

NATIONAL TRANSPORTATION SAFETY BOARD

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



August 24, 2022

MATERIALS LABORATORY FACTUAL REPORT

Report No. 22-065

A. ACCIDENT INFORMATION

Place : Auburndale, FL
Date : 12/17/2021
Vehicle : AEROFAB LAKE LA-4-250, N1402C
NTSB No. : ERA22LA090
Investigator : Douglass Brazy

B. COMPONENTS EXAMINED

Rod end and section of push pull tube (Figure 1).

C. DETAILS OF THE EXAMINATION

The steel rod end exhibited debris embedded within the threads (Figure 2). The embedded debris was present on both sides of the stop nut. The rod end was cleaned with acetone in an ultrasonic cleaner. Examination of the rod end threads after cleaning revealed a shiny metallic material embedded within the threads (Figure 3).

The female threaded aluminum end of the push pull tube was sectioned for examination of the internal threads. The examination revealed that the internal threads in the tube end had been fractured in shear overstress (Figure 4). The fractured threads extended for a depth of approximately 0.438 inch.

Joseph Panagiotou
Fire Protection Engineer



Figure 1: Accident parts as received.



Figure 2: Rod end prior to cleaning.



Figure 3: Threaded end of rod end after ultrasonic cleaning.

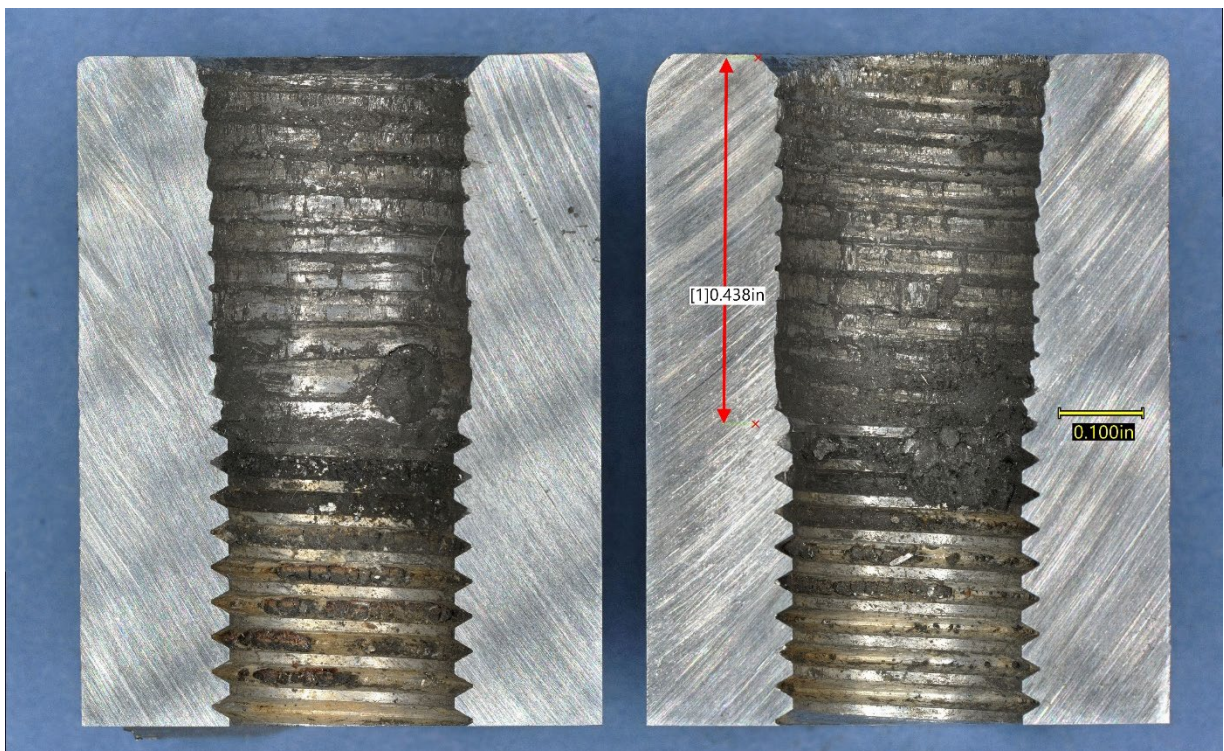


Figure 4: Threaded end of push pull tube after sectioning.