Multiple Factors Contributed to Serious Incident on Amapola Flight

References:

L2021-04 Engine Malfunction on Airliner during Takeoff at Helsinki-Vantaa Airport on November 25, 2021

The Safety Investigation Authority of Finland (SIAF) has completed an investigation into the November 25, 2021, incident in which a Fokker 50 operated by Amapola Flyg sustained an engine malfunction on takeoff at Helsinki-Vantaa airport. The aircraft was departing on a scheduled domestic service to Joensuu.

A malfunction occurred in the feathering system of the left propeller during liftoff. The propeller feathered but the engine continued operation at high power.

"*Aircraft can be flown safely on one engine*", explains Investigator-in-Charge Janne Kotiranta.

"In this particular event, a single anomaly would not have led to a serious incident, but multiple failures occurred, exacerbating the situation. The pilots noted the engine failure but did not realize immediately that the propeller had feathered. The engine continued running but did not produce thrust. The first officer eventually executed the prescribed procedure and shut down the engine. Also, the landing gear remained down throughout the entire flight, which in turn increased drag and degraded climb performance. The aircraft momentarily entered uncontrolled airspace, and nearly infringed safety margins around a tall transmission tower. To sum it all up, both technical and procedural discrepancies played a role in the event", Kotiranta elaborates.

"The aircraft eventually landed back at the departure airport under air traffic control assistance. However, had this or any similar serious incident occurred in hot-and-high conditions, climb rate would have degraded further, and an accident could have resulted", Kotiranta states.

Since the incident, Amapola Flyg has updated landing gear related instructions in the airplane flight manual.

Current pilot training does not include actions during uncommanded propeller feathering. The SIAF therefore recommends that these procedures be added in pilot training syllabi.

The SIAF also gave two safety recommendations to the aircraft manufacturer. Both are related to propeller feathering and feathering control.

Link to summary

Further information:

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