

Moats Heidi

From: [REDACTED]
Sent: Wednesday, January 28, 2015 9:20 AM
To: Moats Heidi
Subject: Accident ERA 15CA 106

Heidi,

In reference to Accident ERA 15CA 106

I inspected the aircraft on 1/16/2015 @ 14:30EST New Castle airport. The aircraft was found upside down resting mostly on the forward top of the cabin and right wing leading edge, the aircraft was on a slight slope and able to teeter somewhat. All three main gear wheel fairings were installed with no apparent damage to the fairings, the left and right wheels and tires were rotating freely with no sign of damage. The nose gear wheel and tire would not rotate and the wheel fairing was stuffed with mud and frozen water. It was decided the owner would have the aircraft righted and moved to a hanger on the airport.

First impact: aircraft's nose gear went into a drainage ditch with a thin covering of ice containing water and mud. The aircraft's nose was restrained by the ditch causing the aircraft to flip over on its back. The second impact was the propeller/spinner and right wing impacting the opposite side of ditch. The aircraft continued flipping over with the vertical stabilizer/rudder impacting the ground causing a compression buckle in the bottom aft fuselage. The aircraft came to rest on the forward top cabin and right wing leading edge with the top of the vertical stabilizer/rudder approximately 6 feet in the air off the slope.

Propeller/spinner damage: spinner was compressed onto propeller hub, left and right blades are bent back approximate 30 degrees aft.

Right wing damage: This wing appeared to have absorbed most of the impact damage, damage to the right wing tip leading edge and wing tip, there are wrinkles all along leading edge, top and bottom of the wing skins, there is heavy compression damage to the bottom and top right inboard wing root area. The left wing lift strut was bent upwards in the middle approximately 20 degrees.

Vertical stabilizer: compression damage to the top of vertical stabilizer and rudder.

Aft fuselage damage: The bottom aft fuselage just forward of horizontal stabilizer has compression damage.

Left wing damage: damage to the outboard leading edge and wing tip, some mid wing top skin and leading edge wrinkling.

On 01/21/2015 @ 09:30 EST New Castle airport

Damage: inspection of aircraft in owner's hanger at New Castle airport 1/21/2015 09:30EST. Note: The owner removed the main gear wheel fairings prior to this inspection with concurrence from me.

Inspection and testing of the brakes revealed no malfunctions, damage or significant deterioration. The left side showed some minor signs of fluid seepage on the piston area of the brake; this seepage was covered with dirt as if it had been there for some time. There was some fluid on the top of the wheel fairing brace which had to have occurred after the aircraft was righted because the location of the fluid. There was one point during brake testing (left side only) the brake was thought to be sponge, this was due to the brake piston being pushed in during inspection and the subsequent need of the system to moving the piston to its correct position. There was a slight skid mark on the left tire which could only be seen when a light was held at an angle to the tire. The right side brake assembly was found to be normal. A maintenance record review showed the brake linings were replaced on 1/15/2014 with 34.7 hours of aircraft operation and the brake rotors were replaced 2/04/2004 with 512.5 hours of aircraft operation.

James Olsen (Jim)

call when you get a moment.



MEMORANDUM FOR RECORD

Heidi Moats
Air Safety Investigator
Eastern Region Aviation

March 10, 2015

Subject: ERA15CA106 – Brake Examination

Who: Federal Aviation Administration Inspector – James Olsen

In a telephone conversation, Inspector Olsen stated the following:

- After the brake felt "spongy" in the beginning of the exam, he took a closer look and the piston wasn't seated correctly.
- "It is normal to take a screw driver and push the piston back to make sure it operates. Then sometimes it doesn't move back into place immediately after it is moved with the screw driver.
- Once the piston was back in the "correct" spot, the brake functioned with no anomalies noted.