



# **Aviation Investigation Final Report**

Location: Loma, Colorado Accident Number: CEN18LA303

Date & Time: July 31, 2018, 11:30 Local Registration: N125TY

Aircraft: Buchanan Kitfox IV Aircraft Damage: Substantial

**Defining Event:** Loss of control in flight **Injuries:** 1 Minor

Flight Conducted Under: Part 91: General aviation - Personal

### **Analysis**

The private pilot departed on a cross-country, personal flight, and during the flight, he chose to fly at low altitude over a river. The pilot reported that, after passing over a group of river rafters about 500 ft above ground level, he "dropped [the airplane] low to the river." Shortly after descending, the airplane's vertical stabilizer struck a cableway that crossed over the river. The pilot lost airplane control, and the airplane subsequently impacted the side of the river canyon and then came to rest partially submerged in the river.

The cableway was supported by two fixed A-frame structures located on the sides of the riverbank, and the cable height at its center above the water's surface was 32 ft. The pilot likely was not properly monitoring the environment during the low-altitude operation, which resulted in his failure to see and avoid the cableway.

## **Probable Cause and Findings**

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

The pilot's improper decision to conduct a low-altitude flight over a river and his inadequate monitoring of the environment, which resulted in a collision with a cableway.

## **Findings**

 Personnel issues
 Decision making/judgment - Pilot

 Aircraft
 Altitude - Incorrect use/operation

 Personnel issues
 Monitoring environment - Pilot

 Environmental issues
 Wire - Effect on operation

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#### **Factual Information**

#### **History of Flight**

Maneuvering-low-alt flying	Low altitude operation/event
Maneuvering-low-alt flying	Loss of control in flight (Defining event)
Maneuvering-low-alt flying	Collision with terr/obj (non-CFIT)

On July 31, 2018, about 1130 mountain daylight time, a Buchanan Kitfox IV experimental airplane, N125TY, impacted a cableway while maneuvering at low altitude over the Colorado River near Loma, Colorado. The private pilot sustained minor injuries, and the airplane sustained substantial damage to the fuselage. The airplane was registered to and operated by a private individual as a Title 14 *Code of Federal Regulations* Part 91 personal flight. Visual meteorological conditions prevailed at the time of the accident, and the flight was operated on a visual flight rules flight plan. The airplane departed the Grand Junction Regional Airport (GJT), Grand Junction, Colorado, about 1100, and was destined for Cedar City, Utah.

According to the pilot, he departed GJT and elected to fly at low altitude over the Colorado River. After over passing a group of river rafters about 500 ft above ground level, the pilot "dropped [the airplane] low to the river." Shortly after descending, the airplane's vertical stabilizer struck a cableway (owned and maintained by the US Geological Survey (USGS)) that crossed over the river. The pilot lost control of the airplane, and the airplane impacted the side of the river canyon. The airplane came to rest partially submerged in the river, and the pilot was rescued by passing river rafters (Figure 1).

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Figure 1 - Accident Site (photo provided by Mesa County Sheriff's Office)

According to the USGS, the cableway is supported by two fixed A-frame structures located on the sides of the riverbank. The center of the cable to the water surface is 32 ft (Figure 2).

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#### 09163500 Colorado River Near Colorado Utah Stateline (As of 08/27/2018)

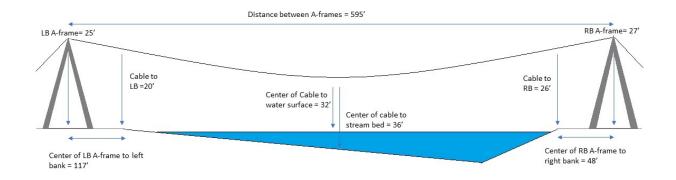


Figure 2 - Cableway dimensions (USGS)

### **Pilot Information**

Certificate:	Private	Age:	59,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Left
Other Aircraft Rating(s):	Glider	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 24, 2017
Occupational Pilot:	No	Last Flight Review or Equivalent:	June 25, 2017
Flight Time:	1240 hours (Total, all aircraft), 783 hours (Total, this make and model), 1077 hours (Pilot In Command, all aircraft), 39 hours (Last 90 days, all aircraft), 30 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

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## **Aircraft and Owner/Operator Information**

Aircraft Make:	Buchanan	Registration:	N125TY
Model/Series:	Kitfox IV	Aircraft Category:	Airplane
Year of Manufacture:	2006	Amateur Built:	Yes
Airworthiness Certificate:	Normal; Experimental (Special)	Serial Number:	HCU089
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	May 31, 2018 Condition	Certified Max Gross Wt.:	1200 lbs
Time Since Last Inspection:		Engines:	1 Reciprocating
Airframe Total Time:	814 Hrs at time of accident	Engine Manufacturer:	Rotax
ELT:	C91A installed, not activated	Engine Model/Series:	912ULS
Registered Owner:	On file	Rated Power:	100 Horsepower
Operator:	On file	Operating Certificate(s) Held:	None

## Meteorological Information and Flight Plan

Conditions at Accident Site:	Visual (VMC)	Condition of Light:	Day
Observation Facility, Elevation:		Distance from Accident Site:	
Observation Time:		Direction from Accident Site:	
<b>Lowest Cloud Condition:</b>	Clear	Visibility	20 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	29.97 inches Hg	Temperature/Dew Point:	27°C / -1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Grand Junction, CO (GJT)	Type of Flight Plan Filed:	VFR
Destination:	Cedar City, UT (CDC)	Type of Clearance:	VFR
Departure Time:	11:00 Local	Type of Airspace:	Class G

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## **Wreckage and Impact Information**

Crew Injuries:	1 Minor	Aircraft Damage:	Substantial
Passenger Injuries:		Aircraft Fire:	None
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	39.135276,-109.025558(est)

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#### **Administrative Information**

Investigator In Charge (IIC):	Sauer, Aaron
Additional Participating Persons:	Robert D Lesitsky; Federal Aviation Administration; Salt Lake City, UT
Original Publish Date:	November 6, 2019
Last Revision Date:	
Investigation Class:	<u>Class</u>
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.ntsb.gov/Docket?ProjectID=97955

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.

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