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Mr. Hans Ytterberg  
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**FEB 22 2018**

Dear Mr. Ytterberg,

I wish to refer to your electronic mails dated 5 and 8 December 2017, related to an accident involving an CRJ200 aircraft, registration SE-DUX, on 8 January 2016 at Oajevágge, Norrbotten County, Sweden, and your letter dated 8 December 2017, reference L-112/16, related to a serious incident involving an AVRO-RJ 100 aircraft, registration SE-DSV, on 7 November 2016 at the Gothenburg/Landvetter Airport, Sweden. The relevant Final Reports contain two safety recommendations (RL 2016:11 R1 and RL 2017:10 R1, respectively) addressed to the International Civil Aviation Organization (ICAO), as follows:


- RL 2016:11 R1 Ensure that a general system of initial standard calls for the handling of abnormal and emergency procedures and also for unusual and unexpected situations is implemented throughout the commercial air transport industry.
- RL 2017:10 R1 Investigate and evaluate the risks of recommended methods for de-icing and post-de-icing check, especially the incorporated method as referred to in the ICAO Annex 6, Part I, Doc 9640, and consider and decide whether the reference should be changed.

With regard to the accident involving the CRJ200, registration SE-DUX, Annex 6 — *Operation of Aircraft*, Part I — *International Commercial Air Transport* — Aeroplanes, Chapter 9, section 9.3 contains Standards and Recommended Practices (SARPs) addressing that operators shall establish and maintain ground and flight training programmes approved by the State of the Operator that shall “include proper flight crew coordination and training in all types of emergency and abnormal situations or procedures caused by engine, airframe or systems malfunctions, fire or other abnormalities”. This establishes the responsibility for States and Operators to ensure crew are adequately trained for these scenarios, including any necessary communications. Identifying the potential abnormal scenarios should be part of establishing a suitable training programme to meet the requirements of Annex 6, Part I, section 9.3.

With regard to the serious incident involving AVRO-RJ 100, registration SE-DSV, ICAO is currently in the process of publishing an updated edition of the *Manual of Aircraft Ground De/Anti-icing Operations* (Doc 9640) with the unedited version to be posted on the ICAO website in February 2018. The third edition of Doc 9640 is being developed in coordination with industry experts to ensure close correlation of best practices with, for example, the Society of Automotive Engineers (SAE) International Document AS6285 – *Aircraft Ground Deicing/Anti-Icing Processes*. The importance of a post de-icing check immediately following the application of de-icing/anti-icing fluids to ensure that the treated surfaces are no longer contaminated is clearly identified in the new edition of Doc 9640 and supporting industry documentation. Therefore, the existing reference to Doc 9640 in Annex 6 remains valid.

I trust that the foregoing information meets the intent of the safety recommendations of the Accident Investigation Authority of Sweden.

Yours sincerely,



Stephen P. Creamer  
Director  
Air Navigation Bureau

cc: Representative of Sweden  
on the Council of ICAO