



REASSESSMENT OF THE RESPONSES FROM TRANSPORT CANADA TO AVIATION SAFETY RECOMMENDATION A02-01

LOW VISIBILITY AND LOW CEILING APPROACHES

Background

The Régionnaire Inc. Raytheon Beech 1900D, serial number UE-347, operating as Flight GIO347, was on a scheduled flight from Port-Menier to Sept-Îles, Quebec, with two pilots and two passengers on board. The aircraft departed Port-Menier for Sept-Îles Airport at 2334 eastern daylight time. The aircraft crashed at 2357 while on approach to the airport, one nautical mile short of the runway, in reported weather conditions of 200-foot ceiling and one-quarter statute mile visibility. A post-crash fire destroyed the wings, the engines, and the right midside of the fuselage. The captain was fatally injured. The first officer was seriously injured, and the two passengers received minor injuries.

The Board concluded its investigation and released report A99Q0151 on 19 March 2002.

Board Recommendation A02-01 (19 March 2002)

The need for additional regulatory restrictions for instrument approaches in poor weather has been discussed in Canada for several years because of the number of accidents that occur during the approach and landing phase. From January 1994 to December 2001, the Board has investigated 24 such accidents where low visibilities and/or ceilings likely contributed to the accident. These accidents resulted in 34 fatalities and 28 serious injuries, not counting the loss of property and damage to the environment. In September 1999, Transport Canada (TC) initiated action to implement new approach ban regulations based on visibility. These regulations should reduce the likelihood of accidents during instrument approaches in low visibility conditions. This process has been ongoing for two years now; however, its timely implementation has been delayed because of some resistance. Until these regulations are promulgated, there will continue to be inadequate defences against the risks associated with pilots descending below the decision height/minimum descent altitude (DH/MDA) in an attempt to land in visibility conditions that are unsafe. Consequently, controlled-flight-into-terrain accidents on approach that result in loss of life and damage to property have continued to occur and will likely continue to occur. The Board therefore recommended that:

The Department of Transport expedite the approach ban regulations prohibiting pilots from conducting approaches in visibility conditions that are not adequate for the approach to be conducted safely.

A02-01



Response to A02-01 (31 May 2002)

As of 31 May 2002, TC has prepared 16 Notices of Proposed Amendments (NPA 2000-001, 002, 006, 007, 008, 009, 010, 011, 012, 106, 107, 108, 116, 117, 194, and 195) to address TSB Recommendation A02-01 concerning approach ban regulations.

These NPAs are currently under review at the Department of Justice and it is expected that the final product will be published in the June 2002 issue of the *Canada Gazette*. The TSB will be sent a copy of the approved version once available.

Board Assessment of the Responses to A02-01 (21 February 2003)

In its 31 May 2002 response, TC indicated that it had prepared 16 Notices of Proposed Amendments (NPA 2000-001, 002, 006, 007, 008, 009, 010, 011, 012, 106, 107, 108, 116, 117, 194, and 195) to address TSB Recommendation A02-01 concerning approach ban regulations related to visibility. These NPAs were under review at the Department of Justice at the time, and it was expected that the final product would be published in the June 2002 issue of the *Canada Gazette*. TC stated that the TSB would be sent a copy of the approved version once available.

The June 2002 issue of the *Canada Gazette* did not contain the stated NPAs. A recent communication with TC revealed that the NPAs are still with the Department of Justice for legal review and that no time frame could be provided as to when the review will be completed.

Given TC's acceptance of the deficiency and its intent to mitigate the risks, the response is assessed as being **Satisfactory Intent**.

Next TSB Action (21 February 2003)

The TSB Air Branch will continue to monitor TC's future actions related to this recommendation, and will update this assessment appropriately.

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

Response to A02-01 (14 December 2005)

The changes to the existing approach ban regulations were consulted with industry through the Canadian Aviation Regulation Advisory Council (CARAC) process. The proposed changes will largely affect commercial aeroplane operations. The changes will not affect general aviation and private passenger transportation operations, nor commercial helicopter operations. The proposed changes to the approach ban were pre-published in Part I of the *Canada Gazette* on 20 November 2004, which allowed for a 60-day public comment period. Thirty-one (31) comments were received. The objections to the proposed approach ban cited the following issues: no safety justification; restricts aerodrome access, especially in the north and for medical evacuation (Medevac) flights; increases costs; need for increased enforcement action; does not recognize new global positioning system (GPS) approach procedures; and is not internationally harmonized.

As a result of the comments received and the completion of a more detailed benefit-cost analysis by TC, which focused specifically on northern operations, changes to the approach ban will be reflected in Part II of the *Canada Gazette*. These changes include: application of the approach ban imposed by ground visibility only at aerodromes south of 60 degrees north latitude; provisions for new approach procedures with vertical guidance (APV) such as Wide Area Augmentation System (WAAS) procedures and Required Navigation Performance (RNP) procedures; and provisions for an operator compliance transition period.

The legal draft is undergoing final review with the Department of Justice, with the goal of publishing the proposed changes in Part II of the *Canada Gazette* in the fall of 2006.

Board Reassessment of the Response to A02-01 (23 June 2006)

On 14 December 2005, TC stated that its proposed changes to the approach ban were published in Part I of the *Canada Gazette* on 20 November 2004. As a result of industry comments on the NPA and a more detailed cost-benefit analysis and industry consultation, TC published an amended NPA. The changes include: application of the approach ban imposed by ground visibility only at aerodromes south of 60 degrees north latitude and provisions for new approach procedures with vertical guidance such as WAAS procedures and required navigation performance procedures. TC's proposed action, if fully implemented, will substantially reduce or eliminate the safety deficiency associated with Recommendation A02-01.

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

Next TSB Action (23 June 2006)

TSB staff will monitor the progress of the draft improvements to determine if this course of action addresses the deficiency associated with Recommendation A02-01.

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

Response to A02-01 (07 February 2007)

TC's response dated 07 February 2007 included a review of both the CARAC and the *Canada Gazette* consultation processes, which resulted in the final version of the changed regulations coming into force on 01 December 2006. Additionally, TC indicates in its Commercial and Business Aviation Advisory Circular 0237 that the most significant changes to the approach ban will affect commercial operators holding operating certificates under the Subparts 702, 703, 704 and 705 of TC's *Canadian Aviation Regulations* operating aeroplanes in instrument flight rules (IFR). Minimal changes to the approach ban will affect IFR commercial helicopter operations and IFR aircraft operations by private operators and general aviation.

Board Reassessment of the Response to A02-01 (24 July 2007)

TC's action to change the visibility requirements of the approach ban regulations includes, but is not limited to, the following changes: an approach ban imposed by ground visibility (applies only at aerodromes south of 60 degrees north latitude); the

concept of runway visibility has been added to the regulations; provisions for new approach procedures with vertical guidance such as WAAS procedures and RNP procedures; and provisions for an operator compliance transition period.

Because the action taken will substantially reduce the deficiency identified in Recommendation A02-01, the assessment is changed to **Fully Satisfactory**.

Next TSB Action (24 July 2007)

Because the Board considers this safety deficiency to be rectified, no follow-up action is required and this deficiency file is assigned an **Inactive** status.