

Adopted: May 17, 1944

File No. 3572-43

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

Nelson Wesley Stake was seriously injured in an accident which occurred approximately one-half mile west of Taneytown, Maryland, about 4:05 p.m. on September 2, 1943. Stake held a commercial pilot certificate with single-engine land, 0-80 h.p. and flight instructor ratings. The aircraft, a Kinner Sportster K, NC 12296, owned by the pilot, was demolished.

Sometime after Pilot Stake took off from the Taneytown Airport for a local pleasure flight, his plane was observed in inverted flight at an altitude of approximately 3500 feet. The pilot stated that just as he rolled the plane from an inverted position to straight and level flight, severe vibration developed in the wings, followed a few seconds later by a sharp, cracking noise. The vibration ceased and Stake noticed that the fabric had torn loose from the trailing edge of the left wing just forward of the aileron. He stated that after this the plane would not respond to either the aileron or elevator controls and entered a steep spiraling turn to the left which continued to the ground. The aircraft contacted the ground, left wing first, with sufficient force to disintegrate the left wing, then rotated to the left, tearing off the engine and left side of the landing gear.

Examination of the wreckage substantiated the pilot's report of wing fabric failure in the air. However, the left wing was so completely disintegrated that it was impossible to ascertain whether or not any portion of the wing structure proper had failed in flight. The appearance of the horizontal tail surfaces after the accident, together with the pilot's statement regarding lack of elevator control, indicated a possibility of failure in the air of some part of the elevator or stabilizer. However, a detailed examination revealed no positive evidence in that respect, nor was anything found to indicate failure of any other part of the aircraft prior to impact. The pilot was not equipped with a parachute.

The probable cause of this accident was failure of the left wing during acrobatic maneuvers, rendering the aircraft uncontrollable.

BY THE BOARD

/s/ Fred A. Toombs
Secretary