



REASSESSMENT OF THE RESPONSE TO AVIATION SAFETY RECOMMENDATION A96-03

State-owned aircraft

Background

On 01 December 1993, a Shorts SD3-30 aircraft, operated by Fonds du Service Aérien Gouvernemental, was on a flight from Kuujuarapik to Umiujaq, Quebec. During the turn onto the final approach to Umiujaq Airport Runway 21, the aircraft stalled. The pilot-in-command regained control of the aircraft but was unable to pull up sufficiently to clear the obstacles, and the aircraft impacted the ground. The two pilots and two of the eleven passengers sustained minor injuries.

The Board determined that the stalling speed of the aircraft increased due to ice on the wings and the steep turn on final. A contributing factor to the accident was the crew's decision to continue the visual approach despite the reported weather conditions. The Board also identified deficiencies regarding the wording of the Air Regulations and the regulatory overview of state aircraft operators. As such, the Board made three Aviation Recommendations (A96-01 to A96-03).

The Board concluded its investigation and released Aviation Investigation Report A93Q0245 on 28 February 1996.

Board Recommendation A96-03 (February 1996)

In Canada, several departments and agencies of the federal and provincial governments operate fleets of aircraft. These fleets vary in size from just a few aircraft to over 100 aircraft, often with a mixture of aircraft types in any one fleet. The aircraft are frequently used to transport passengers, albeit not in a commercial capacity. The state aircraft generally operate under Air Navigation Order (ANO) I, No. 2, which regulates the transport of passengers in private aircraft. Private aircraft in this context include state and corporate aircraft. Thus, a private aircraft with a passenger-carrying capacity of only a few passengers and state/corporate aircraft with significant passenger-carrying capacity (often significantly greater than that of the accident aircraft type) are treated in a similar manner from a regulatory perspective. The Fonds du Service Aérien Gouvernemental is classified as a state-owned operation and was operating under ANO I, No. 2.

Commercial operations are generally conducted in accordance with ANO VII, No. 2 (large aircraft), and ANO VII, No. 3 (small aircraft). The aircraft type involved in this accident would be operated under ANO VII, No. 2, in a commercial operation. There are significant differences between ANO I, No. 2, operations and ANO VII (particularly ANO VII, No. 2) operations in the

areas of the requirement for an operating certificate, operational requirements, crew training and qualifications, and regulatory overview.

In the late 1980s, the predecessor to the TSB, the Canadian Aviation Safety Board (CASB), became concerned about the number of occurrences involving another operator of a large fleet of state aircraft, the RCMP. It was noted at that time that a number of the practices and procedures meant to enhance safety in the commercial aviation sector were absent in the day-to-day operation of that fleet. The CASB suggested that the operator request an independent safety survey to assist in identifying shortcomings in the operation. A safety survey was subsequently done by Transport Canada (TC) and corrective measures were taken. Some of these measures were in excess of ANO I, No. 2, requirements and more in line with ANO VII requirements. The number of significant occurrences involving RCMP aircraft has reduced considerably since 1990.

Following this accident, and with the concurrence of Service Aérien, Transport Canada initiated a post-accident safety survey of the organization. As a result of this survey, changes were made to the organization's managerial staff. The TSB was unable to determine what other changes, if any, resulted from this survey.

In providing its regulatory overview of commercial operators, Transport Canada uses risk management indicators to identify those carriers possibly requiring extra surveillance and audit. However, operators of state aircraft do not come under the same regulatory scrutiny; thus, indicators of increasing risk are less likely to be detected. The operation of TC's own fleet of aircraft is voluntarily subjected to the requirements of an operating certificate similar to that of commercial carriers.

The recently announced CARs will require state and private operators of large or turbine-powered, pressurized passenger aircraft to adhere to more demanding safety standards. However, these standards are still not equivalent to those applicable to commercial air carriers. It is recognized that the operations in which state aircraft are often engaged are unique, and that, for the most part, they do not involve the travelling public. Yet, when passengers are regularly carried on state aircraft, it is reasonable for these passengers to expect that the aircraft and aircrew involved in state operations are subject to the same regulatory requirements as commercial carriers. The Board believes, therefore, that state operations would benefit from the increased standards and regulatory overview applicable to commercial operations.

Therefore the Board recommends that:

The Department of Transport require that the operators of state aircraft be subject to regulatory overview, as practicable, equivalent to that of similar commercial operations.

TSB Recommendation A96-03

Transport Canada's response to Recommendation A96-03 (July 1996)

The Private Aeroplanes Passenger Transportation Order, Air Navigation Order Series I, Number 2 was introduced in March of 1982 to address findings following several corporate aviation accidents involving turbine powered, pressurized aeroplanes, that showed evidence of

a lack of crew training, standardization, and, coordination. Since the introduction of this order there have been no passenger fatalities and very few accidents with this group of operators.

The Quebec Government Air Service is one of the larger fleet operators regulated by ANO Series I, No. 2 (CAR 604) and operates a range of aircraft including small aircraft, fire suppression aircraft and several large passenger carrying aeroplanes. While the operation of Convair CV580 aircraft in an employee transportation role appears to be quite active, this operation is not a publicly available air service and as such does not warrant the imposition of increased commercial standards.

At the time of the subject accident, there were shortcomings in the flight operations of the Quebec Government Air Service. Following this accident Transport Canada Aviation conducted a confidential safety audit for the Quebec Government and subsequently worked with the Quebec Government Air Service to address deficiencies. Since that audit there have been no accidents, occurrences, or risk indicators to merit an increased level of surveillance and audit.

The implementation of CAR 604 - Private Operator Passenger Transportation will introduce new safety requirements in areas such as, flight attendant training, passenger briefing, flight duty time limitations and flight crew training. As new regulations which will further enhance the safety of these operations are to be introduced, and after consideration of the discussion presented in TSB Report number A93Q0245, Transport Canada does not consider the imposition of commercial air operator regulations and standards on state operators to be necessary.

Board assessment of the response to Recommendation A96-03 (September 1996)

In response, TC makes three main points to support its decision not to subject state aircraft operations to the same regulatory overview as that of similar commercial operations. First, since the introduction of the "Private Aeroplanes Passenger Transportation Order Series I, No. 2" in March 1982, there have been no passenger fatalities and very few accidents with this group of operators. Second, although the employee transportation role is quite active with some state operators, these operations are not a publicly available air service. And finally, TC refers to the implementation of CAR 604, "Private Operator Passenger Transportation", which "will introduce new safety requirements such as flight attendant training, passenger briefing, flight duty time limitations and flight crew training" for state aircraft operations.

With respect to TC's first point about casualties and the level of safety in state operations, it was extremely fortunate that the crew and passengers in the Umiujaq occurrence received only minor injuries. There could have easily been thirteen casualties; eleven of whom were Quebec Hydro employees/passengers. Furthermore, TSB data indicates that both the RCMP and Service Aérien have had poor accident records. TC has apparently not considered the potential for casualties or the occurrence records of some state operators in its generalizations on the safety of state aircraft operations.

In its second point on a publicly available service, TC seems to be linking the level of safety afforded to or that which can be expected by a passenger to whether or not the passage on the aircraft is offered to the public (it is assumed this means on a commercial basis). TSB staff believe that, when an employer-funded passage on state aircraft is provided to an employee, the

flight on the state aircraft is essentially a substitute for some other form of commercial transportation. TC's own fleet of aircraft, which conducts a sizeable passenger-carrying service and does not offer this service publicly, operates under an Operating Certificate (OC) similar to commercial airlines and is, therefore, subject to regulatory surveillance and audits. It appears that, while TC believes that its own operations (and passengers) can benefit from regulatory overview, it does not take the same view with respect to other state aircraft operators.

The proposed CAR 604 on new safety standards seems to be a step in the right direction. However, it does not address the safety benefit that can be provided by a program of audits and surveillance similar to that conducted on commercial passenger-carrying operations. Both the RCMP and Service Aérien requested TC to conduct confidential safety audits; however, these audits were done after both operators had already exhibited an adverse trend in their accident records for some time. A proactive monitoring of risk indicators like accident trends (as done on commercial carriers by TC), might have prevented some occurrences for both operators.

To date, TC has only taken limited action, that being the proposed new CAR, to ensure that passengers on state aircraft enjoy a level of safety comparable to similar commercial operators.

Therefore, the response to Recommendation A96-03 is assessed as **Unsatisfactory**.

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

Board reassessment of the response to Recommendation A96-03 (February 2004)

CAR 604, "Private Operator Passenger Transportation", contains requirements similar to those for commercial operations. CAR 604 does not specifically say "state operators" must meet these requirements but TC's original response indicated that the operator in the occurrence (Quebec Gov't Air Services) would be one of the operators regulated (under proposed CAR 604).

As there is no direct reference to the inclusion of state operators in CAR 604, Recommendation A96-03 is assessed as **Satisfactory in Part**.

As such, "Further Action is Unwarranted" at this time with respect to Recommendation A96-03, and the status is set to **Inactive**.

Board review of Recommendation A96-03 deficiency file status (April 2014)

The Board requested that Recommendation A96-03 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 A96-03 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 A96-03 is changed to **Active**.

Transport Canada's response to Recommendation A96-03 (July 2015)

Transport Canada recently published rules for Private Operators (CAR 604) that also apply to the State Operators that choose not to operate in accordance with Part VII of the CARs.

Board reassessment of the response to Recommendation A96-03 (March 2016)

The regulatory changes in the *Canadian Aviation Regulations* (CARs) identified in Transport Canada's July 2015 response, more specifically CARs 604.03, now include state operators and therefore subjects them to the same requirements as all other operators who choose to operate under CARs 604.

These changes should substantially reduce or eliminate the safety deficiency identified in Recommendation A96-03.

Therefore, the response to Recommendation A96-03 is assessed as **Fully Satisfactory**.

Next TSB action

No further action is required.

This deficiency file is **Closed**.