

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Research and Engineering
Materials Laboratory Division
Washington, D.C. 20594

May 30, 2018



MATERIALS LABORATORY FACTUAL REPORT

Report No. 18-025

A. ACCIDENT INFORMATION

Place : Port Mansfield, TX
Date : 10/19/17
Vehicle : Piper PA-32RT-300T, N663CB
NTSB No. : CEN18LA017
Investigator : Mitchell Gallo

B. COMPONENTS EXAMINED

Portions of nose landing gear (figure 1).

C. DETAILS OF THE EXAMINATION

The primary portion of the nose landing gear components submitted for examination consisted of a trunnion exhibiting multiple fractures (figure 1). Examination of the fracture surfaces on the trunnion casting (figures 3, 4) revealed fractures consistent with overstress. No evidence of preexisting cracks was observed on any of the fracture surfaces.

Joseph Panagiotou
Fire Protection Engineer



Figure 1: Portions of nose landing gear as received.



Figure 2: Both halves of bolt hole fracture on trunnion casting.



Figure 3: Fractures pivot arms of trunnion casting.