



NATIONAL TRANSPORTATION SAFETY BOARD

Eastern Region – Ashburn, Virginia

SUMMARY OF FINDINGS

ERA20CA135

This accident occurred during the COVID-19 pandemic, and the NTSB coordinated with the operator, who was also the manufacturer, to investigate the circumstances involved in the accident. The following is a summary of conversations and findings of the investigation.

Initially, it was reported that the left side of the engine cowling came loose and struck the main rotor blades after the helicopter had landed and the pilot was in the process of shutting the engine down. However, further review of surveillance video revealed that the cowling folded back and struck all 4 main rotor blades when the crew was in a hover-taxi in preparation to land. Photos of the blade damage was provided to an NTSB aeronautical engineer, who determined the damage was substantial.

According to the manufacturer/operator, prior to the flight, the pilot observed the right-hand side cowling fasteners appeared long and reported it to maintenance. No anomalies were observed with the fasteners on the left-hand side of the engine cowling. Maintenance then removed the one-piece engine cowling and a mechanic replaced some of the fasteners before reinstalling the cowling with the help of another mechanic. The mechanic said he specifically fastened each of the fasteners on the cowling himself and did a 100% check of each fastener after the cowling was installed. Once the cowling was reinstalled a quality inspector visually inspected the engine cowling fasteners. He did not observe any anomalies and signed off that the work had been completed.

Prior to the accident flight, the flight test engineer performed another preflight of the helicopter and did not observe any obvious issues with any of the cowling fasteners. The helicopter then departed and flew for about an hour before the cowling folded back.

Postaccident examination of the cowling by the operator/manufacture revealed no premishap discrepancies with the fasteners/cowling, or the design and conformity of the helicopter structure.

Leah Read, Sr. ASI