



TSB Recommendation A91-21

Manufacturer's recommendations - Letters-to-operators - Compliance requirements

The Transportation Safety Board of Canada recommends that the Department of Transport clarify the operator compliance requirements with respect to Letters-to-Operators.

Air transportation safety investigation report	A88H0011
Date the recommendation was issued	18 June 1991
Date of the latest response	October 2022
Date of the latest assessment	February 2023
Rating of the latest response	Satisfactory Intent
File status	Active

Summary of the occurrence

On 15 September 1988, a Hawker-Siddeley HS-748, was in cruise flight at 3,000 feet in visual flight conditions while on an instrument flight rules flight to Ottawa International Airport from Montreal/Dorval Airport. Coincident with a remark by the captain pointing out a ground feature, the aircraft commenced a full aileron deflection roll to the left. The aircraft rolled through 465 degrees and descended to impact, with a final speed of approximately 290 knots. In the last stages of the accident manoeuvre, a maximum vertical acceleration of approximately 4.7g was recorded. Both crew members on board were killed, and the aircraft was destroyed.

The investigation determined that the aileron control system was asymmetrically rigged, making it susceptible to aerodynamic overbalance. The operator had not conducted the required post-maintenance flight tests of the aileron control response.

Contributing to the accident were the design of the aileron system; ambiguous and incomplete maintenance instructions; a lack of published information for flight crew concerning aileron system performance and possible emergencies; and the presence of factors which may have led to the development of flight crew fatigue.

As a result of the investigation of this occurrence, the TSB forwarded six recommendations to TC; four dealt with aircraft aileron overbalance, and two centered on manufacturer notices-to-operators (NTO).

The Board concluded its investigation and released Aviation Investigation Report A88H0011 on 18 June 1991.

Rationale for the recommendation

The country of manufacture of an aircraft is obligated by section 4.2 of annex 8 of the International Civil Aviation Organization (ICAO) Standards to transmit to contracting states any generally applicable information which it has found necessary for the continuing airworthiness of an aircraft and for the safe operation of an aircraft. To further ensure the continuing airworthiness of Canadian-registered aircraft, TC routinely reviews all manufacturers' service bulletins and, if required, issues Airworthiness Directives (ADs). TC's review of service bulletins is in accordance with paragraph 5 (b) of section 571.101/4 of the Airworthiness Manual Advisory (AMA), which states that manufacturer's recommendations, such as service bulletins (which primarily concern aircraft maintenance) and Letters-to-Operators (which primarily concern aircraft operation) are assessed by TC to determine their acceptability.

Although all service bulletins are reviewed by TC, Letters-to-Operators, including NTOs, are usually reviewed by TC only if a specific request to do so is received from an operator. This practice could result in TC overlooking vital operational or maintenance related information which might otherwise have resulted in an AD being issued.

In addition, operator compliance requirements with respect to service bulletins are detailed in Notice to Aircraft Maintenance Engineers and Aircraft Owners (NAME-AO) No. 26/83; however, compliance requirements with respect to Letters-to-Operators have not been promulgated.

Therefore, the Board recommended that

the Department of Transport clarify the operator compliance requirements with respect to Letters-to-Operators.

TSB Recommendation A91-21

Previous responses and assessments

February 1992: response from Transport Canada

It is Transport Canada's policy to review manufacturers' Service Bulletins and Airworthiness Directives issued by foreign airworthiness authorities, applicable to aircraft types registered in Canada. Although other service and maintenance documents that come to Transport Canada's attention may be assessed, present policy does not, because of the amount and diversity of the information involved, include the review of all service and maintenance related correspondence between manufacturers and operators.

Transport Canada agrees to review the present policy and will undertake an evaluation of the matter of review of Letters-to-Operators in terms of potential safety benefits, cost impact, administrative feasibility and related factors.

March 1992: TSB assessment of the response to Recommendation A91-21 (Satisfactory in Part)

In issuing recommendations A91-20 and A91-21, the TSB emphasized that the omission of the operational content of the manufacturer's "Letters-to-Operators" was of prime concern; however, TC's response seems to focus on airworthiness concerns and completely skirts the operational issue. Nevertheless, TC's proposed review of their present policy and evaluation of the review process of Letters-to-Operators, plus a stated intent to produce a new Airworthiness Manual Advisory (AMA) may encompass the operational considerations as well as the airworthiness ones.

The intended review by TC, if broad in scope, could address the intent of Recommendations A91-20 and A91-21. It will be the results of the TC review, and subsequent action that should indicate if the deficiencies of Recommendations A91-20 and A-91-21 have been fully addressed.

Therefore, the response to Recommendation A91-21 is assessed as **Satisfactory in Part**.

November 1996: TSB assessment of the response (Satisfactory in Part)

In August 1995, Transport Canada completed its final report entitled "Letters-to-Operators Survey".

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

April 1997: response from Transport Canada

TC will produce a new airworthiness manual advisory that will clarify the compliance requirement for known categories of manufacturer's instructions for continued airworthiness. This advisory will take into account any pertinent result from the study proposed in A91-20.

November 1997: TSB assessment of the response (Satisfactory in Part)

Transport Canada will produce a new Airworthiness Manual Advisory (AMA) designed to clarify the compliance requirement for each category of manufacturer's instructions.

The initial draft was completed as of 02 April 1997. Further work is on hold due to higher priorities.

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

January 1998: TSB assessment of the response (Satisfactory in Part)

No changes since the last reassessment.

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

January 2004: TSB assessment of the response (further action unwarranted; file status: Inactive)

A review of recent TC Airworthiness Manual Advisories (AMAs) could not confirm TC issued an AMA regarding the handling of manufacturers' instructions. However, despite the fact that no specific advisory material was issued with regards to LTO review, the residual risk from the safety deficiency is considered "low".

As such, **Further Action is Unwarranted** with respect to Recommendation A91-21 and the status is set to **Inactive**.

April 2014: TSB review of deficiency file status (response: Satisfactory in Part; file status: Active)

The Board requested that Recommendation A91-21 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 A91-21 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 A91-21 is changed to **Active**.

June 2018: response from Transport Canada

Transport Canada (TC) agrees in principle with the recommendation.

TC agrees that Part VII of the *Canadian Aviation Regulations* (CARs) may require amendments in order to clarify operator responsibilities regarding letters-to-operators. TC will prepare an issue paper for the Regulatory Steering Committee identifying the issue and recommending the development of a Notice of Proposed Amendment (NPA) to introduce an evaluation program for Part VII Operators.

TC expects to have the issue paper developed in June 2018, in order to present to the Steering Committee.

February 2019: TSB assessment of the response (Satisfactory Intent)

To date, the following actions have been proposed by Transport Canada (TC) to address the safety deficiency identified in Recommendation A91-21, regarding the clarification of the operator compliance requirements with respect to Letters-to-Operators:

- In 1992, TC intended to review its policy and undertake an evaluation of the review of Letters-to-Operators in terms of potential safety benefits, cost impact, administrative feasibility and other related factors;
- In 1995, TC completed a report entitled “Letters-to-Operators Survey”; and
- In 1997, TC completed the initial draft of an airworthiness manual advisory to clarify the compliance requirements for each category of manufacturer’s instructions.

Apart from the Letters-to-Operators Survey Report, none of the other actions previously proposed by TC was completed. In its latest response, TC indicates that it will prepare an issue paper for the Regulatory Steering Committee identifying the issue and recommending the development of a Notice of Proposed Amendment to introduce an evaluation program for Part VII operators. The issue paper was presented to the Regulatory Steering Committee on 27 June 2018, and was accepted. TC now plans to develop the draft Notice of Proposed Amendment by early March 2019.

This recommendation was issued more than 27 years ago. The Board is concerned with the protracted delays in addressing the safety deficiency identified in Recommendation A91-21.

The Board notes the progress made in 2018 and hopes that the momentum can be maintained in 2019 so that this safety deficiency can finally be fully addressed. Although the future evaluation program for Part VII operators may address the safety deficiency identified in Recommendation A91-21, until it is fully implemented, the risks to transportation safety remain.

Therefore, the response to Recommendation A91-21 is assessed as **Satisfactory Intent**.

December 2019: response from Transport Canada

Transport Canada (TC) agrees with the recommendation.

In our previous update in June 2018, TC indicated that Part VII of the *Canadian Aviation Regulations* (CARs) may require amendments in order to clarify operator responsibilities with respect to letters-to-operators. TC committed to preparing an issue paper for the Regulatory Steering Committee identifying the issue and recommending the development of a Notice of Proposed Amendment (NPA) to introduce an evaluation program for Part VII Operators.

Following the acceptance of the issue paper by the Regulatory Steering committee on 27 June 2018, a draft NPA has been developed to introduce an evaluation program for Part VII Operators. TC plans to have the initial draft reviewed internally and with industry by April 2020.

Following these consultations, TC plans to have the proposed amendment published for formal consultation via Canada Gazette Part I in the fall of 2020 with possible publication of new requirements in the spring of 2021.

February 2021: update to the response from Transport Canada

The initial development of the NPA has been completed but the final review and development has been delayed due to the COVID-19 crisis. Work on the NPA and stakeholder coordination is scheduled to resume in 2021.

March 2021: TSB assessment of the response (Satisfactory Intent)

In its responses, Transport Canada (TC) indicated that it agrees with the recommendation and that a Notice of Proposed Amendment (NPA) has been drafted to introduce an evaluation program for *Canadian Aviation Regulations* Part VII operators in order to clarify operator responsibilities regarding letters-to-operators.

Following the internal and industry review of the NPA, TC was initially expecting to have its proposal published in the *Canada Gazette*, Part I by the fall of 2020, with the new requirements possibly published in the *Canada Gazette*, Part II by the spring of 2021. However, work on the NPA has been delayed due to the COVID-19 pandemic, and is scheduled to resume in 2021.

This recommendation was issued approximately 30 years ago. Even though encouraged that progress is being made, the Board is concerned with the protracted delays in addressing the safety deficiency identified in Recommendation A91-21. Although the future evaluation program for Part VII operators may address the safety deficiency identified in Recommendation A91-21, until it is fully implemented, the risks to transportation safety remain.

Therefore, the response to Recommendation A91-21 is assessed as **Satisfactory Intent**.

September 2021: response from Transport Canada

Transport Canada (TC) agrees with the recommendation.

Since the recommendation was reactivated in June 2018, TC prepared an issue paper for the Regulatory Steering Committee identifying the issue and recommending the development of a Notice of Proposed Amendment (NPA) to introduce an evaluation program for Part VII Operators.

In TC's December 2019 and February 2021 updates,¹ the Department committed to developing an NPA to introduce an evaluation program for Part VII Operators and planned to publish it for formal consultation via *Canada Gazette*, Part I in Fall 2020, with possible publication of new requirements in Spring 2021.

¹ Transportation Safety Board of Canada (2021). *Update to Transport Canada's response to Recommendation A91-21 (February 2021)*. Available at: <http://www.bst-tsb.gc.ca/eng/recommandations-recommendations/aviation/1991/rec-a9121.html>

Since the previous update, TC has further developed the NPA following several recommendations by TC officials and is estimating that the NPA should be finalized from a technical perspective in October 2021, which has been delayed due to workload associated with the pandemic. Once the NPA is finalized, TC will be coordinating the NPA for stakeholder consultation using the Canadian Aviation Regulation Advisory Council (CARAC) process, which should be completed sometime in the 1st quarter of 2022 with a possible publication in the 2nd quarter of 2022.

March 2022: TSB assessment of the response (Satisfactory Intent)

In its latest response, Transport Canada (TC) indicated that it agrees with the recommendation and that a Notice of Proposed Amendment (NPA) has been drafted to introduce an evaluation program for *Canadian Aviation Regulations* (CARs) Part VII operators in order to clarify operator responsibilities regarding letters-to-operators.

Since the last TSB reassessment, TC has further developed the NPA; however, it has yet to be finalized. TC was initially expecting to have its proposal published in the *Canada Gazette*, Part I, by the fall of 2020, with the new requirements possibly published in the *Canada Gazette*, Part II, by the spring of 2021. However, work on the NPA has been delayed due to the COVID-19 pandemic. At the time of this reassessment, TC indicated that the completion of the NPA is now anticipated by the spring of 2022, with a possible publication in the *Canada Gazette*, Part I, in December 2022 or early 2023.

While encouraged that some progress is being made, the Board continues to be concerned with the protracted delays in addressing the safety deficiency identified in Recommendation A91-21. Although the future evaluation program for CARs Part VII operators may address the safety deficiency identified in Recommendation A91-21, until it is fully implemented, the risks to transportation safety remain.

Therefore, the response to Recommendation A91-21 is assessed as **Satisfactory Intent**.

Latest response and assessment

October 2022: response from Transport Canada

Since the recommendation was reactivated in June 2018, TC prepared an issue paper for the Regulatory Steering Committee identifying the issue and recommending the development of a Notice of Proposed Amendment (NPA) to introduce an evaluation program for Part VII Operators in order to clarify operator responsibilities regarding letters-to-operators.

This recommendation was accepted and in 2019, the Department committed to developing this NPA to and planned to publish it for formal consultation via *Canada Gazette*, Part I, in Fall 2020 with possible publication of new requirements in Spring 2021.

Since the previous update in September 2021, TC has further developed the NPA following several recommendations by TC officials and is estimating that the NPA should now be finalized

from a technical perspective in by the end of 2022, which has been delayed due to workload associated with the pandemic. The evaluation program requirements NPA will be introduced as a change to the current Standards instead of a change to the current Regulations, which means the drafting, consultation, and publication of the changes will be done in a more timely manner.

Once the NPA is finalized, TC will be coordinating the NPA for CG1 publication in the 4th quarter 2023 or early 2024 due to Department of Justice workload.

TC is not planning any actions in the short term to mitigate any risk as it has been almost 20 years since these requirements were removed from the CARs and TC believes that most Operators review all in service data that may affect the airworthiness of their fleet. This is supported by the fact that there have been any safety occurrences due to in service information not being reviewed or implemented by our Operators.

February 2023: TSB assessment of the response (Satisfactory Intent)

In its latest response, Transport Canada (TC) indicated that it agrees with the recommendation and that a Notice of Proposed Amendment (NPA) has been drafted to introduce an evaluation program for *Canadian Aviation Regulations* (CARs) Part VII operators in order to clarify operator responsibilities regarding letters-to-operators.

Since the last TSB reassessment, TC has further developed the NPA; however, it has yet to be finalized. TC indicated that, due to pandemic-related workload, it anticipates the NPA to be published in the *Canada Gazette*, Part I in late 2023 or early 2024.

The Board continues to be concerned with the protracted delays in addressing the safety deficiency identified in Recommendation A91-21. Although the future evaluation program for CARs Part VII operators may address the safety deficiency identified in Recommendation A91-21, until it is fully implemented, the risks to transportation safety remain.

Therefore, the Board considers the response to Recommendation A91-21 to show **Satisfactory Intent**.

File status

The TSB will monitor the progress of TC's planned actions to mitigate the risks associated with the safety deficiency identified in Recommendation A91-21, and it will reassess the deficiency on an annual basis or when otherwise warranted.

This deficiency file is **Active**.