

Inspector's Statement

August 12, 2016

Aircraft accident Follow-On Brake Examination,
Cessna 310G, N8943Z, X04, 6/10/2016
NTSB ERA16LA213

On 6/10/2016 at approximately 1610 local time the above aircraft accident occurred during landing roll out at Orlando Apopka Airport (X04), Apopka, Florida. The aircraft, a Cessna C-310G, s/n 310G-0043, departed the right side of the runway ending with the nose gear against a dirt railway embankment well off the runway to the right side of the runway. Left wing tip, and both left and right elevator and horizontal stabilizers had damage. Apparently pulling the aircraft off embankment caused most of the damage. The left stabilizer upper surface buckled. There was some damage to the aft bulkhead. Both left and right propellers and blades were not damaged. The owner pilot stated he lost left side brake completely. The lead Inspector entered the aircraft and actuated both left and right brakes with no apparent problems. At this point we returned to the FSDO.

I made an additional trip to observe the removal and teardown of the brake master cylinders from the aircraft. I had no way to determine the part numbers or serial number as all data plates has succumbed to hydraulic fluid. The right brake worked perfectly when removed. The left brake worked once but on the second actuation the actuating rod slowly leaked internally to the bottom. Both cylinders had an acceptable fluid level after removal. We capped the hoses and placed the cylinders upright to minimize leakage. At this point we started disassembly. All the o-rings were in a reasonable condition with no visible cuts or tears. The left brake had a dark crusty compound in the reservoir and a small washer loose in the reservoir. The right brake had the same including a washer. It was not as contaminated as the left. My opinion is the brake master cylinders had not been removed from the aircraft for many years. This plus resealing without removal was how the debris and water formed to cause the dark matter in the reservoirs. The clumps would break up with little pressure.

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ASO-FSDO-15

End of statement.