

National Transportation Safety Board

Office of Aviation Safety

Washington, DC 20594



CEN23LA170

EXAMINATION SUMMARY

May 8, 2023

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A. ACCIDENT

Location: Palmer, Texas
Date: April 30, 2023
Time: 1450 LCL
1950 UTC
Airplane: N1113B, Luscombe Series 8F, S/N 5740

B. EXAMINATION SUMMARY

Mechanic	Gerhard Deffner Self - Contracted Mechanic McKinney, Texas
FAA IIC	Kevin Taylor FAA Irving, Texas

C. SUMMARY

The examination was conducted with a contracted mechanic and the FAA in the owner's hangar. The examination consisted of a visual inspection of the rudder system followed by removal of the failed rudder cable. The examination revealed a separated left rudder cable and a missing rudder attach link on the left rudder return spring.

D. DETAILS OF THE EXAMINATION

1.0 Airframe Examination

1.1 Fuselage

The left rudder cable was inspected and found to be separated and frayed with a bird cage appearance at the pulley located under the cabin floor. The cable was removed from the rudder pedal assembly to the failure point and the failure point aft about 1 ft. The cable was separated aft of the failure point with a cable cutter and wrapped to protect from unraveling. The left rudder cable pulley rotated smoothly when moved by hand. No areas of cable to fuselage rub were observed along the entire length of the cable.



Figure 1. Left Rudder Cable failure point.

The removed section of cable and entire pulley assembly were sent to the NTSB Materials Laboratory for further review.

Further inspection of the rudder system showed that the left rudder return spring was missing the rudder attach link between the spring and firewall.



Figure 2. Rudder Return Springs. Left Rudder is the forward spring.

The right rudder cable was found properly attached to its respective assembly and no issues were found.

1.2 Empennage

The rudder cable system was inspected with no issues being found. The rudder flight control surface had full and correct movement when moved by hand.

Submitted by:

Andrew Finne
Air Safety Investigator