

This document is a translation of the original assessment in Swedish by SHK of the response to the recommendation. In case of discrepancies between this translation and the Swedish original text, the Swedish text shall prevail in the interpretation of the assessment.

Saab Group AB

## **The Swedish Accident Investigation Authority's report RM 2019:02**

On 20 August 2019, the Swedish Accident Investigation Authority (SHK) published the report RM 2019:02, which deals with an accident that occurred on 21 August 2018 in Möljeryd, Blekinge County, involving a military aeroplane of the type JAS 39 C Gripen, operated by the Swedish Armed Forces.

A total of nine safety recommendations were made in this report, two of which were to Saab AB (Saab).

### **Recommendation RM 2019:02 R4**

Saab was recommended initially to, in consultation with the Armed Forces and other operators, simplify and adapt the emergency checklists to engine failures at low altitude (RM 2019:02 R4).

Saab has via Saab Aeronautics responded that the company has analysed flight profiles and speeds in order to maximise flight time after, for example, a serious engine problem or an engine failure. The analysis has resulted in a recommended speed in order to maximise flight time or air mileage taking into account load. The aircraft flight manual (AFM) will be updated in accordance with this in 2020 as per the normal plan for updates to the manual.

SHK finds that the action that has been taken and is planned is a good response to the recommendation that was made in the report. Accordingly, it is possible to deem the recommendation to have been implemented and the response to the recommendation to be satisfactory.

### **Recommendation RM 2019:02 R5**

Saab was also recommended to investigate whether an advanced APU logic with longer running time in connection with take-off and pre-landing, or other function in support of faster re-start, may improve flight safety (RM 2019:02 R5).

According to the response to this recommendation, Saab Aeronautics has analysed the possibilities for extending the running time for the APU after take-off and for

bringing forward APU start prior to landing, but has decided not to change the activation logic. According to the response, a longer APU running time after take-off and an earlier APU start prior to landing would restrict operational performance in an unacceptable way as the aeroplane's maximum speed and usable load factor is significantly restricted when the APU is running. A change in activation logic of this nature would also make only a negligible contribution to increased safety as the exposure time, where a running APU would contribute to faster engine relighting is very short. Saab Aeronautics' experience of the engine's resilience to breakdowns is also extremely good.

The response to the recommendation indicates that Saab has conducted an investigation and analysis as was recommended in the report. The response also contained a reasonable justification for the position that the APU logic would not be changed. The response is therefore deemed satisfactory.

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