

Adopted: April 24, 1944

File No: 4655-43

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

Kenneth John Nolan was fatally injured in an accident which occurred approximately 15 miles northwest of Gilpin Airport, Tucson, Arizona, about 9:12 a.m. on November 2, 1943. Nolan, a War Training Service Navy trainee, held a private pilot certificate with a single-engine land, 0-80 h.p. rating. He had flown 17 $\frac{1}{4}$ solo hours, approximately 15 of which were in the type airplane involved. The aircraft, a Porterfield CP-65, NC 34745, owned by the Defense Plant Corporation and being operated by the Pacific Air Schools, was demolished.

Nolan took off from Gilpin Airport at 7:50 a.m. to practice maneuvers, which included spirals, stalls and spins, in a practice area northwest of the airport. About 9:10 a.m. his plane was observed at an altitude of around 600 feet in a steep left spiral which continued through an arc of approximately 270°. It crashed on its left wing and nose in a desert waste among mesquite trees. As no one was observed leaving the aircraft, it is apparent that the student jumped at a higher altitude. His body was found about 1500 feet from the wreckage and was partially covered by his parachute, the suspension lines of which were badly entangled.

Investigation revealed that there had been a fire, from an undetermined origin, in the aircraft prior to the crash. The upholstery covering the cabin ceiling directly above the pilot's seat, and several wooden strips, to which the fabric is attached, were almost entirely burned away. The fire extinguisher was found approximately 500 feet from the wreckage, imbedded in the ground to a depth that would indicate it had fallen from a considerable height. Whether the pilot abandoned the aircraft due to the fire, or became blinded by fire extinguisher fluid while combating the flames and jumped, could not be determined. There was no indication of any continuation of the fire after impact with the ground.

The condition of the 14-year old parachute disclosed that the suspension line retainers, due to insufficient elasticity, had failed to retain the suspension lines properly. Numerous tears and static burns in the canopy and static burns on the suspension lines indicated that the lines had fouled. It seems quite apparent that at the time the shock load occurred the fouled condition of the canopy and suspension lines caused the right side of the harness to absorb the entire load, resulting in separation of the webbing at the tunnel through which the chest strap passes. This permitted the upper portion of the harness on the right side to slip through the shoulder adapter, releasing the tension on all suspension lines of the right side. The deteriorated and frayed condition of the over-aged harness also contributed to the failure, which resulted in the rate of descent being increased sufficiently to cause fatal injury to the pilot.

Records indicated that Parachute Technician Virgil Kenneth McKinley inspected and repacked the parachute on September 20, 1943, when it was obvious that the harness was in such a deteriorated condition that it should have been replaced. Due to the carelessness and incompetence demonstrated by Mr. McKinley, the Civil Aeronautics Board, on March 17, 1944, revoked his

parachute technician certificate.

While the cause of this accident was the circumstance which induced the pilot to abandon the aircraft, the fatality resulted from failure of the un-airworthy parachute.

BY THE BOARD

/s/ Fred A. Toombs
Secretary