

Adopted: May 29, 1944

File No. 5159-43

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

An accident which occurred about one-half mile east of the Ford-Lansing Airport, Lansing, Illinois, at approximately 12:05 p.m. on December 20, 1943 resulted in serious injury to Instructor Norman Albert Medalis and minor injury to his student, Vernon Frazee Barnhizer. Medalis held a commercial pilot certificate with single-engine land, 0-80 h.p., and flight instructor ratings. He had flown approximately 1100 hours, however, this was his first flight in the type airplane involved. Barnhizer held a student pilot certificate and had accumulated approximately 90 hours of flight time, 30 of which were in the type plane involved. The aircraft, an Ercoupe 415C, NC 28923, owned by the student, was demolished.

Medalis and Barnhizer took off from the Ford-Lansing Airport at 10:30 a.m. for Barnhizer to practice maneuvers preparatory to taking his flight test for a private pilot certificate. Approximately one and one-half hours later they returned to the airport and entered the traffic pattern on the downwind leg at an altitude of about 600 feet. Shortly after throttling the engine for a 180° gliding approach to land, the elevator controls became inoperative, whereupon the instructor took over the controls. The aircraft assumed a diving angle of about 40° which continued until the left wing struck the ground. The plane then cartwheeled and came to rest in an inverted position about 175 feet from the first point of impact.

Examination of the elevator controls revealed that the 1/4 inch bolt which holds the push-pull tube and bell crank in place (located just below and to the rear of the pilot's seat) was missing. The aircraft had been flown approximately 13 hours since the last periodic inspection. It is difficult to understand how a nut, properly cotter-keyed, could work loose and detach itself from the bolt, allowing the bolt to drop out. However, the mechanic responsible for the last line inspection stated that in October the nut was on the bolt and the cotter pin ends were bent for safety.

The probable cause of this accident was failure of the elevator control system due to loss of a clevis bolt in flight.

BY THE BOARD

/s/ Fred A. Toombs  
Secretary