



REASSESSMENT OF THE RESPONSE TO TSB RECOMMENDATION A93-16

Seaplane training qualifications

Background

Between 1976 and 1990, there were 1,432 seaplane accidents, of which 234 were fatal, resulting in 432 deaths. In February 1994, following an examination of these accidents, the Board issued a report identifying safety deficiencies associated with the levels of skills, abilities and knowledge of pilots engaged in seaplane operations. The report contained ten recommendations addressing issues of training, evaluation and certification, proficiency and education.

On 5 May 1994, the Minister responded to each of the Board's recommendations. Following is the Board's assessment of the extent to which the underlying deficiencies are being addressed.

The Board released Report SSA93001 on 10 February 1994.

TSB Recommendation A93-16 (February 1994)

Seaplane conversion training may be conducted by any holder of a Commercial or Airline Transport Pilot Licence with 50 hours pilot-in-command experience on seaplanes. The pilot giving the training does not need to have ever submitted to a test of knowledge on seaplane operations, nor have any experience in training or flying training. In light of the circumstances of many of the occurrences which were studied, it is unrealistic to expect meaningful training, evaluation, and recommendation from a pilot whose only qualification is a minimum experience on seaplanes. Given the seasonal and remote nature of seaplane operations, maintaining quality control in the provision of sound pilot training for safe flight operations is a significant challenge. Yet, the occurrence record strongly indicates a need for improved methods for developing seaplane pilots' knowledge, skills, and judgement. In view of the unique requirements for safe flight operations from water, the Board recommends that

the Department of Transport require an endorsement to the Commercial and Airline Transport licences for seaplane instruction which would entitle the holder to provide alternate seaplane flight and ground school training to pilots.

TSB Recommendation A93-16

Transport Canada's response to Recommendation A93-16 (February 1994)

Transport Canada agrees that additional structure to the training for a seaplane endorsement will help instructors shape the course so that the identified performance objectives are achieved. Proposed new legislation will require course approval and adherence to expanded training requirements that will be specified in the Personnel Licensing Handbook Volume 1- Flight Crew. As well, with the planned introduction of comprehensive ground and flight training

syllabi to address TSB Recommendation A93-14, individuals authorized to conduct alternate seaplane training will be provided with more useful guidance.

TSB assessment of Transport Canada's response to Recommendation A93-16 (July 1994)

Transport Canada's reply to this recommendation focuses on the additional structure that will be applied to the training for a seaplane endorsement as a result of its response to recommendation A93-14. In TC's view, such additional structure, i.e. comprehensive ground and flight training syllabi, will provide individuals authorized to conduct seaplane training with "more useful guidance". While the additional structure in the training of seaplane pilots is necessary and important, TC's reply does not address the issue of ensuring quality control of instructors.

A Transport Canada official informally has advised staff that TC intends to require that persons providing seaplane training will have to submit to a TC regional office their proposed course program for approval. This will be the extent of TC monitoring for quality control. Transport Canada does not intend to certify instructors for seaplane instruction.

With more rigorous training requirements, the need for effective instructors increases. It should be noted that TC requires that a trainer be specifically qualified as a flight instructor to teach night flying. These instructors must be certified by TC and must be periodically reassessed. It should also be noted that in its replies to recommendations A93-16, A93-17 and A93-18, Transport Canada refers to the person providing the training as the "instructor"; however, this person is not required to have any special training or education in how to teach and evaluate pilot trainees. Calling a person "an instructor" simply by virtue of her/his experience is stretching the meaning of the word. By calling "instructor" a person who has no training and certification for such a title, Transport Canada gives little credit to its own process of flying instructor training, testing and certification.

Therefore, the response to Recommendation A93-16 is assessed as **Unsatisfactory**.

TSB reassessment of Recommendation A93-16 (November 1996)

No change since the last assessment.

Therefore the assessment remains as **Unsatisfactory**.

TSB reassessment of Recommendation A93-16 (November 1997)

Although more guidance is now provided in the new syllabus, instructors are still not required to be certified by Transport Canada and be periodically reassessed.

Therefore the assessment remains as **Unsatisfactory**.

TSB reassessment of Recommendation A93-16 (January 2004)

Canadian Aviation Regulations (CARs) 421.38(1)(a)(i) amended on 23 March 1998 increased applicant experience requirements to 7 hours of seaplane training, with minimum 5 hours dual.

Canadian Aviation Regulations (CARs) 421.38 amended on 01 September 2000 states:

Within the 12 months preceding the date of application for a seaplane rating, an applicant shall have successfully completed a qualifying flight under the supervision of a Transport Canada Inspector or a person qualified in accordance with CAR 425.21(6) by demonstrating the level of skill specified in the instructor guide - Seaplane Rating (TP12668).

Therefore, the response to Recommendation A93-16 is assessed as **Satisfactory in Part**.

As such, **Further Action is Unwarranted** with respect to A93-16 and the status is set to **Inactive**.

TSB review of Recommendation A93-16 deficiency file status (April 2014)

The Board requested that A93-16 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 A93-16 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 in Part**.

Consequently, the status of Recommendation A93-16 is changed to **Active**.

Transport Canada's response to Recommendation A93-16 (March 2018)

TC agreed at the time this recommendation was made, there was a need for more standardization of seaplane training.

Standard 425.21 (6) provides that:

A person who conducts flight training toward the issuance of a landplane class rating or a seaplane class rating shall:

- (a) be the holder of a Commercial Pilot Licence or an Airline Transport Pilot Licence; and
- (b) have experience of not less than 50 hours flight time on the class of aeroplane used for the training.

In 1996, TC published the Flight Instructor Guide - Seaplane Rating (TP 12668) to contribute to the standardization of seaplane pilot training in Canada.

TC's review of current requirements concluded that Part IV of the CARs and TP 12668 appropriately address the requirement.

TC plans no further action and suggests closing this recommendation.

TSB reassessment of Transport Canada's response to Recommendation A93-16 (January 2019)

Transport Canada indicates that the safety deficiency identified in Recommendation A93-16, regarding the requirement for an endorsement to the Commercial and Airline Transport licences for seaplane instruction, has been addressed as follows:

- Section 405.21 of the *Canadian Aviation Regulations* requires that a person be qualified as a flight instructor in order to conduct flight training. To be qualified, that person needs to meet the requirements of the personnel licensing standards (*Commercial Air Service Standards* [CASS] 425.21);
- Subsection 425.21(6) of the CASS requires that a person conducting flight training for the issuance of a seaplane class rating must be the holder of either a Commercial Pilot Licence or an Airline Transport Pilot Licence and have at least 50 hours flight time on that class of aeroplane;
- In order to standardize seaplane pilot training in Canada, Transport Canada published the *Instructor Guide - Seaplane Rating* (TP 12668). This guide provides flight instructors with the detailed training requirements to obtain a seaplane rating; and
- Section 421.38 of the CASS requires that within 12 months preceding the date of application for a seaplane rating, an applicant shall have successfully completed a qualifying flight under the supervision of a Transport Canada Inspector or a person qualified in accordance with subsection 425.21(6) of the CASS by demonstrating the level of skill specified in TP 12668.

The Board believes that the actions taken by Transport Canada have substantially reduced the risk associated with the safety deficiency identified in Recommendation A93-16.

Therefore, the response to Recommendation A93-16 is assessed as **Fully Satisfactory**.

This deficiency file is **Closed**.