

[REDACTED]

On July 5th & 8th, 2019, I assisted Inspector Wilfredo Perez in the investigation of MD Helicopters Inc. 369E, S/N 0587E, N5277F, as a result of an accident, which occurred at William P. Hobby Airport on Thursday, July 4, 2019. [REDACTED]

[REDACTED]

Initial observation of the accident site showed the helicopter right landing skid had made contact with the grass/concrete on the south side of the landing pad, and came to rest on its right side and was positioned on the northwest corner of the landing pad. The right-hand, forward landing gear strut had broken away from the fuselage mount, while the right-hand, aft strut had separated at the connection point of the skid tube. The markings on the concrete pad were consistent with contact from the right-hand, aft skid strut, as there was an indication of blue paint transfer from the strut to the concrete, along with blue paint chips in the grass.

The other following conditions were noted at the same time: 1) All 5 main rotor blades made contact with the concrete pad and had blade tip damage, along with scrapping marks on the lower, outboard surfaces of the blades. The blade contour was swept up and aft, as if the main rotor system was under full power when the blades made contact with the landing pad. 2) The yellow main rotor pitch change link was sheared in half, just below the upper rod end where the P/C link attaches to the pitch change horn. The shear surface of both pieces of the P/C link were consistent with damage due to impact forces. 3) The fuselage has impact damage to the right-hand, forward lower section, just below the observer's seat position. The right-hand lower portion of the windscreen was broken from the impact. 4) The FLIR unit and mount, both mounted on the right-hand side of the fuselage, showed impact damage from the landing pad. 5) The pilot-in-command flies from the left-hand position in the operator's configuration. During the walk around of the helicopter, it was noted that PIC's left-hand tail rotor pedal was laying on the ground, directly below the broken section of the windscreen. It was also noted that both the PIC and the [REDACTED] noted in their statements that they had to reinstall the left-hand tail rotor pedal retaining pin, prior to commencing their flight on the night of the accident. Subsequent investigation showed that the retaining pin, when reinstalled with the pedal in place, exhibited no retention capabilities and was free to fall out with no resistance.

On July 8, 2019, a continuity check was performed on the helicopter flight control systems. The cyclic, collective and tail rotor pedal flight controls were all checked with positive continuity in all three systems.

7/9/2019

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Daniel Prince

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