

Adopted: May 17, 1944

File No. 4054-43

REPORT OF THE CIVIL AERONAUTICS BOARD
on the
Investigation of an Accident Involving Aircraft
During a Local Pleasure Flight

Pilot Fergie Gilbert Sanford and his passenger, Newton C. Short, Jr., were fatally injured in an accident which occurred approximately 5 miles east of Jasper, Alabama, about 10:20 a.m. on September 12, 1943. Sanford held a student pilot certificate and had accumulated approximately 100 hours of solo flight time. Short was not certificated as an airman. The aircraft, a Taylorcraft A, NC 19602, owned by the Jasper Flying Club, was demolished.

Sanford secured clearance from the Jasper Airport for a solo flight at 9:05 a.m. The clearance officer stated that he was not present at the field when Sanford took off and that Passenger Short had boarded the plane without his knowledge or consent. About 10:20 a.m. the plane was observed to enter a spin around 5 miles east of the airport, at an altitude estimated to have been about 2000 feet. Recovery was effected after two or three turns and a second spin and recovery were observed shortly thereafter. The aircraft was then flown in a wide 180° turn, after which it entered a third spin that continued to within 250 to 300 feet of the ground. It was seen to recover from this spin and resume level flight momentarily, then the nose dropped suddenly and the plane dived almost vertically to the ground, striking on the nose and left wing tip.

Examination of the wreckage disclosed that the upper elevator control cable had parted in the vicinity of the pulley located aft of the cable's attachment to the control column. This failure was caused by fraying, partly due to jamming of the pulley. Examination of this 3/32" cable indicated that when final failure occurred it possessed only a small fraction of its rated strength. Sand, mixed with grease, was found imbedded among the individual strands and probably contributed to the excessive wear. Manufacturer's Service Bulletin No. 46, dated March 12, 1943, and an Aircraft Airworthiness Inspection Note, issued by the Civil Aeronautics Administration on April 2, 1943, advised owners of the subject type aircraft to remove and inspect at 1000 hours all 3/32" cables used in the rudder and elevator control systems, and at 1500 hours to replace or splice a new section of cable in those portions of the system which are subject to wear. There was no record or evidence that this part of the control system of the subject airplane had ever been replaced. The aircraft log indicated that at the time of the accident this plane had been flown 1777 hours and 20 minutes.

The Civil Aeronautics Administration discourages the use of 3/32" size cables and the old type black micarta pulleys in control systems of light aircraft, due to their higher maintenance requirements.

The probable cause of this accident was failure of the upper elevator control cable during acrobatic maneuvers, due to lack of proper maintenance.

BY THE BOARD

/s/ Fred A. Toombs
Secretary