Havarikommissionen
Accident Investigation Board Denmark

Additional information to report 2020-424

Serious incident to OE-IMI (Dassault Falcon 900EX) in Kangerlussuaq (BGSF) on 3-12-2020.

ISSUED MARCH 2022

ADDITIONAL INFORMATION

In the safety investigation of the serious incident to OE-IMI in Kangerlussuaq (BGSF) on 3-12-2020, the main landing gear brake number 2 S/N 01191 was lost by the courier during shipping from Denmark to France. Section 1.12.2.2 of the published safety investigation report described this shipping irregularity.

On 12-1-2022, the Danish Accident Investigation Board (AIB) received a notification from an involved party that they had localised the lost brake number 2.

The Danish AIB organized an examination of brake number 2, similar to the examination performed on brake number 1 and 4 involved in the serious incident.

On 7-2-2022, the brake manufacturer performed the examination of brake number 2 at their facility. Safety investigators from the Danish AIB and the French Bureau d'Enquêtes et d'Analyses pour la sécurité de l'aviation civile (BEA) were present during the examination.

The examination concluded no brake defects, and all brake test results and measurements complied with the requirements of the Component Maintenance Manual (CMM). The examination report issued by the brake manufacturer stated:

> 3.1 CONCLUSION ON CARBON BRAKE ASSEMBLY INVESTIGATION
>
> During the inspection of the Carbon Brake Assembly PNR: C20181100-8 SNR: 01191, it has been noticed:
>
> - Carbon discs are free to rotate as long as pressure remains lower than or equal to 6 bars,
> - No damage nor oxidation noticed on the rotor and stator discs,
> - Leakage and functional tests results are compliant with the CMM requirements.
>
> Carbon Brake Assembly was functional and compliant to the CMM requirements.
>
> 3.2 POSSIBLE ROOT CAUSE OF THE EVENT
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> According to the investigation results and observations made by the maintenance staff on and off wing in Kangerlussuaq, the tire burst event is likely due to the ingestion of melted snow during take-off. The snow then froze during the flight, trapping the discs preventing the rotors freely to rotate during landing phase leading to a wheel locked.

AIB CONCONCLUSION

Since the examination of brake number 2 contributed with no significant new information to the safety investigation, the conclusions of the published safety investigation report remain the same.

For that reason, the AIB does not revise the published safety investigation report.