



REASSESSMENT OF THE RESPONSE TO TSB RECOMMENDATION A95-20

Aircraft grouping for pilot proficiency checks (PPC)

Background

On 03 December 1993, a Britten-Norman Islander BN2A-20 aircraft, operated by Arctic Wings and Rotors, was involved in a fatal accident at Tuktoyaktuk, Northwest Territories (A93W0204). The Board determined that a magneto impulse coupling, worn beyond the prescribed limits, resulted in the failure of the right engine. Following the engine failure, the pilot mistrimmed the rudder and was unable to maintain control of the aircraft.

The Board made 6 Aviation Safety Recommendations as a result of the accident. Transport Canada's (TC) response to these recommendations has now been received; the extent to which the safety deficiencies are being resolved is assessed below.

The Board concluded its investigation and released Aviation Investigation Report A93W0204 on 18 October 1995.

TSB Recommendation A95-20 (October 1995)

A pilot who is current on several aircraft types is prone to applying the specific procedures or practices for one type to another; this includes the possible incorrect operation of controls if the control functions are significantly different from one aircraft to another. Such errors in the performance of an operation or procedure are known as "transfer errors." Differences in cockpit layout, in the operation of flight and engine controls, in the major aircraft systems, and in the critical emergency procedures could promote transfer errors. To minimize aircrew susceptibility to making transfer errors, aircraft groupings should be based on more than general similarities in aircraft handling and performance.

Therefore the Board recommends that

The Department of Transport revise the guidelines for grouping aircraft for PPCs to take into account the susceptibility to transfer errors by aircrew.

TSB Recommendation A95-20

Transport Canada's response to Recommendation A95-20 (January 1996)

Transport Canada agrees that the grouping of these types of aircraft needs to be reviewed. A review of the suitability of current groupings for aeroplanes will be included in the Terms of Reference (TOR) of the Safety of Air Taxi Operations Task Force (SATOPS).

TSB's assessment of Transport Canada's response to Recommendation A95-20 (February 1996)

Transport Canada (TC) agrees that the grouping of aircraft needs reviewing and that the issue of grouping of aircraft for PPCs will be included in the SATOPS Task Force. However, there is no mention of interim action to address the shortcomings identified in existing aircraft groupings.

Therefore, the response to Recommendation A95-20 is assessed as **Satisfactory in Part**.

TSB's reassessment of Recommendation A95-20 (September 1996)

TC set up a Safety of Air Taxi Operations Task Force (SATOPS) to review air taxi operations in Canada. Its final report to DGAR should be on 31 Dec. 96.

Therefore the assessment remains as **Satisfactory in Part**.

TSB's reassessment of Recommendation A95-20 (November 1996)

Regulatory change proposal on PPC Groupings were submitted to CARAC in September 1996.

Therefore the assessment of Recommendation A95-20 is changed to **Satisfactory Intent**.

TSB's reassessment of Recommendation A95-20 (November 1997)

Regulatory change proposal on PPC Groupings were submitted to CARAC in September 1996. SATOPS recommendations with regards to groupings have been approved and TC will be reviewing all existing groupings using TP12993 and produce a valid list in June 1998.

Therefore the assessment remains as **Satisfactory Intent**.

TSB review of Recommendation A95-20 deficiency file status (May 2017)

The Board requested that Recommendation A95-20 be reviewed to determine if the deficiency file status was appropriate. After an initial evaluation, it was determined that the safety deficiency addressed by Recommendation A95-20 still needed to be reassessed.

A request for further information was sent to Transport Canada and a reassessment will be conducted upon receipt of Transport Canada's response.

Therefore, the assessment remains as **Satisfactory Intent**.

Consequently, the status of Recommendation A95-20 is changed to **Active**.

Transport Canada's response to Recommendation A95-20 (August 2017)

TC agrees in principle with the recommendation.

This recommendation was issued prior to the implementation of the CARs. During the development of the CARs, TC reviewed and modified the criteria for grouping aircraft, which are published in the CARs, Subpart 703 Standards 723-Air Taxi Aeroplanes Schedules II and III. Further, Advisory Circular (AC) 700-118, lists the Approved and Cancelled Groupings of

Aeroplanes Operating Pursuant to Subparts 702 and 703 of the CARs for Recurrent Pilot Proficiency Check (PPC) purposes. AC 700-118 is available at:
<https://www.tc.gc.ca/media/documents/ca-opssvs/ac-700-018-eng.pdf>.

TC continues to assess aeroplane differences and update groupings to mitigate the risks associated with this recommendation. TC believes this recommendation has been addressed.

TSB reassessment of Transport Canada's response to Recommendation A95-20 (February 2018)

TC has taken a number of actions to address the safety deficiency identified in Recommendation A95-20, regarding the grouping of similar aircraft types. To date, these include the following:

1. The enactment of the *Canadian Aviation Regulations* (CARs), which included amendments to the aircraft groupings that were in effect when Recommendation A95-20 was first published; and
2. The subsequent release, in 2011, of Advisory Circular (AC) 700-018 - *Flight Crew Member Qualifications - Sections 702.65 and 703.88 of the CARs - List of Approved and Cancelled Groupings for Recurrent PPC Purposes of Aeroplanes Operating Pursuant to Subparts 702 and 703 of the CARs*. AC 700-018 provides a revised list of approved groupings for similar aircraft types, in order to prevent transfer errors when pilots are current on several aircraft types.

TC has also indicated that it will continue, on an on-going basis, to assess aeroplane differences and update the groupings.

The Board believes that the actions taken by TC have substantially reduced the risk associated with the safety deficiency identified in Recommendation A95-20.

Therefore, the response to Recommendation A95-20 is assessed as **Fully satisfactory**.

Next TSB Action

This deficiency file is **Closed**.