

Adopted: April 24, 1944  
File No. 4322-43

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

Robert Ernest Hallman and James Allison Young were seriously injured in an accident which occurred at the Municipal Airport, Fort Worth, Texas, about 6:00 p.m. on September 11, 1943. Both Hallman and Young hold commercial pilot certificates with single-engine land, 0-330 h.p., and flight instructor ratings. Hallman had flown approximately 1021 solo hours, 85 of which were in the type airplane involved. The aircraft, a Stinson 10A, NC 31526, owned by the Defense Plant Corporation, was extensively damaged.

Hallman and Young took off from the Fort Worth Municipal Airport about 6:00 p.m. on a local practice flight, with Hallman handling the controls. The take-off was made into a quartering south-southwest wind of 11 m.p.h. During a shallow climbing turn to the left, at an altitude of approximately 200 feet, the engine stopped. Construction work at the airport was in progress directly under the flight path and workmen, with grading equipment, were scattered over the field. As there were ditches on both sides and houses ahead, the pilot attempted to reach a more suitable landing area east of a newly constructed runway but was forced to land short among large boulders on a part of the field under construction. The plane struck a bank at the edge of the runway and nosed over into an inverted position.

Investigation revealed a sufficient amount of water in the carburetor bowl to have caused the engine to stop and no other reason for stoppage was found. The subject type aircraft is provided with a 20-gallon fuel tank in the right wing panel which conforms to the shape of the wing. It has a large horizontal area, is shallow in depth, and permits a relatively large accumulation of water in the tank before there is any evidence of its presence in the gascolator or carburetor. In level flight this water moves forward to the tank outlet and into the feed line.

This type of fuel tank can be drained by unsafetying and removing a 1/8" pipe plug with a wrench. Due to the design of the fuel system and the attitude of the airplane on the ground, the accumulation of water, from condensation or other causes, cannot be removed in any other manner. This unsatisfactory condition was brought to the attention of the Civil Aeronautics Administration and that agency has recommended to the manufacturer that a more practical type of fuel tank drain, such as a "weather-head," be installed; further, that a bulletin or directive be issued to owners of the subject type aircraft covering this change and recommending that the fuel tank be drained and checked for water at frequent intervals.

The probable cause of this accident was engine stoppage, due to water in the fuel system, following take-off over terrain unsuitable for a safe landing.

BY THE BOARD

/s/ Fred A. Toombs  
Secretary