



REASSESSMENT OF THE RESPONSE TO TSB RECOMMENDATION A15-01

Reporting of number of infant and child passengers travelling by air

Background

On 22 December 2012, the Perimeter Aviation LP, Fairchild SA227-AC Metro III (registration C-GFWX, serial number AC650B), operating as Perimeter flight PAG993, departed Winnipeg/James Armstrong Richardson International Airport, Manitoba, at 1939 Coordinated Universal Time (1339 Central Standard Time) as a charter flight to Sanikiluaq, Nunavut. Following an attempted visual approach to Runway 09, a non-precision non-directional beacon (NDB) Runway 27 approach was conducted. Visual contact with the runway environment was made and a circling for Runway 09 initiated. Visual contact with the Runway 09 environment was lost and a return to the Sanikiluaq NDB was executed. A second NDB Runway 27 approach was conducted with the intent to land on Runway 27. Visual contact with the runway environment was made after passing the missed approach point. Following a steep descent, a rejected landing was initiated at 20 to 50 feet above the runway; the aircraft struck the ground approximately 525 feet beyond the departure end of Runway 27. The 406 MHz emergency locator transmitter activated on impact. The 2 flight crew and 1 passenger sustained serious injuries, 5 passengers sustained minor injuries, and 1 infant was fatally injured. Occupants exited the aircraft via the forward right overwing exit and were immediately transported to the local health centre. The aircraft was destroyed. The occurrence took place during the hours of darkness at 2306 Coordinated Universal Time (1806 Eastern Standard Time).

The Board concluded its investigation and released Aviation Investigation Report A12Q0216 on 29 June 2015.

TSB Recommendation A15-01 (June 2015)

According to the International Civil Aviation Organization, in 2013, the number of passengers carried rose to 3.1 billion, which is 4.5% higher than for 2012.¹ In terms of domestic scheduled air services, all regions experienced an increase in traffic, and markets overall grew by 5.1% in 2013. North America is still the world's largest domestic market with 45% of the world domestic scheduled traffic. There are no statistics on the number of infants and children travelling.

Transport Canada statistics show that passenger traffic at Canadian airports increased 2.9% in 2013, to reach 85.2 million enplaned and deplaned passengers. Domestic, Canada-U.S., and

¹ Transport Canada, Transportation in Canada 2013, TP 14816. Available at: https://www.tc.gc.ca/media/documents/policy/Transportation_in_Canada_2013_eng_ACCESS.pdf (last accessed 18 June 2015).

other international traffic increased year-over-year by 2.8%, 4.4%, and 1.6%, respectively.² The number of infants and child passengers travelling by air is not available.

Currently, under the *Transportation Information Regulations*, Canadian air carriers must provide a wide range of information on their overall operations to the Minister of Transport. However, information on the number of infant and child passengers travelling is not required to be reported. Historical information supplied by Perimeter and 3 other air carriers in the course of this investigation indicated that infants 0 to 2 years old and children 2 to 12 years old made up nearly 14% of their total passenger loads.

Data relevant to the number of infants may be available but not stored for easy retrieval, and the number of children (under 12 years old) travelling is contained within the number of passengers. As a result, the exact number of infants and young children travelling on board an aircraft, and whether or not infants are carried on a guardian's lap or in a separate seat, is not available and makes it difficult to properly assess infant and child passenger exposure to air travel.

Until better data collection is required, the industry will be unable to conduct research, assess risks, and outline emerging trends related to the carriage of infants and children. If more complete data on the number of infants and children travelling are not available, there is a risk that their exposure to injury or death in the event of in-flight turbulence or a survivable accident will not be adequately assessed and mitigated.

Therefore, the Board recommends that:

The Department of Transport require commercial air carriers to collect and report, on a routine basis, the number of infants (under 2 years old), including lap-held, and young children (2 to 12 years old) travelling.

TSB Recommendation A15-01

Transport Canada's response to Recommendation A15-01 (September 2015)

The Department of Transport (TC) agrees that having more accurate information on the number of infants and young children travelling by air would enable the conduct of risk and cost-benefit analyses to support regulatory decision making. TC is working to determine what options exist for collecting the information, including stakeholder consultation to be completed by March 2016, which from their point of view is the best way to gather and report information.

TSB assessment of Transport Canada's response to Recommendation A15-01 (November 2015)

In its response, Transport Canada indicated that it is working on determining what options exist for collecting and reporting information on the number of infants and young children travelling by air.

Transport Canada's proposed action indicates that, after consultation with appropriate stakeholders, the best way to gather and report the required data to Transport Canada will be

² National Transportation Safety Board (2010). Safety Recommendations A-10-121 through -123.

determined. However, these actions do not indicate how and when industry will be required to report this information. While the actions proposed by Transport Canada constitute a first step in the right direction, much more work is required.

Therefore, at this time, the response to Recommendation A15-01 is assessed as **Satisfactory Intent**.

Transport Canada's response to Recommendation A15-01 (April 2016)

An exploratory meeting was held on April 11, 2016. TC is still actively consulting industry on data collection related to children and infants travelling by air.

TSB reassessment of Transport Canada's response to Recommendation A15-01 (April 2016)

In its responses from September 2015 and April 2016, Transport Canada indicated that it is working on determining what options exist for collecting and reporting information on the number of infants and young children travelling by air.

Transport Canada's proposed action indicates that, after consultation with appropriate stakeholders, the best way to gather and report the required data to Transport Canada will be determined. Although Transport Canada has started consultations, there is no indication as to how and when industry will be required to report this information. While the actions proposed by Transport Canada constitute a first step in the right direction, much more work is required.

Therefore, at this time, the response to Recommendation A15-01 is assessed as **Satisfactory Intent**.

Transport Canada's response to Recommendation A15-01 (February 2017)

On 20 April 2016, TC met with industry organizations to discuss the acquisition of the data recommended by the TSB. The *Canada Transportation Act* (CTA) authorizes the Minister to collect transportation statistics. However, the *Transportation Information Regulations* do not currently provide for the collection of the information described in Recommendation A15-01. In 2017-18, the department will explore the possibility of making the required regulatory changes.

TSB reassessment of Transport Canada's response to Recommendation A15-01 (March 2017)

In its response, TC indicates that it has met with industry organizations to discuss the acquisition of the information required by Recommendation A15-01. In addition, TC advises that the collection of that particular information is not covered by the *Transportation Information Regulations*. As such, in 2017-18, TC plans to explore possible regulatory changes to enable the collection of such information.

Although TC is proposing to explore regulatory changes to enable the collection of the data required by Recommendation A15-01, no details are provided as to how and when industry will be required to report this information.

Therefore, the response to Recommendation A15-01 is assessed as **Satisfactory Intent**.

Transport Canada's response to Recommendation A15-01 (May 2019)

TC agrees in principle with the recommendation. Having more accurate information on the number of infants and young children travelling by air would enable the conduct of risk and cost-benefit analyses to support regulatory decision making.

In previous responses to this recommendation, TC has indicated that it had consulted with industry stakeholders and determined that collection of the information specified in this recommendation would require changes to the *Transportation Information Regulations*. While the *Canada Transportation Act* (CTA) authorizes the Minister to collect transportation statistics, the associated regulations do not currently provide for the collection of the specified data.

TC has no additional information to provide at this time.

TSB reassessment of Transport Canada's response to Recommendation A15-01 (March 2020)

In its response, Transport Canada (TC) indicated that it agrees in principle with Recommendation A15-01.

Since the publication of Recommendation A15-01, the following actions have been taken by TC to address Recommendation A15-01, regarding the requirement for commercial air carriers to collect and report, on a routine basis, the number of infants, including lap-held, and young children travelling:

- In 2015, TC indicated that it was working on determining what options existed for collecting and reporting information on the number of infants and young children travelling by air.
- In 2016, TC indicated that it was still actively consulting industry on data collection related to infants and young children travelling by air.
- In 2017, TC indicated that it had consulted with the appropriate stakeholders and determined that collecting the information specified in Recommendation A15-01 would require changes to the *Transportation Information Regulations*, because the regulations do not contain any provision for the collection of the data specified in the recommendation. As such, in 2017-2018, TC had planned to explore possible regulatory changes to enable the collection of such information.

In its latest response, TC did not provide any further details on the progress or results of its 2017-2018 plan to explore possible regulatory changes. Furthermore, no details were provided with respect to how and when industry would be required to report this information.

Therefore, the Board is **unable to assess** the response to the recommendation.

Transport Canada's response to Recommendation A15-01 (September 2020)

TC agrees in principle with the recommendation. TC takes the safety of all passengers who board an aircraft seriously, especially children.

However, work conducted by TC since this recommendation was published has led to the conclusion that the collection of the data advocated in this recommendation is unnecessary for the continued advancement of the safety of children and infants travelling by air.

Since the publication of the recommendation in 2015, TC has worked to determine what options existed for collecting the information and committed to carrying out stakeholder consultation.

Following consultations with industry (National Air Transportation Association (NATA), National Airlines Council of Canada (NACC) and the Air Transportation Association of Canada (ATAC)) in 2016, TC concluded that this recommendation, whether implemented in whole or in part, would not lead to an improvement in safety beyond providing more exposure data to facilitate risk assessments. Given that work is already being undertaken to improve safety in this area the costs associated with gathering more accurate exposure data are not offset by a commensurate safety benefit.

TC is continuing its work to improve safety for infants and children travelling by air as advocated by TSB Recommendation A15-02 that calls for TC to “work with industry to develop age and size appropriate child restraint systems for infants and young children travelling on commercial aircraft, and mandate their use to provide an equivalent level of safety compared to adults”.

Since the publication of this recommendation, TC has taken action. As described in TC’s most recent update in March 2019,³ TC has:

- Enabled/permitted passengers to use child-restraint systems (CRS)⁴
- Provided more detailed guidance to Canadian air operators to assist their front line staff in recognizing, accepting and encouraging the use of approved CRSs⁵
- Launched a public information campaign to promote the voluntary use of CRS;⁶ and
- Conducted a comprehensive examination of mandating CRS.

For the reasons outlined above, TC does not intend to take further action to require the acquisition of the data recommended by the TSB.

TSB reassessment of Transport Canada’s response to Recommendation A15-01 (March 2021)

In its response, Transport Canada (TC) reaffirmed that it agrees in principle with this recommendation. However, following consultation with industry stakeholders, TC determined that the collection of the information specified in this recommendation would not lead to an improvement in safety beyond providing more exposure data to facilitate risk assessments. As a result, TC has come to the conclusion that the collection of the data is unnecessary for the continued advancement of the safety of children and infants travelling by air, and has no further planned activities to address Recommendation A15-01.

³ **Transport Canada (2019)**. *Transport Canada’s Update on TSB Recommendations – Phase 3 – 2019*. Available at: RDIMS 14943717.

⁴ **Transport Canada (2015)**. *Exemption from the Subsection 605.26(1) of the Canadian Aviation Regulations*. Available at : <https://www2.tc.gc.ca/civilaviation/regserv/affairs/exemptions/docs/en/2954.htm>

⁵ **Transport Canada (2016)**. *Advisory Circular 605-003 – Child Restraint Systems and Other Seating Devices*. Available at: <https://tc.canada.ca/en/aviation/reference-centre/advisory-circulars/advisory-circular-ac-no-605-003>

⁶ **Government of Canada (2020)**. *Taking children on a plane*. Available at: <https://travel.gc.ca/travelling/children/taking-children-on-a-plane>

TC is, however, continuing its work to improve safety for infants and children travelling by air, as advocated by Recommendation A15-02, which calls for TC to “work with industry to develop age- and size-appropriate child restraint systems for infants and young children travelling on commercial aircraft, and mandate their use to provide an equivalent level of safety compared to adults.”

Until better data collection is required, the industry will be unable to conduct research, assess risks, and outline emerging trends related to the carriage of infants and children. If more complete data on the number of infants and children travelling are not available, there is a risk that their exposure to injury or death in the event of in-flight turbulence or a survivable accident will not be adequately assessed and mitigated.

The Board acknowledges that any further actions taken by TC to reduce the risks to which infants and young children are exposed to when travelling by air, can be monitored and assessed through Recommendation A15-02.

Therefore, given that TC does not intend to take any further action, the Board considers the response to Recommendation A15-01 to be **Unsatisfactory**.

Next TSB action

The TSB will continue to monitor the influence of the safety deficiency through future investigations and by assessing TC's action to address Recommendation A15-02.

This deficiency file is **Dormant**.