

back with you if we have any further question or need additional photos.

Respectfully,

Stephen C. Travis

Aviation Safety
Principal Maintenance Inspector
Federal Aviation Administration
Louisville Flight Standards District Office, CE-17
[REDACTED]

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<image001.png>

From: Robert Crawford [REDACTED]
Sent: Thursday, February 23, 2023 9:33 AM
To: Travis, Stephen (FAA) <[REDACTED]> Austin, Gary L (FAA)
[REDACTED] STEVE THOMAS [REDACTED]
[REDACTED]
Subject: RE: N3844C Evaluation and Logbooks

Gentlemen,

Thank you for your patience, I'm including the evaluation below as well as a link to the photos and videos associated with the evaluation.

N3844C

1977 Cessna 310R

S/N: 310R1238

Incident date: December 15th 2022

Incident type: Landing gear malfunction in flight, collapse on landing.

After jacking the aircraft and removing the linkages for the gear doors for better inspection, I took a series of photos, and video, then proceeded to inspect the landing gear at each main and nose positions, the gear box, emergency extension handle, and the nose gear pushrod tube. It was noted that both the gear warning and the landing gear motor circuit breakers were pulled, either while in flight or while rescuing the aircraft from the runway. The RH landing gear down-lock brace was broken on the

upper portion that is listed as the "Bell-crank" indicating (in my opinion) that an overstressed condition occurred, likely before landing. The nose landing gear push rod which runs from the lower portion of the landing gear transmission had pushed through the main spar carry through in two places and torn the aluminum structure while moving past its typical range in an outward fashion, this indicates to me that the gear ran past its normal down and locked position. Upon inspecting the landing gear actuator/transmission, it was quickly apparent that the actuator arm on top of the transmission had ran past its down and locked position and had damaged the limit switches associated with up and down limits. The aircraft power was turned on at the master and in the down selection, the landing gear, while actuated with the motor circuit breaker, would run in the down selected position but the motor spun freely of the transmission, no input to the landing gear was noted. Additionally, while in the up selected position, and being ran with the circuit breaker, the landing gear motor would not run. (In my opinion) It appears that either the relay or the down-limit switch malfunctioned in flight which caused the associated damages noticed, and created a situation where the emergency extension mechanism was ineffective and unable to achieve a safe down and locked state.

Images and video link: [REDACTED]
[REDACTED]

If the videos do not play, they are still loading, you may need to download them.

If you have any further questions, please let me know, we have locked out the landing gear as before, and have moved it back onto the tarmac post inspection, all associated parts are in the aircraft. I still have the logbooks and keys in our safe.

Robert Crawford
LEX Fixed-Wing Manager TBAMKY

From: Travis, Stephen (FAA) <[REDACTED]>
Sent: Wednesday, February 22, 2023 3:42 PM
To: Austin, Gary L (FAA) <[REDACTED]> Robert Crawford
[REDACTED]
Subject: RE: N3844C Evaluation and Logbooks

Yes, thank you very much!

Respectfully,

Stephen C. Travis

Aviation Safety
Principal Maintenance Inspector