NATIONAL TRANSPORTATION SAFETY BOARD WASHINGTON, D.C.

ATR Letter to EASA (Freezing Drizzle / Freezing Rain) February 12, 2009
(3 Pages)

ATTACHMENT 45



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O/Ref.: DO/TC-0684/09

Y/Ref.: ALE/sba/C.1 2009(D) 54925

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For the attention of:

Alain LEROY

Head of Products Department

Toulouse, February 12th, 2009

OBJECT: TCCA request related to Freezing Drizzle and Freezing Rain

Dear Mr. LEROY,

Further to your above referenced letter you will find here below the ATR answer or position to the issue.

Freezing drizzle and freezing rain are not covered by the certification icing envelop as defined within the CS/FAR25 requirements and associated appendix C. Nevertheless these conditions have been addressed after the ATR72 Roselawn accident and generic FAA AD's have been issued towards the turboprop manufacturers to account for these conditions within the flight manuals. Visual means to identify these conditions and procedures to exit safely have since been implemented within our manuals.

The AFM limitation section (page 2-06 attached) addresses ZL and ZR encounters while in flight and the means provided to the flight crew to detect these conditions.

The procedures to be followed in case of such encounter is described in the AFM Emergency Procedures section (page 4-05 attached)

Freezing drizzle or rain at Take-off

Even if take-off under freezing drizzle or rain is not specifically addressed, the take-off cannot be conducted as soon as the flight crew has detected one of the cues defined in 2-06 section.

Freezing drizzle or rain at Landing

If these conditions and encountered (and identified by the flight crew as detailed in section 2-06) while performing the final approach or landing) the Emergency Procedure (4-05 section) is to exit these conditions. It appears more appropriate to exit these conditions in pursuing the landing provided all the procedure steps are strictly followed and in particular the minimum severe icing speed bugged and respected.



Operational issue

Even if freezing precipitation are taken into account to determine the Holdover Time provided by anti-icing fluids that could have been sprayed on the aircraft surface while on ground, it cannot be anticipated how these fluids behave during and after the take-off. Consequently ATR do not consider any credit for these anti-icing fluids if freezing drizzle or rain is still present during the Take-Off.

Best regards,

D. CAILHOL
ATR Continued Airworthiness Manager

Attachments:

- Extract of ATR42 AFM Limitation Section Pages 2-06
- Extract of ATR42 AFM Emergency Procedure Section Page 4-05