



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

March 12, 2018

RIGHT MAIN LANDING GEAR EXAMINATION SUMMARY

WPR17LA131

This document contains 5 embedded photos.

A. ACCIDENT

Location: Carlsbad, California
Date: June 22, 2017
Aircraft: Cessna 421, N380AL
NTSB Investigator-in-Charge: Joshua Cawthra

B. DETAILS OF THE INVESTIGATION

1.0 FAA Initial Inspection

The FAA inspector assigned to the accident reported that their examination revealed the right main landing gear link rod pivot bolt assembly severed, with the nut and cotter key end, not located. Additionally, the landing gear trunnion was partially separated from the wing structure and the right main landing gear was separated, however, remained attached via hydraulic hoses.



Figure 1: View of the right main landing gear during recovery. (Courtesy of the FAA)



Figure 2: Right main landing gear scissor link pivot bolt. Courtesy of the FAA.



Figure 3: Right main landing gear scissor link pivot bolt. Courtesy of the FAA.

2.0 Right Main Landing Gear Examination

Examination of the airplane revealed that the forward right side landing gear trunnion was separated into two pieces. The lower portion was torn away from the upper portion. The landing gear assembly remained intact. Scraping was observed on the outboard side of the landing gear strut and brake caliper. The forward trunnion attach pin was undamaged. The aft trunnion attach

pin was bent downward. The right main landing gear tire exhibited vertical scuffing along the outboard crown of the tire. Additional multi directional striations were observed on the outboard portion of the lower scissor link assembly, brake caliper, and lower portion of the landing gear strut assembly.

Portions of the right trunnion, right side landing gear brace assembly, tube assembly which connected to the right hand bell crank assembly, and the upper scissor assembly along with the scissor link pivot bolt were sent to the NTSB Materials Laboratory for further examination.



Figure 4: View of the airplane as recovered.



Figure 5: Right main landing gear wheel, brake, and lower link assembly.

Submitted by: Joshua Cawthra