



## REASSESSMENT OF RESPONSES TO AVIATION SAFETY RECOMMENDATION A07-07

### Carry-on baggage

#### Background

On 02 August 2005, the Air France Airbus A340-313 aircraft (registration F-GLZQ, serial number 0289) departed Paris, France, at 1153 Coordinated Universal Time (UTC) as Air France Flight 358 on a scheduled flight to Toronto, Ontario, with 297 passengers and 12 crew members on board. Before departure, the flight crew members obtained their arrival weather forecast, which included the possibility of thunderstorms. On final approach, they were advised that the crew of an aircraft landing ahead of them had reported poor braking action, and Air France Flight 358's aircraft weather radar was displaying heavy precipitation encroaching on the runway from the northwest. At about 200 feet above the runway threshold, while on the instrument landing system approach to Runway 24L with autopilot and autothrust disconnected, the aircraft deviated above the glideslope and the groundspeed began to increase. The aircraft crossed the runway threshold about 40 feet above the glideslope.

The aircraft was not able to stop on the runway and departed the far end at a groundspeed of about 80 knots. The aircraft stopped in a ravine at 2002 UTC (1602 eastern daylight time) and caught fire. All passengers and crew members were able to evacuate the aircraft before the fire reached the escape routes. A total of 2 crew members and 10 passengers were seriously injured during the crash and the ensuing evacuation.

The Board concluded its investigation and released report A05H0002 on 12 December 2007.

#### Board Recommendation A07-07 (12 December 2007)

During the emergency evacuation of AFR358, many passengers took their carry-on baggage with them, despite specific instructions to the contrary being repeatedly shouted to them by the cabin attendants. In view of the requirement to egress rapidly, especially when an aircraft is on fire, this action presented a significant risk to their safety. The consequences could include impeding an orderly and timely evacuation, damaging an evacuation slide, and increasing the potential for injury.

Research into other accidents involving emergency evacuations revealed that the practice by passengers insisting on retrieving their carry-on baggage during an emergency evacuation was not unique to this accident, but was rather widespread. Research has also demonstrated that in a heightened state of fear, individuals have difficulty in understanding and adhering to instructions given. Furthermore, it was found that, in some aircraft, emergency evacuation cards for the passengers do not show any direction to leave carry-on baggage behind during an evacuation. Without prior instructions or guidelines concerning the dangers of attempting to take their carry-on baggage during an evacuation, passengers are likely to do so, increasing the

potential for injury. The Board believes that any measure that would assist in raising the passengers' awareness about the hazards of attempting to take carry-on baggage with them during an emergency evacuation would serve to mitigate the risks. It is clear that informing passengers during emergency (safety) briefings of the prohibition of evacuating with carry-on items during an emergency would complement any existing measures designed to increase the efficiency and effectiveness of an emergency evacuation.

Therefore, the Board recommended that:

The Department of Transport require that passenger safety briefings include clear direction to leave all carry-on baggage behind during an evacuation.

TSB Recommendation A07-07

### **Transport Canada's response to A07-07 (21 February 2008)**

Transport Canada (TC) agrees with Recommendation A07-07 and will propose an amendment to the CARs to require that passenger safety briefings include direction to leave all carry-on baggage behind during an evacuation. The proposed amendment will be subject to the normal CARAC regulatory consultation process.

### **Board assessment of Transport Canada's response to A07-07 (13 August 2008)**

TC agrees with this recommendation, and intends to propose an amendment to the present regulations in line with the text of the recommendation. The proposed action will not have any effect in the short term, as any amendment to the CARs is a long process. However, this intended action, if implemented, will fully meet the intent of this recommendation. In the short term, direct liaison on the part of the regulator with Canadian Airline Operators to recommend improvements in their safety briefing practices with respect to emergency evacuations would also achieve the aim of the recommendation.

Therefore, TC's response to Recommendation A07-07 is assessed as **Satisfactory Intent**.

### **Next TSB action (13 August 2008)**

TSB Air Branch staff will continue to monitor occurrences reflecting similar type deficiencies upon which this recommendation was based, and to monitor any short term mitigating action from TC in order to determine to what extent, if any, such action may reduce the validated risks identified in this recommendation.

### **Transport Canada's response to A07-07 (10 October 2008)**

A response to a DOI (A) letter dated 03 October 2008 suggesting that TC devise some short term action to mitigate the risks identified in Recommendation A07-07 was received on 10 October 2008. In its response TC committed to developing an Advisory Circular applicable to both

General Aviation and Commercial Operators to address the concerns identified in Recommendation A07-07.

### **Board reassessment of Transport Canada's response to A07-07 (19 November 2008)**

TC's stated intention to publish an Advisory Circular addressing the concerns identified in Recommendation A07-07 will complement its plan to propose a regulatory change via the normal CARAC regulatory consultation process. This short term action should serve to raise awareness amongst Canadian Airline Operators to the risks associated with not including clear direction to leave all carry-on baggage behind during an evacuation in their respective passenger safety briefings.

Therefore, TC's response to Recommendation A07-07 remains as **Satisfactory Intent**.

### **Next TSB action (19 November 2008)**

TSB Air Branch staff will continue to monitor occurrences reflecting similar type deficiencies upon which this recommendation was based, and to monitor both the short and long term mitigating action from TC in order to determine to what extent, if any, such action may reduce the validated risks identified in this recommendation.

### **Transport Canada's response to A07-07 (15 February 2010)**

TC's response refers to its Advisory Circular No. 700-012 published 16 March 2009 as a means to address the concerns identified in TSB's Recommendation A07-07.

### **Board reassessment of Transport Canada's response to A07-07 (28 July 2010)**

The publication of AC 700-012 entitled *Passenger Safety Briefings* will serve to raise awareness of the deficiency identified in Recommendation A07-07. The response does not update TSB with respect to progress of its rulemaking initiative as stated in its response dated 21 February 2008.

Despite the lack of information regarding the progress of TC's stated intention to initiate regulatory action, the Board believes that TC fully intends to pursue this course of action. The action taken will reduce but not substantially reduce or eliminate the safety deficiency.

Therefore, the assessment is changed to **Satisfactory in Part**.

### **Next TSB action (28 July 2010)**

TSB staff will continue to monitor occurrences reflecting similar type deficiencies upon which this recommendation was based, and to seek details from TC as the status of its proposal to initiate regulatory change.

## **Transport Canada response to A07-07 (21 January 2011)**

TC's latest update took the form of answers to two questions that TSB had asked in July 2010 as a follow-up from TC's February 2010 update. Essentially, TSB requested the status of the TC's CARAC A07-07-related initiatives and, besides the publication of AC 700-012 *Passenger Safety Briefings* what, if any, alternatives to regulatory change might TC consider?

TC updated the status of its CARAC A07-07-related initiatives by stating that its proposed regulatory amendments are part of the work plan but have yet to be addressed. Additionally, TC states that it is not considering any alternatives to regulatory change other than AC 700-012 *Passenger Safety Briefings*.

## **Board reassessment of the response to A07-07 (09 March 2011)**

TC's response does not provide any new information with respect to the progress of TC's CARAC A07-07-related initiatives.

Given the action taken to date and the lack of specificity regarding TC's future action, this will reduce but not substantially reduce or eliminate the safety deficiency.

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

## **Next TSB action (09 March 2011)**

TSB staff will continue to monitor occurrences reflecting similar type deficiencies upon which this recommendation was based, and continue to seek details from TC as the status of its proposal to progress regulatory change.

## **Transport Canada's response to A07-07 (30 September 2011)**

### **May 2011 input**

No change since January 2011 update.

### **September 2011 update**

No change.

## **Board assessment of the response to A07-07 (07 March 2012)**

TC's response provides no new information with respect to the progress of TC's CARAC A07-07-related initiatives since its 21 January 2011 response. Specifically, in answer to the Board's question submitted to TC on 21 July 2010:

Can TC please provide the status of its previously mentioned CARAC initiatives to propose an amendment to the CARS to require that passenger safety briefings include direction to leave all carry-on baggage behind during an evacuation?

TC provided the following response:

Proposed amendments to the regulation are part of the work plan but have yet to be addressed.

It is disappointing that the latest update does not include any details about TC's work plan with respect to Recommendation A07-07-related initiatives. Additionally, a search of TC's Notice of Proposed Amendment webpage does not yield any passenger safety briefings-related activity associated with the deficiency identified in Recommendation A07-07.

TC's publication of AC 700-012 *Passenger Safety Briefings* remains the only substantive action taken to address the deficiency identified in Recommendation A07-07. The continued lack of detail with respect to TC's action plan to implement a regulatory requirement that passenger safety briefings be enhanced in accordance with Recommendation A07-07 prevents a meaningful assessment. The action taken to date will reduce but not substantially reduce or eliminate the safety deficiency.

The response is considered **Satisfactory in Part**.

### **Next TSB action (07 March 2012)**

The TSB will continue to monitor occurrences reflecting similar type deficiencies upon which this recommendation was based, and continue to seek details from TC as to the status of its proposal to progress regulatory change.

The deficiency file is assigned an **Active** status.

### **Transport Canada's response to A07-07 (04 December 2012)**

Advisory Circular (AC) No. 700-012 "Passenger Safety Briefings" was issued on 2009-03-16 to notify air operators of their responsibilities regarding passenger safety briefings. TC will measure the efficiency of the AC by reviewing actions taken by CARs 705 operators as they apply the AC and, as a result of this, will reassess to determine whether any further action is required by TCCA reassessment of this recommendation.

### **Board assessment of the response to A07-07 (06 March 2013)**

Once again TC's response makes no mention of its rulemaking initiative as originally stated in its response dated 21 February 2008. Additionally, as late as 2011, TC stated that "*Proposed amendments to the regulation are part of the work plan but have yet to be addressed.*" Unfortunately, details of the work plan are again not provided and TC's Notice of Proposed Amendment

webpage does not contain any passenger safety briefings-related activity associated with the deficiency identified in Recommendation A07-07.

TC does advise of a plan to measure the efficiency of its *Advisory Circular* (AC) No. 700-012 “Passenger Safety Briefings” issued in 2009. The intent is to review actions taken by CARs 705 operators to implement this AC. Assuming all 705 operators are compliant with the passenger safety briefings-related CARs, such a review would presumably only reveal how many 705 operators are using the AC guidance to comply with the CARs. This information would be considered transient as there are no CARs that require that passenger safety briefings include clear direction to leave all carry-on baggage behind during an evacuation. Therefore, any operator that voluntarily included such direction could just as easily amend its passenger safety briefing to remove such direction and still be compliant with the applicable CARs.

The continued lack of detail with respect to TC’s action plan to implement a regulatory requirement that passenger safety briefings be enhanced in accordance with Recommendation A07-07 prevents a meaningful assessment. The action taken to date will reduce but not substantially reduce or eliminate the safety deficiency.

The response is considered **Satisfactory in Part**.

### **Next TSB action (06 March 2013)**

The TSB will continue to monitor occurrences reflecting similar types of deficiencies upon which this recommendation was based, and expects to receive details from TC as to the status of CARs 705 operators’ application of this advisory circular.

The deficiency file is assigned an **Active** status.

### **Transport Canada’s response to A07-07 (26 November 2013)**

Transport Canada recently canvassed major Canadian carriers to gauge the extent to which direction to leave baggage behind in an emergency is communicated to passengers in a live or recorded audio briefing.

Transport Canada was encouraged by the results and maintains that the existing Advisory Circular (AC) 700-012: Passenger Safety Briefings provides the appropriate guidance.

TC does not plan any further regulatory or advisory material at this time, and no further updates will be provided.

### **Board assessment of the response to A07-07 (02 April 2014)**

TC’s latest response indicates that it is persuaded that AC 700-012: Passenger Safety Briefings is having the desired effect. TC does not categorically state that all major carriers have implemented AC 700-012 to provide passengers with the instruction to leave baggage behind in

the event of an emergency. Rather, its response indicates that an adequate number of carriers are providing this safety information to their passengers.

TC appears satisfied with these results and the ongoing willingness of operators to voluntarily include this safety information in their passenger briefings. Consequently, it plans no regulatory action that would require operators to provide this information to passengers as stated in Recommendation A07-07. The action taken to date will reduce but not substantially reduce or eliminate the safety deficiency.

The response is considered **Satisfactory in Part**.

### **Next TSB action (02 April 2014)**

No further action is planned by TC, and continued reassessment will not likely yield further results.

The deficiency file is assigned a **Dormant** status.