

Adopted January 10, 1944

File No 3021-43

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

Charles Joseph Heckman was seriously injured in an accident which occurred one mile south of the New Castle Airport, New Castle, Pennsylvania, about 3 40 p.m. on July 16, 1943. Heckman was a War Training Service trainee in the elementary Navy course and had accumulated approximately 24 hours of flight training, about  $7\frac{1}{2}$  of which were solo. The aircraft, a Piper J3L-76, NC 41007, owned by Finaley C. Wilson, was extensively damaged.

Heckman took off from the New Castle Airport at approximately 2 45 p.m. and proceeded to a practice area about 3 miles from the airport, where he practiced various maneuvers. Around 3 40 p.m., the pilot returned to the airport and just as he was about to enter the traffic pattern, at an altitude of approximately 600 feet, the engine began to lose power. Heckman applied full throttle and carburetor heat and the engine picked up momentarily, then stopped. The best field available was selected for an emergency landing but during the pilot's attempt to lose altitude by making "S" turns, he stalled the aircraft. It fell off to the left and crashed on the nose and left wing simultaneously at an angle of about 45°.

Examination of the wreckage revealed no evidence of failure of any part of the aircraft prior to impact. Evidence indicated that the engine stoppage was caused by exhaustion of the fuel supply. Heckman's instructor stated that he had made a visual check of the fuel supply prior to the student's take-off and considered it ample for a one-hour flight. However, investigation disclosed that the fuel gage was inaccurate. The student stated, "I picked out a field and headed into the wind. I thought I was going to overshoot so I S-turned to lose altitude. I believe I made the last turn too sharp and lost flying speed."

While the instructor's carelessness in dispatching the student on a flight with an inadequate supply of fuel was a contributing factor, the direct cause of this accident was failure of the pilot to maintain flying speed while attempting an emergency landing.

BY THE BOARD

/s/ Fred A. Toombs  
Secretary