident reports, safety studies, special investigation reports, safety recommendations, and statistical reviews.

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](#).