

Adopted: July 28, 1944

File No. 825-44

REPORT OF THE CIVIL AERONAUTICS BOARD
on the
Investigation of an Accident Involving Aircraft
During a Parachute Drop Testing Flight

Pilot Edward Butler was fatally injured in an accident which occurred approximately 3 miles northwest of Mercer Airport, Trenton, New Jersey, about 1:30 p.m. on March 10, 1944. Butler held a private pilot certificate with Class 1 and 28 land ratings. He had flown approximately 915 hours up to the time of his last log book entry on Dec. 31, 1943, around 400 of which were in the type aircraft involved. He was an experienced parachute jumper and technician, and was employed by the Switlik Parachute Company to drop test parachutes. The aircraft, a Pitcairn PA-6, NC 824N, owned by the pilot and equipped for drop testing parachutes, was demolished.

Butler took off from the Mercer Airport at approximately 1:00 p.m. for the purpose of drop testing two parachutes. After releasing the chutes, he climbed to an altitude of from 3000 to 4000 feet, where various maneuvers, including a spin, were executed. Recovery from the spin was effected about 1500 feet above the ground and the plane was flown straight and level approximately $3/4$ of a mile. The pilot then attempted a loop, during which the aircraft was stalled in a nearly inverted position and the engine sputtered and stopped. The plane fell off into a spin which continued until it struck the ground on the nose and left wing at an angle of about 70°. The pilot apparently made no effort to use his parachute.

The subject aircraft was equipped with two 18 x 30 inch slide boards secured to the top surface of the lower wings, adjacent to the fuselage. The rear end of these boards extended approximately seven inches above and slightly aft of the trailing edge of each lower wing. This installation would obviously change the air flow over the wings and tail surfaces, which would affect the stability and controllability of the airplane. Butler had told his wife and several friends that the elevator control did not function normally, especially during turns, because of the blanketing effect the boards had on the tail surfaces.

The Civil Aeronautics Administration requires that the installation of all parachute drop testing equipment be approved by a CAA inspector. Investigation revealed that Butler did not submit for inspection the equipment installed on his plane.

Butler kept the aircraft staked out at the Mercer Airport and did his own maintenance work. The aircraft log had not been kept up to date and the plane had apparently been flown around 200 to 300 hours since the last entry on March 5, 1942.

The probable cause of this accident was loss of control during an acrobatic maneuver, possibly due to air flow interference by parachute drop testing equipment which had been installed on the wings of this aircraft.

BY THE BOARD

/s/ Fred A. Toombs
Secretary