File No. 3086-43

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

Instructor Thomas Francis Byrie and Students Beecher Benjamin Bowman, Tallace M. Brady and George Tilliam Bodkin, Jr., were seriously injured in an accident which occurred near the Utica Municipal Airport, Marcy, New York, at approximately 5 00 p.m. on July 18, 1943. Byrne held a commercial pilot certificate with single-engine land, 0-330 h.p., and flight instructor ratings. He had accumulated about 1050 hours of flight time. Bodkin and Brady had each flown approximately 123 hours and Bowman around 165 hours. All three held student pilot certificates and were in Stage B of the Mar Training Service cross-country course at the Utica Aviation School, Inc. The aircraft, in aco ZGC-7, NC 17730, powered by a Jacobs 285 h.p. engine and owned by the Defense Plant Corporation, was destroyed by impact and fire.

This training flight took off from the Utica Nunicipal Airport about 4 55 p.m. into a west wind of 16 m.p.h. Student Bookin was at the controls in the right front seat, while Instructor Byrne occupied the pilot's seat on the left side and Students Brady and Bowman were in the rear seats. Then an altitude of from 250 to 350 feet had been reached the students in the rear seat observed smoke and reported this fact to the instructor. However, naving experienced similar conditions during previous flights, no undue apprehension was felt and the flight was continued. Shortly thereafter, at an altitude of from 450 to 600 feet, a sound resembling a backfire was heard and flames issued from the ventilator in the vicinity of the instructor's feet. The instructor immediately took the controls, rade a 180° left turn and headed east along the southern boundary of the airport. The hand fire extinguisher was emptied but despite all efforts the flames gained rapidly and the engine functioned irregularly. Soon after Byrne had started another left turn, to land on the surport, the engine failed completely and an immediate landing was made crosswind in a furrowed potato field east of and adjacent to the airport. The left landing gear was torn off during the landing and the plane turned over on its back. It was destroyed by fire.

The aircraft and engine were so completely destroyed that the origin of the fire could not be determined. Investigation did reveal that the engine was not in an airworthy condition and that on July 10, 1943 the Chief Mechanic at Utica Aviation School had noted in the log that the engine was in need of an overhaul, but no such subsequent action was taken by the operator.

The probable cause of this accident was fire in the aircraft while in flight, the origin of which could not be determined.

BY THE BOARD