

**NATIONAL TRANSPORTATIONS SAFETY BOARD
Office of Aviation Safety
Washington, DC 20594**

SUMMARY OF ENGINE TEST RUN

-- CEN18LA015 --

A. ACCIDENT

Location: Willmar, MN
Date: October 18, 2017
Time: 1045 central daylight time
Aircraft: Cessna 150J (s/n 15069430), N50609

B. PARTICIPANTS

Pamela Sullivan
Senior Air Safety Investigator
National Transportation Safety Board
Denver, Colorado

Kurt Gibson
Air Safety Investigator
Continental Motors
Mobile, Alabama

Philip Grice
Continental Motors
Mobile, Alabama

C. ACCIDENT SUMMARY

On October 18, 2017, at 1045 central daylight time, a Cessna 150J airplane, N50609, nosed over during a forced landing in Willmar, Minnesota. The certified flight instructor received minor injuries and the private pilot was not injured. The airplane received substantial damage to the wings and fuselage. The airplane was registered to an individual and was operated by the CFI as a 14 Code of Federal Regulations Part 91 instructional flight. Visual flight rules conditions existed near the accident site at the time of the accident, and a flight plan had not been filed. The local flight departed from the Willmar Municipal Airport (BDH), just prior to the accident.

G. SUMMARY OF ENGINE TEST RUN

The engine sustained impact damage which was limited to the induction system. The carburetor attach flange was broken free from the induction system and the intake airbox displayed minor damage. The remainder of the engine was undamaged. The carburetor heat valve was examined, and the valve flapper had a significant amount of play on the shaft and one of the attachment screws was loose. The carburetor control arms were secured and capable of normal movement.

The cylinders were examined with a boroscope. Normal operating signatures were noted on the cylinder bores, piston faces, and valves.

The engine was prepared for the test cell by removing the carburetor airbox, vacuum pump copper breather tube, baffling, and throttle and mixture cables.

The engine started normally without any hesitation and ran for 5 minutes at each of the following power settings: 1,200 rpm, 1,600 rpm, 2,450 rpm and the full throttle setting of 2,764 rpm.