



REASSESSMENT OF THE RESPONSE TO AVIATION SAFETY RECOMMENDATION A97-01

Regulatory overview of air ambulance operations

Background

On 25 November 1995, a Piper PA-31-325 Navajo (registration C-GOLM, serial number 31-7712050) operating as a medical evacuation (MEDEVAC) flight, departed Wollaston Lake, Saskatchewan, en route to La Ronge. After take-off, the aircraft descended and struck the frozen surface of Wollaston Lake. The pilot and the patient suffered serious injuries; the other two occupants suffered minor injuries. The aircraft was destroyed. Contributing to the severity of the patient's injuries were the inadequate restraint provided by the stretcher and its restraining strap, the lack of standards regarding stretchers used in aircraft, and the lack of standards as to the operation of MEDEVAC flights.

Transport Canada (TC) currently relies on operators to voluntarily make the necessary changes to aircrew training and operational procedures, and to seek TC airworthiness approval of equipment installations before offering air ambulance service to the public.

The Board concluded its investigation and released Aviation Investigation Report A95C0250 on 12 May 1997.

Board Recommendation A97-01 (May 1997)

The term "air ambulance operations" refers to the transport of medical patients by air. The missions can range from a straightforward patient transfer to an emergency medical evacuation (MEDEVAC). At present, air ambulance operations are considered by TC to be a commercial air service and as such are governed by Part VII of the *Canadian Aviation Regulations* (CARs). The granting of an Air Operator Certificate, which allows for the transport of fare-paying passengers, also permits the operator to adapt the operation for an air ambulance service. The CARs contain no specific reference to or standards with respect to the conduct of air ambulance operations, and conducting such a service does not require an amendment to the Operations Specification. As such, TC might not be aware that an operator is conducting an air ambulance service and, therefore, might not include aspects specific to air ambulance operations in any TC audit and surveillance of the operator.

TC currently relies on operators to voluntarily make the necessary changes to aircrew training and operational procedures, and to seek TC airworthiness approval of equipment installations before offering air ambulance service to the public. However, in this occurrence, the operator was conducting an air ambulance service without a TC-approved stretcher installation, additional aircrew training, and amended manuals to reflect specific air ambulance procedures.

As noted earlier, several provinces have set standards for aircraft, passenger restraints, aero-medical equipment, ground facilities, and personnel training. However, these standards are reportedly difficult to enforce in situations where the flight is arranged or paid for by an organization other than an agency of the respective provincial government.

As recognized in Transport Canada's air ambulance guidance documents and in the efforts by some provincial governments to regulate the air ambulance services in their respective provinces, the provision of consistently safe air ambulance service requires equipment, training, and procedures considerably different from those required for regular passenger-carrying operations. The Board understands that in other occurrences (e.g., TSB A89O0280), patient safety has been compromised by inadequate protective measures (vis-à-vis those afforded a normal passenger). Notwithstanding measures taken by some provinces to enhance patient safety in air ambulance operations, the Board believes that a consistent level of safety across Canada will not be attained through voluntary measures. Crews and patients will remain at risk to the extent that patients are transported with inappropriate equipment or by crews that have not been adequately trained in meeting the special needs of non-ambulatory medical patients.

Therefore the Board recommends that:

The Department of Transport require all air carriers operating air ambulance services in the course of their business to provide the equipment, procedures, and crew training necessary to ensure a level of safety for patients consistent with that provided by commercial air services to fare-paying passengers.

TSB Recommendation A97-01

Transport Canada's response to Recommendation A97-01 (August 1997)

Transport Canada concurs with the recommendation and is currently reviewing the adequacy of the *Canadian Aviation Regulations* (CARs) pertaining to Medevac operations.

A proposal will be made to the Canadian Aviation Regulation Advisory Council (CARAC) to strike a working group to consider what amendments to the CARs may be required. Membership on this working group will be sought from numerous stakeholders, including Health Canada, the provincial and territorial health authorities, commercial air operator associations, state operators, the unions/organizations representing the doctors, nurses and paramedics.

Board assessment of the response to Recommendation A97-01 (October 1997)

In its reply, Transport Canada agreed with the recommendation and advised that it was currently reviewing the adequacy of the *Canadian Aviation Regulations* (CARs) concerning Medevac operations. Recent discussions with TC staff indicated that all air ambulance operations are under review, not just the medical emergency (MEDEVAC) situations. In addition, TC indicated that a Canadian Aviation Regulation Advisory Council (CARAC) working group has now been formed and that the terms of reference are being drafted. The working group will apparently consist of various stakeholders, including Health Canada, provincial and territorial health authorities, commercial operator associations, state operators, the unions/organizations representing the doctors, nurses, and paramedics.

Given that recommendations coming out of the CARAC working group could result in mandatory requirements being developed for air ambulance operations, which in turn would provide for a consistent level of safety nationally, the response is considered as having “**Satisfactory Intent**” at this time.

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

Board reassessment of the response to Recommendation A97-01 (January 1998)

The CARAC working group have issued the Terms of Reference and the work is scheduled to begin in January 1998.

Therefore, the assessment remains **Satisfactory Intent**.

Board reassessment of the response to Recommendation A97-01 (April 1999)

After many delays, the CARAC working group met on 30 and 31 March 1999 with 100+ attendees and discussed items such as the level of safety, the Aeronautics Act versus the Canada Health Act, airworthiness issues, etc. Possible recommendations include the establishment of an Air Ambulance Operations Specifications.

Therefore, the assessment remains **Satisfactory Intent**.

Board reassessment of the response to Recommendation A97-01 (February 2004)

An amendment to CARs 724 and 723 dated 01 June 2003 now require “contents of company manuals” contain procedures for dedicated or contracted MEDEVAC operations. Emphasis is put on ensuring that decisions affecting the safety of the flight are not affected by the condition of the patient.

While the deficiency addresses crew training, equipment, procedures etc. related to MEDEVAC operations, action taken by TC only addresses changes to avoid increased pressures on the pilot due to a perceived or real medical emergency.

Therefore, the response to Recommendation A97-01 is assessed as **Satisfactory in Part**.

As such, “Further Action is Unwarranted” with respect to Recommendation A97-01 and the status is set to **Inactive**.

Board review of Recommendation A97-01 deficiency file status (April 2014)

The Board requested that Recommendation A97-01 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 A97-01 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 **Satisfactory in Part**.

Consequently, the status of Recommendation A97-01 is changed to **Active**.

Transport Canada's response to Recommendation A97-01 (July 2015)

Requirements for air ambulance services and fare paying passengers are regulated under the same subparts of the CARs (CAR 703 and 704) for passengers and cargo. Therefore, the requirements of air ambulance services are consistent with those of fare paying passengers. There are no new initiatives being undertaken for this issue.

Board reassessment of the response to Recommendation A97-01 (March 2016)

In its response, Transport Canada has indicated that requirements for air ambulance services and fare paying passengers are now regulated under the same subparts of the CARs. This in turn makes the requirements of air ambulance services consistent with those of fare paying passengers.

The regulatory change identified in Transport Canada's July 2015 response should substantially reduce or eliminate the safety deficiency identified in Recommendation A97-01.

Therefore, the response to Recommendation A97-01 is assessed as **Fully Satisfactory**.

Next TSB action

No further action is required.

This deficiency file is **Closed**.