Adopted: May 29, 1944
File No. 4941-43

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

Instructor Donn Marvyn Routh and Students Clifford Offer McCurdy and O Homer Naylor, Jr., were seriously injured in an accident which occurred at Municipal Airport, Kansas City, Missouri, about 8:50 a.m., on November 10, 1943. Routh held a commercial pilot certificate with single-engine land, O-330 h.p. and flight instructor ratings. He had flown approximately 1542 : hours, 466 of which were in the type aircraft involved. McCurdy and Naylor were CAA War Training Service trainees. The aircraft, a Stinson SR-9B, NC 17151, equipped with a Lycoming R-680-B6 engine, was extensively damaged It was owned by the Defense Plant Corporation and was being operated by Kan Cities Flying Service, Inc.

Instructor Routh and Trainees McCurdy and Naylor, were properly cleare for a routine instruction flight from the Kansas City Municipal Airport. T took off into a SW wind of 7 m.p.h., from the 2300 foot NE-SW runway and ha used about two-thirds of the runway when, at an altitude of approximately 50 feet, the engine stopped without warning. In an effort to remain within the airport boundary and avoid a 15-foot dike at the end of the runway, the instructor entered an abrupt left turn, during which the aircraft was stall It crashed to the ground on the nose and landing gear at an angle of appro mately 25° slid forward and turned over, stopping about 125 feet from the i point of impact.

During a tear-down inspection of the engine it was found that the magn driving gear and the magneto bevel driving gear were badly scored and the t gears had the appearance of one over-riding the other. Further examinatio disclosed that the supporting studs and the shear nuts which held the acce sory driving shaft bearing in place had become loose. This allowed the dri shaft to shift rearward and the magneto bevel drive gear to become disenga resulting in engine failure. The subject engine had been operated 104 hou since the last overhaul on October 23, 1943, at which time a new rear half the crankshaft and accessory drive shaft were installed by the Iowa Airpla Company. It seems very probable that misalignment, due to faulty assembly resulted in the difficulty experienced. Due to the fact that the engine fa at the critical point of take-off, with a 15-foot dike at the end of the r and the river beyond, it is believed that the pilot used reasonably good j ment in not attempting a landing straight ahead.

The probable cause of this accident was engine failure during take-of. necessitating an immediate landing, during which the pilot stalled the pla

BY THE BOARD

/s/ Fred A. Toombs
Secretary