

Adopted: May 31, 1944

File No. 5426-43

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

An accident which occurred approximately 5 miles northwest of the Pullman-Moscow Airport, Pullman, Washington, about 11:00 a.m., on December 27, 1943, resulted in serious injury to Instructor Sylvia Elizabeth Johnson Simonson. Her student, Hubert O. Knauff, was not injured. Instructor Simonson held a commercial pilot certificate with single-engine land, C-80 h.p., and flight instructor ratings. She had flown approximately 951 hours, about 900 of which were in the type aircraft involved. Knauff was a War Training Service Army trainee and this was his first flight. The aircraft, a Piper J3F-65, powered by a Franklin 65 h.p. engine, NC 30549, was owned by the Defense Plant Corporation and was being operated by the Pullman-Moscow Air Service. It was demolished by impact and fire.

Instructor Simonson and Student Knauff took off from the Pullman-Moscow Airport at 10:40 a.m. for a local instruction flight and flew to their practice area. About 15 minutes later, while flying at an altitude of from 1800 to 2000 feet, the instructor observed smoke coming from the right side of the engine and, believing the aircraft to be on fire, ordered the student to jump. Knauff immediately bailed out and parachuted safely to the ground. Instructor Simonson then left the plane but upon reaching the ground was dragged by her parachute over rough, frozen terrain in a high wind. Instructors in two other planes observed the two occupants leave the plane and saw the plane crash and burst into flames, but stated that they observed no indication of fire in the aircraft while it was in the air. They landed near the path of the drifting parachute and one instructor pursued it but was unable to run fast enough to rescue Instructor Simonson. A passing motorist observed the approaching parachute and placing herself in front of the canopy, wrapped it around a telephone pole, thereby stopping its progress. Instructor Simonson, unconscious, had been dragged on her side and back about six-tenths of a mile. The weather at 11:00 a.m. was clear with unlimited visibility, temperature 36°, wind east 26 m.p.h.

Upon examination of the wreckage it was found that the 3/16" oil line to the valve mechanism of No. 4 cylinder had failed, due to a fatigue fracture, probably caused by vibration. The break, which occurred within the steel bushing 5/16" from the terminal flange, apparently allowed oil to spray over the hot exhaust manifold, creating smoke. While the engine log contained no reference to the subject oil line having been replaced, bends in the line, apparently made by hand, and tool marks at a sharp bend adjacent to the break were clearly visible. This prevented free movement of the compression bushing on the oil line. Oil on the right forward diagonal lift strut indicated the spraying of oil along the right side of the airplane. Some oil was found in the crankcase, which leads to the belief that loss of oil had continued for only a short time prior to impact. The oil could have become ignited while spraying over the hot exhaust manifold but as the two instructors flying in the immediate vicinity observed no fire between the time the occupants left the plane and the time of impact, and as there was no indication of fire to be found forward of the fire wall, it appears more likely that the fire broke out upon impact with the ground.

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While the instructor's belief of fire aboard the aircraft was responsible for her decision to abandon the plane, her injuries resulted from being dragged across recently-tilled frozen ground by a strong wind.

BY THE BOARD

/s/ Fred A. Toombs
Secretary