On-Site Observations of Aircraft N94GF (4/1/2021)

Model: PA-32RT-300 Ser. No. 32R-7885115

- -Aircraft was positioned on a trailer/dolly.
- -Conducted a walk around of the aircraft and the aircraft appeared to have been very well maintained.
- -Airport Manager drove me out to the spot where the aircraft came to rest. Walked the area, but did not find any aircraft parts. Most of the ground scaring had been washed away due to a recent heavy rainfall. The point where the left wheel went onto the grass and scuff marks from the right tire were still visible. Closer examination of the right tire mark indicated that the tire was rolling, but being dragged to the left simultaneously.
- -Left Landing Gear was covered with dried mud. Removed mud and took measurements of the Brake Discs and Linings. Measurement of Left Brake Disc: 0.412; Left Brake Linings: 0.148 with even wear.
- -Both tires were in good condition and had plenty of tread.
- -The fluid level in the Brake Reservoir was normal.
- -Tested Toe Brakes from left and right seats:

Left Seat- Both toe brakes had no resistance and went all the way down.

Right Seat-Left pedal was very soft / Right pedal was firm (normal)

-Parking Brake

Unable to effectively perform ops check IAW data, as the handle was soft and came back all the way.

- -Inspected the Master Cylinders and brake lines under the instrument panel. Observed a couple coagulated drops of fluid at the brake line nuts, but no fresh fluid. All of the brake lines appeared to be fairly new.
- -The hole in the upper skin of the left wing measured approximately 5 ½" side to side looking forward and approximately 4 ¼ " measured fore and aft. The hole was directly above where the left strut would normally be located with the gear down and locked.
- -The left strut was separated from the forward trunnion attach point.
- -Top of the left strut showed deep scratches/gouges from being pushed through the upper left wing skin.

Inspector Statement (Derek Jackson

During a visual inspection of the aircraft, it was observed that the forward trunnion attach point for the left main landing gear strut broke upon the reported hard landing, causing the strut to be driven upward, breaking the aileron cable tube and continuing through the upper wing skin of the left wing.