



## REASSESSMENT OF THE RESPONSE TO AVIATION SAFETY RECOMMENDATION A91-23

### First aid kit

#### Background

On 04 April 1989, four miles north of Carleton, Quebec, a Piper PA-31-310 Navajo belonging to Transport Air Inc., with one pilot and five passengers on board, was on an instrument flight plan from the city of Québec to Bonaventure, Quebec. While in cloud, the aircraft struck a mountain 27 nautical miles northwest of Bonaventure. The Board determined that the aircraft descended below the minimum safe altitude while flying in instrument meteorological conditions. No evidence was found of any airframe or system malfunction prior to or during the flight.

The pilot was killed in the accident; three passengers suffered serious injuries and two passengers received minor injuries. The Board is concerned that, although the first aid kit on board this aircraft met the current Air Navigation Order (ANO) regulations, it was inadequate to handle the injuries sustained by the survivors of this accident.

The Board concluded its investigation and released Aviation Investigation Report A89Q0086 on 18 March 1992.

#### Board Recommendation A91-23 (March 1992)

In 1986, the Canadian Aviation Safety Board (CASB) was concerned that an "Aircraft First Aid Kit Order", then being proposed, would require the minimum contents of the kit to be limited to the treatment of minor injuries likely to occur in flight. Believing that relatively inexpensive measures could be taken to better equip commercially operated, passenger-carrying aircraft for post-accident injuries, the Board at that time recommended that the Department of Transport:

- a. prescribe a minimum list of first aid equipment which, in the event of an accident, would supplement the supplies in the first aid kit specified in the "Aircraft First Aid Order"; and
- b. require such equipment to be carried on commercial, passenger-carrying aircraft.

#### CASB Recommendation 86-21

Transport Canada's reply to Recommendation 86-21 indicated a partial agreement with the intent to include first aid equipment that could aid survival in post-accident situations. However, by the end of 1987, TC had decided not to take any further action, recording that "no meaningful addition could be made to a first aid kit without imposing untold difficulties on the operator".

In view of the inadequacies of first aid equipment in the Bonaventure accident, it was considered opportune to re-examine the issues surrounding Recommendation 86-21 in conjunction with a coincidental review by TC of regulations regarding the carriage of survival equipment.

Therefore, the Board recommends that:

The Department of Transport reconsider the feasibility and practicality of including a first aid kit specifically equipped for post-accident survival in the aircraft survival kit required by Air Navigation Order (ANO) Series V, No. 12.

**TSB Recommendation A91-23**

### **Transport Canada's response to Recommendation A91-23 (June 1992)**

Transport Canada (TC) is aware that the current requirements for first aid supplies, as described in the Aircraft First Aid Kit Order (A.N.O., Series II, No. 11), might be insufficient for post-accident use. In formulating this reply, TC consulted with Civil Aviation Medicine of the Department of Health and Welfare.

The revised Survival Equipment and Radio Communication Systems Order (A.N.O., Series V, No. 12), requires a survival kit as one of the items that must be aboard an aircraft under certain circumstances, and that this kit must be sufficient for the survival of each person carried on board the aircraft for a minimum period of 72 hours, given the geographical area, the season of the year and the anticipated seasonal climatic variations within which the aircraft is being operated.

Although the survival kit in the revised Order does not contain any additional first aid supplies, TC does not believe it practical to mandate additional first aid supplies to an already extensive survival kit. Considering also that some aircraft will be able to waive the requirement to carry the survival kit in certain circumstances, and that these same aircraft will always carry one or more first aid kits, TC is of the opinion that the intent of the recommendation could be better served by improving the regular first aid kits.

TC will review the requirements of the Aircraft First Aid Kit Order, to ensure that it equals or exceeds the requirements specified in the Aviation Occupational Safety and Health Regulations (OSH), Part X, Subsection 10.5(1), which are slightly more descriptive than the Aircraft First Aid Kit Order, concerning the carriage of first aid supplies.

### **Board assessment of the response to Recommendation A91-23 (August 1992)**

In its response, Transport Canada (TC) has agreed that the present first aid kits required by A.N.O. II, No. 2 may be inadequate for post-accident use, but TC believes that it would not be practical to require the inclusion of additional first aid supplies to an already extensive survival kit. An alternative action has been offered to improve the contents of the first aid kits. Specifically, TC will review the first aid kit requirements of the A.N.O. to ensure that it equals or exceeds the requirements specified in the Aviation Occupational Safety and Health (OSH) Regulations. The OSH requirements are a significant improvement over the current A.N.O.

requirements. TC staff, who are reportedly drafting legislation to change the first aid kits, indicate that the OSH kit would be a one-for-one substitution for the present A.N.O. kit.

TC has recognized the deficiency and has stated an alternative corrective action to the one put forth in Recommendation A91-23. Although a timeframe for change of the contents of the first aid kits has not been indicated, the staff consider that the safety deficiency is receiving responsible attention. However, it must be recognized that proposed legislation may be “on the books” for several years before full implementation is effected.

Therefore, the response to Recommendation A91-23 is assessed as **Satisfactory Intent**.

### **Board reassessment of the response to Recommendation A91-23 (November 1996)**

The Aviation Occupational Safety and Health (OSH) Review Working Group has completed the task, proposed improvements are minimal, and there is no indication they will be implemented.

Therefore, the reassessment of the response to Recommendation A91-23 is changed to **Satisfactory in Part**.

As such, further action is unwarranted with respect to A91-23 and the status of the recommendation is set to **Inactive**.

### **Board review of Recommendation A91-23 deficiency file status (April 2014)**

The Board requested that A91-23 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 A91-23 needed to be reassessed.

A request for further information was sent to Transport Canada (TC) and a reassessment will be conducted upon receipt of TC’s response.

Therefore, the assessment of the response to Recommendation A91-23 remains **Satisfactory in Part**.

Consequently, the status of Recommendation A91-23 is changed to **Active**.

### **Transport Canada’s response to Recommendation A91-23 (July 2015)**

Transport Canada Civil Aviation (TCCA) agrees with the spirit of the 1991 recommendation.

Following publication of the *Canadian Aviation Regulations* (CARs) in 1996, a Survival Equipment Working Group was established to consider identified issues and concerns. This working group was a joint effort of both the Part VI and Part VII Technical Committees of the Canadian Aviation Regulation Advisory Council (CARAC). One of the questions this working group considered was: “Is there a requirement to have additional or different first aid equipment for post-crash first aid, and if so, what should that equipment consist of?”

The final recommendation of the working group, as accepted by the CARAC, was that the CARs should refer to the first aid kit content requirements of the Aviation Occupational Health and Safety Regulations instead of carrying a separate list of items.

Subpart 604 private operators and Subpart 703, 704, and 705 commercial air operators are required to have first aid kits that contain the supplies and equipment set out in the *Aviation Occupational Health and Safety Regulations*.

### **Board reassessment of the response to Recommendation A91-23 (March 2016)**

The regulatory change identified in Transport Canada's July 2015 response should substantially reduce or eliminate the safety deficiency identified in Recommendation A91-23.

Therefore, the response to recommendation A91-23 is assessed as **Fully Satisfactory**, and no further action is required.

This deficiency file is **Closed**.