

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

Robert William Lyons was fatally injured and Harry Alvin Posner received serious injuries in an accident which occurred about 3/4 mile east of the Pullman-Moscow Airport, Pullman, Washington, at approximately 9:20 a.m. on July 18, 1943. Lyons held a commercial pilot certificate with single-engine land, 0-240 h.p., and flight instructor ratings. He had flown about 1220 hours, of which only 8 were in the type of aircraft involved. Posner held a private pilot certificate with a single-engine land, 0-80 h.p. rating. He had flown approximately 135 hours, of which 76 were in the airplane involved. The aircraft, a Piper J-3, NC 20814, powered by a Continental 40 h.p. engine and owned by Lyons and Posner, was demolished.

Lyons and Posner, en route from Walla Walla, Washington, to Coeur d'Alene, Idaho, stopped at the Pullman-Moscow Airport (about 2700 feet above sea level) to refuel. After the plane had been refueled to capacity a take-off to the east was made toward hills 60 to 100 feet in height. Posner was at the controls. Finding it difficult to gain altitude, Lyons, the more experienced pilot, took over the controls shortly after passing the east boundary of the airport. However, one-half mile east of the airport the flight had still not been able to attain sufficient altitude to clear the hills ahead. Lyons turned right and had proceeded approximately one-quarter of a mile along a draw to the side of the hills when the plane was stalled. It struck the ground on its nose and left wing and stopped with the tail extended upward in an almost vertical attitude.

A teardown inspection of the engine disclosed a considerable amount of carbon deposit in the combustion chamber and on the pistons, the No 4 cylinder exhaust valve stem was blued from intense heat and stuck tightly in its guide, indicating that the engine could not have been delivering full power. Had the engine been properly run-up and checked for maximum r.p.m. prior to take off the pilots probably would have become aware of its defective condition. Examination of the log book indicated that this engine had been operated 560 hours since it was installed in the subject airplane in March 1938, and there was no record of any overhaul during that time. Weather conditions were favorable, the ceiling and visibility being unlimited, wind southeast 3 m.p.h., and temperature 85° F. When the stall occurred the plane was above a sloping wheat field in which a comparatively safe landing could have been effected.

Investigation revealed that the aircraft was overloaded by approximately 60 pounds. Dual controls were installed and operative. The manner in which the propeller was damaged indicated that little power was being developed at the time of impact.

IT APPEARS THAT A DEFECTIVE ENGINE AND AN OVERLOADED AIRPLANE CONTRIBUTED TO THE CAUSE OF THIS ACCIDENT WHICH WAS THE DIRECT RESULT OF A STALL AT AN ALTITUDE TOO LOW TO EFFECT RECOVERY.

BY THE BOARD

/s/ Fred A. Loombs
Secretary