



NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Western Pacific Region

July 11, 2022

LANDING GEAR EXAMINATION SUMMARY

WPR22LA228

A. ACCIDENT

Location: Palm Springs, California
Date: June 4, 2022
Aircraft: N4752K, Cessna P210N
NTSB IIC: Albert Nixon

B. PARTICIPANTS

Albert Nixon
Senior Aviation Accident Investigator
National Transportation Safety Board
Western Pacific Region
Federal Way, WA

Bruce Thielbar
Aviation Safety Inspector
Federal Aviation Administration
Riverside, CA

C. SUMMARY

Examination of the landing gear was conducted in a hanger at Palm Springs International Airport (PSP), Palm Springs, California. The postaccident examination of the landing gear revealed no preimpact mechanical failures or malfunctions that would have precluded normal operation.

D. DETAILS OF THE INVESTIGATION

1.0 Landing Gear Examination

- The hydraulic system fluid level and line were examined, and no anomalies were noted. The level was full of fresh fluid.
- No hydraulic residue or accumulation was noted anywhere near the landing gear, bottom of the airplane, or near the line, that would be consistent with a leak.
- The airplane was placed on jacks.
- Several landing gear swings from retraction to extension were accomplished and no anomalies were noted.
- During retraction, all landing gear moved to the appropriate up and locked position and the amber light illuminated appropriately.
- During extension, all the landing gear moved to the down and locked position and the down and locked green light illuminated appropriately.
- The landing gear warning system audio alerted and cutoff appropriately.



Figure 1: Land Gear Lever and Landing Gear Position Indicator Lights.

- The hydraulic fluid maintained its level and the LDG GEAR and GEAR PUMP circuit breakers remained in during the examination of the landing gear.
- The landing gear lever was examined, and its movement and detent were appropriate, with no anomalies noted.
- It was noted that during gear extension, the nose wheel locked into place first, and the main landing gear pivoted and moved to the locked position a few seconds later.
- During the transient interval, the main landing gear struts were angled such that if contact were made with the ground, the top outer edge (side) of the tire would make contact.
- Examination of the main landing gear tires revealed that both tires had obvious markings on the outer edge (side) consistent with ground contact. These marking were noted at the start of examination before the gear swings were accomplished.



Figure 2: Main Landing Gear in transient for extension (note outer edge of tire).



Figure 3: Main Landing Gear Tire as viewed from the top side (note markings on outer edge).

Submitted by Albert Nixon