



Aviation Investigation Final Report

Location:	Ogallala, Nebraska	Accident Number:	CEN25LA029
Date & Time:	October 27, 2024, 12:15 Local	Registration:	N257ST
Aircraft:	Cub Crafters Carbon Cub	Aircraft Damage:	Destroyed
Defining Event:	Flight control sys malf/fail	Injuries:	1 Minor
Flight Conducted Under:	Part 91: General aviation - Personal		

Analysis

The pilot reported that he performed a flight control check before departing in his experimental, amateur-built airplane, and that the flight controls operated normally. During the initial climb, about 30 to 50 ft above ground level, the elevator control went slack. He could not regain elevator control and adjusted engine power in an attempt to regain control of the airplane's pitch; however, the airplane descended and impacted the runway surface. The airplane skidded off the runway, the pilot egressed, and the airplane was destroyed by postimpact fire.

A postaccident examination of the airplane found that the top elevator control cable was not attached to the elevator horn. The securing bolt, nut, and cotter pin were not located. The lower elevator control cable remained attached via its bolt, but the securing nut and cotter pin were not located. A review of maintenance information about the airplane revealed that the airplane was originally assembled about three years before the accident, and had undergone several condition inspections, including one by a mechanic who was different than the owner/builder. The most recent condition inspection was performed by the owner/builder about nine months before the accident, and would have included inspection of all flight control surfaces. There was no logbook record of any recent maintenance to the elevator, nor did the pilot recall any. Based on the available information, it is likely that the elevator control cable was improperly secured during maintenance; however, when the maintenance occurred could not be determined.

Probable Cause and Findings

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

The improper installation of the elevator control cable hardware, which resulted in the separation of the elevator control cable and a loss of pitch control in flight.

Findings

Aircraft	Elevator control system - Related maintenance info
Personnel issues	Installation - Owner/builder
Personnel issues	Scheduled/routine inspection - Owner/builder

Factual Information

History of Flight

Initial climb	Flight control sys malf/fail (Defining event)
Uncontrolled descent	Collision with terr/obj (non-CFIT)

On October 27, 2024, about 1215 central daylight time, an experimental, amateur-built CCK-2000 airplane, N257ST, was destroyed when it was involved in an accident near Ogallala, Nebraska. The pilot received minor injuries. The airplane was operated as a Title 14 *Code of Federal Regulations* Part 91 personal flight.

The pilot recalled doing a flight control check before the flight, during which he found the controls operated normally. During the initial climb, when the airplane was about 30 to 50 ft above ground level, the elevator control went slack. He could not regain elevator control and adjusted engine power in an attempt to regain control of the airplane’s pitch; however, the airplane descended and impacted the runway surface. The airplane skidded off the runway and a postimpact fire ensued. The pilot egressed, and the airplane was destroyed by the postimpact fire.

A postaccident examination of the airplane found that top elevator control cable was not attached to the elevator horn (see figure 1). The securing bolt and nut were not located. The lower elevator control cable remained attached via its bolt, but the securing nut was not located.



Figure 1. Elevator Control Connections (FAA Photo)

After the airplane was originally assembled in 2021, it was inspected by a Federal Aviation Administration Designated Airworthiness Representative, who would have checked the build. It had subsequently undergone several annual condition inspections, including one by an airframe & powerplant mechanic who was different than the owner/builder. The most recent condition inspection was performed by the owner/builder about nine months before the

accident, which would have included inspection of all flight control surfaces. Review of the airplane's maintenance logs did not reveal any maintenance related to the elevator, nor did the owner/builder recall any recent maintenance on the elevator.

Pilot Information

Certificate:	Private	Age:	38,Male
Airplane Rating(s):	Single-engine land	Seat Occupied:	Front
Other Aircraft Rating(s):	None	Restraint Used:	4-point
Instrument Rating(s):	Airplane	Second Pilot Present:	No
Instructor Rating(s):	None	Toxicology Performed:	
Medical Certification:	Class 3 Without waivers/limitations	Last FAA Medical Exam:	September 7, 2022
Occupational Pilot:	No	Last Flight Review or Equivalent:	May 24, 2023
Flight Time:	360 hours (Total, all aircraft), 30 hours (Total, this make and model), 303 hours (Pilot In Command, all aircraft), 34 hours (Last 90 days, all aircraft), 13 hours (Last 30 days, all aircraft), 3 hours (Last 24 hours, all aircraft)		

Aircraft and Owner/Operator Information

Aircraft Make:	Cub Crafters	Registration:	N257ST
Model/Series:	Carbon Cub EX3	Aircraft Category:	Airplane
Year of Manufacture:	2021	Amateur Built:	Yes
Airworthiness Certificate:	Experimental (Special)	Serial Number:	CCK-2000-0059
Landing Gear Type:	Tailwheel	Seats:	2
Date/Type of Last Inspection:	January 1, 2024 Condition	Certified Max Gross Wt.:	2000 lbs
Time Since Last Inspection:	59 Hrs	Engines:	1 Reciprocating
Airframe Total Time:	226 Hrs at time of accident	Engine Manufacturer:	Carbon Cub
ELT:	C126 installed, not activated	Engine Model/Series:	CC363i
Registered Owner:	ROCKY MOUNTAIN STOL LLC	Rated Power:	186 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:	KOGA, 3250 ft msl	Distance from Accident Site:	1 Nautical Miles
Observation Time:	11:15 Local	Direction from Accident Site:	83°
Lowest Cloud Condition:	Clear	Visibility	10 miles
Lowest Ceiling:	None	Visibility (RVR):	
Wind Speed/Gusts:	/	Turbulence Type Forecast/Actual:	/
Wind Direction:		Turbulence Severity Forecast/Actual:	/
Altimeter Setting:	30.12 inches Hg	Temperature/Dew Point:	17°C / 1°C
Precipitation and Obscuration:	No Obscuration; No Precipitation		
Departure Point:	Ogallala, NE	Type of Flight Plan Filed:	None
Destination:	Englewood, CO (KAPA)	Type of Clearance:	None
Departure Time:		Type of Airspace:	Class G

Airport Information

Airport:	SEARLE FLD OGA	Runway Surface Type:	Concrete
Airport Elevation:	3279 ft msl	Runway Surface Condition:	Dry
Runway Used:	26	IFR Approach:	None
Runway Length/Width:	5102 ft / 75 ft	VFR Approach/Landing:	Forced landing

Wreckage and Impact Information

Crew Injuries:	1 Minor	Aircraft Damage:	Destroyed
Passenger Injuries:	N/A	Aircraft Fire:	On-ground
Ground Injuries:	N/A	Aircraft Explosion:	None
Total Injuries:	1 Minor	Latitude, Longitude:	41.117766,-101.78161(est)

Administrative Information

Investigator In Charge (IIC):	Aguilera, Jason
Additional Participating Persons:	Marlyn Beisner; FAA FSDO; Lincoln, NE Bruce Johnson; FAA FSDO; Lincoln, NE
Original Publish Date:	April 1, 2025
Last Revision Date:	
Investigation Class:	Class 3
Note:	The NTSB did not travel to the scene of this accident.
Investigation Docket:	https://data.nts.gov/Docket?ProjectID=195380

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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](#).