



REASSESSMENT OF THE RESPONSE TO TSB RECOMMENDATION A93-20

Seaplane periodic flight review

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 A93-20 (February 1994)

For the purpose of its proposed biennial flight review, Transport Canada states that sea and land class aeroplanes shall be deemed to be the same class. Since unique skills and knowledge are required to fly seaplanes, demonstrations of skill in a landplane will not confirm competence in the specific skills required for seaplane operations.

Therefore the Board recommends that

The Department of Transport establish a mandatory periodic flight review on seaplanes for the maintenance of the operating privileges of a seaplane endorsement.

TSB Recommendation A93-20

Transport Canada's response to Recommendation A93-20 (May 1994)

Transport Canada has developed a mandatory flight review that is currently undergoing consultation with the aviation industry. The flight review program recommends that a pilot complete the requirements specified in one of the following options once in each 24 month period:

1. Completion of the proposed Flight Review program as defined in the Aviation Notice of March 5, 1992; or,
2. Attendance at a Safety Seminar conducted by Transport Canada, Aviation, or by an organization approved by the Minister which consists of:
 - a) a session designed to update the pilot on changes to Regulations, Orders and operating procedures; and

- b) a session on Human Factors; or,
- 3. Participation in a programme approved by the Minister which is designed to enhance pilot knowledge and cognitive skills; or,
- 4. Successful completion of a Pilot Proficiency Check or mandatory training programme as required by an applicable Air Navigation Order; or,
- 5. Successful completion of a flight test for a licence or for the endorsement of a licence for instrument rating or instructor rating privileges.

This flight review builds on proven programs that are now being delivered by Transport Canada and segments of the aviation community. As part of the ongoing consultation with the aviation industry, consideration will be given to including material specific to seaplane operations when appropriate.

TSB assessment of Transport Canada's response to Recommendation A93-20 (July 1994)

Transport Canada states that its mandatory flight review is currently undergoing consultation with the aviation industry and as part of this consultation process, consideration will be given to including material specific to seaplane operations when appropriate. Unfortunately, as indicated by the many options offered in TC reply, there remains considerable difference of opinion within the industry as to what will suffice as a "periodic flight review". Basically, it would appear that TC intends to place greater reliance on the current requirement to have completed a specified number of landings and take-offs in the preceding six months.

The response is so vague that without knowing what consideration will be given, what material might be included or what "when appropriate" means, it is not possible to meaningfully assess this reply. Since the reply makes no new commitment to ensure the currency of (non commercial) seaplane pilots, it is considered to be Unsatisfactory.

TSB reassessment of Recommendation A93-20 (November 1996)

Some of the options, which may be the preferred ones for pilots, only require attendance to a seminar or a self-paced study program. Biennial recurrent training program in effect under *Canadian Aviation Regulations* (CARs) 421.05(2) Recency Requirements.

Therefore, the assessment remains as Unsatisfactory.

TSB reassessment of Recommendation A93-20 (November 1997)

No change since the last reassessment.

Therefore the assessment remains as **Unsatisfactory**.

TSB reassessment of Recommendation A93-20 (February 2004)

The vagueness of Transport Canada's response prompted the **Unsatisfactory** assessment. Although the program of biennial recency requirement is contained in *Canadian Aviation Regulations* (CARs) 421.05(2) Recency Requirements, it does not include a mandatory flight review (requirement can be met thru self-paced written test or seminar attendance) as stated in the recommendation.

Therefore, the response to Recommendation A93-20 is assessed as **Satisfactory in Part**.

As such, **Further Action is Unwarranted** with respect to A93-20 and the status is set to **Inactive**.

TSB review of Recommendation A93-20 deficiency file status (April 2014)

The Board requested that A93-20 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 A93-20 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 A93-20 is changed to **Active**.

Transport Canada's response to Recommendation A93-20 (August 2017)

TC agrees with the recommendation. The recommendation was issued prior to TC replacing the *Air Navigation Orders* with *Canadian Aviation Regulations*.

For private (general aviation) operations, the following CARs Part IV personnel licensing references apply: Section 401.05 Recency Requirements as well as Chapter 421.05 in compliance with Subpart 401 in the CARs.

For commercial operations, all operators must comply with Part VII regulations and standards (Air Taxi 703/723 and commuter 704/724). The training and checking requirements in Part VII stipulate initial and annual recurrent training on all aspects of an operation. For float or seaplane operations, all the mandatory training to establish, maintain and verify competency is found in the operator's approved training syllabus which is developed by the operator and approved by TC. Program Validation Inspections (PVI) and other oversight strategies are used to ensure the training is completed and the flight crews are fully qualified.

TC believes that the safety deficiency upon which this recommendation is based has been addressed. Regulatory requirements, processes, and oversight provisions assure that seaplane pilots maintain and demonstrate necessary competence.

Regulatory references 703.98/723.98 and 704.115/724.115.

TSB reassessment of Transport Canada's response to Recommendation A93-20 (February 2018)

In its response, TC indicates that the replacement, in 1996, of the *Air Navigation Orders* with the *Canadian Aviation Regulations* (CARs) has resulted in the following improvements regarding the maintenance of the operating privileges of a seaplane endorsement:

- Recency requirements in CARs 401.05, under which all pilots must conduct five take-offs and five landings on a seaplane every six months in order to carry passengers on a seaplane. This provides a means to maintain the proficiency of seaplane pilots on a recurrent basis and mitigates the risks associated with carrying passengers on seaplanes; and

- Under CARs Part VII, commercial air operators engaged in seaplane operations must establish and maintain a seaplane training program, approved by TC, in order to validate the proficiency of their pilots by means of initial and annual ground and flight training.

The Board believes the actions taken by TC have substantially reduced the risk associated with the safety deficiency identified in Recommendation A93-20.

Therefore, the response to Recommendation A93-20 is assessed as **Fully Satisfactory**.

Next TSB action

This deficiency file is **Closed**.