

Cawthra Joshua

From: Budinski Michael
Sent: Tuesday, July 7, 2020 12:23 PM
To: Cawthra Joshua
Subject: WPR17LA131 N380AL, Cessna 421B Materials Laboratory Email Report
Attachments: Images of pieces evaluated.pdf

Place : Carlsbad, California
ACC Date : June 22, 2017
Vehicle : Cessna 421B, N380AL
NTSB No. : WPR17LA131
Investigator : Joshua Cawthra, AS-WPR

COMPONENTS

1. Portion of brace assembly with fracture
2. Pieces of fractured trunnion
3. Fractured portion of swivel bearing assembly
4. Fractured portion of rod end
5. Portion of link assembly with fractured rod end
6. Bag with extraneous pieces

The fractures on all submitted parts were evaluated using a 5X to 50X stereo zoom microscope. All the fractures were due to overstress (monotonically increasing load to fracture). There were no indications of fatigue cracks or preexisting fractures. Images of the submitted components are attached.

--Mike B.

From: Epperson Joe [REDACTED]
Sent: Thursday, August 24, 2017 4:58 PM
To: Cawthra Joshua [REDACTED]
Cc: Budinski Michael [REDACTED]; Epperson Joe [REDACTED]
Subject: WPR17la1331 N380AL, Cessna 421B

Place : Carlsbad, California
ACC Date : June 22, 2017
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COMPONENTS

Right Main Landing Gear Torque Upper Link and Bolt

The pivot bolt between the received upper torque link and the lower link (not received) was fractured through the threaded region at the edge of the pivot barrel. The fracture was visually examined at up to ~50X with a stereo microscope. The fracture surface was partially obscured by red rust deposits but

exhibited surface texture, surface topography and deformation patterns indicative of a bending overstress fracture. No indications of preexisting cracking or corrosion were uncovered.

Joe Epperson, FASM
Senior Metallurgist