



## TSB Recommendation A91-20

### Manufacturer's recommendations - Letters-to-operators – review process

The Transportation Safety Board of Canada recommends that the Department of Transport evaluate its review process concerning Letters-to-Operators to ensure the continuing airworthiness and safe operation of Canadian-registered aircraft.

Air transportation safety investigation report	A88H0011
Date the recommendation was issued	18 June 1991
Date of the latest response	May 2019
Date of the latest assessment	February 2023
<a href="#">Rating</a> of the latest response	Satisfactory in Part
<a href="#">File status</a>	Closed

#### Summary of the occurrence

The accident aircraft, 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.

Therefore, the Board recommended that

The Department of Transport evaluate its review process concerning Letters-to-Operators to ensure the continuing airworthiness and safe operation of Canadian-registered aircraft.

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### **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 (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 A91-20 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**.

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

No changes since the last reassessment.

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

**November 2004: TSB assessment of the response (Satisfactory in Part)**

As per previous re-assessments, this file should be **Inactive**. The suggested "Further Action is Unwarranted" is based on TC's study of its process for reviewing LTOs, etc., and its internal recommendations (forwarded to the TSB in August 1995). As there has been no specific advisory material issued on this subject, the assessment remains as **Satisfactory in Part**.

As such, "Further Action is Unwarranted" with respect to A91-20 and the status is set to **Inactive**.

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

The Board requested that A91-20 be reviewed to determine if the Deficiency File Status was appropriate. After an initial evaluation, it was determined that the safety deficiency addressed by Recommendations A91-20 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 A91-20 is changed to **Active**.

## **Latest response and assessment**

### **May 2019: response from Transport Canada**

Transport Canada (TC) agrees in principle with the recommendation as the continuing airworthiness of Canadian registered aircraft is of paramount importance. TC does not have a formal process for reviewing manufacturer's Letters to Operators for operational issues. However, at this time, TC does not believe there is sufficient information to indicate additional processes are required in this area.

Manufacturer service bulletins related to the airworthiness of aeronautical products are assessed by TC National Aircraft Certification specialists to determine whether they should be mandated. If the specialists believe the action recommended in a service bulletin should be mandated, the service bulletin is converted into an Airworthiness Directive specifying that the work must be completed to maintain the certification of the product and identifying a date by which compliance must be achieved.

Aside from the investigation report from 1988 that led to this recommendation, TC is not aware of any information that suggests an additional formal process is required and TC suggests that this recommendation be closed.

### **February 2023: TSB assessment of the response (Satisfactory in Part)**

In its response of May 2019, Transport Canada (TC) indicated that it agrees in principle with the recommendation.

At that time, the following actions had been proposed or taken by TC to address the safety deficiency identified in Recommendation A91-20, regarding the evaluation of its review process concerning Letters-to-Operators (LTOs):

- In 1992, TC intended to review its policy and undertake an evaluation of the review of LTOs in terms of potential safety benefits, cost impact, administrative feasibility and other related factors; and
- In 1995, TC completed a report entitled "Letters-to-Operators Survey."

Through the years, TC has indicated that service bulletins and foreign airworthiness directives (ADs) applicable to Canadian-registered aircraft types were reviewed and, when applicable, ADs were issued for the work required. The same process is not in place for LTOs because of the amount and diversity of the information involved, including service- and maintenance-related correspondence between manufacturers and operators.

In response to Recommendation A91-21, TC committed in 2019 to develop 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. Although progress on the NPA has been significantly delayed due to the pandemic, the NPA will be introduced as a change to the 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 is anticipating publication in the *Canada Gazette*, Part I in late 2023 or early 2024.

In keeping with the intent of Recommendation A91-20, TC has reviewed its process concerning LTOs to ensure the continuing airworthiness and safe operation of Canadian-registered aircraft and has come to the conclusion that no additional process is required. Furthermore, as noted in its latest response to A91-21 (October 2022), TC believes that most operators review all in service data that may affect the airworthiness of their fleet.

The Board considers that TC has addressed the intent of Recommendation A91-20, as it was written in 1991. Although there are no indications that the safety deficiency identified has been eliminated, the Board is of the opinion that the work currently in progress to address Recommendation A91-21 will encompass the safety deficiency identified in Recommendation A91-20.

Therefore, the Board considers the response to Recommendation A91-20 to be **Satisfactory in Part**.

### **File status**

The TSB will no longer monitor the progress of TC's actions in regards to LTOs through Recommendation A91-20. It will, however, follow the progress of the proposed action detailed in Recommendation A91-21.

This deficiency file is **Closed**.