



## REASSESSMENT OF RESPONSE TO AVIATION SAFETY RECOMMENDATION A91-08

### EMERGENCY EXIT HANDLE COVERS

#### Background

The Bell 212 helicopter was operating in support of heli-skiing activities in the Cariboo Mountain (Thunder River) area of British Columbia. The pilot landed at 7075 feet above sea level on a glacial ski run to pick up skiers for transport to the top of the glacier. The passengers boarded the helicopter, and an into-wind take-off over rising ground was initiated. The pilot began a slow, low-level, downwind turn to the right, away from the high terrain immediately ahead. Following the turn, the pilot realized that the main rotor rpm was decaying, and he decided to attempt a landing back onto the glacier. On touchdown, the skids dug into the snow, causing the helicopter to nose over and roll onto its left side. An intense fire erupted immediately following impact. Three of the 13 passengers were unable to escape the burning aircraft and were fatally injured.

The Transportation Safety Board of Canada determined that the pilot conducted an upslope take-off manoeuvre that was beyond the performance capability of the helicopter. Contributing to the severity of this accident were the rapid onset of post-impact fire and the difficulties the passengers experienced in reaching the emergency exits.

The Board authorized the release of report A90P0121 on 04 May 1993

#### Board Recommendation A91-08 (04 May 1993)

To ensure that the emergency exit handles in Bell wide-body helicopters can be easily accessed in the future, the TSB recommended that:

The Department of Transport sponsor modifications to the existing design of the emergency exit handle access system on Bell models 204, 205, 212, and 214 helicopters that are currently equipped with emergency exit handle covers, to ensure that the emergency exit handles can consistently and easily be accessed.

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#### Transport Canada Response to A91-08 (19 July 1991)

Transport Canada agrees with this recommendation and is researching its implementation. A proposal to redesign the access to and conspicuousness of the emergency handle will be addressed in conjunction with the Federal Aviation Administration (FAA).

## **Development of Board Assessment of TC Responses to A91-08 (09 June 2004)**

Transport Canada agreed with this recommendation. Methods of enhancing access to, and the conspicuousness of the emergency handle will be coordinated with the FAA.

Such action, if implemented would fully address the safety deficiency this recommendation sought to address. The action proposed by TC goes beyond the action recommended by improving the conspicuity of the emergency exit handle. In supplemental Airworthiness Directive (AD) No. CF-91-27, dated 1 August, 1991 Transport Canada required Canadian operators of Bell models 204B, 205A1, and 212 helicopters to ensure that the emergency D-handle is painted red, on a white background. Further, the AD directed operators to ensure that the background is marked with a red arrow and "OPEN" decals.

The colouring and decals to which the AD makes reference ensure that changes recommended by Bell Helicopters in an Alert Service Bulletin issued in 1975 are still effective. The requirements of the subject AD do not address the safety deficiency identified in this recommendation, although these may be interim measures. The staff believes that the TC response to this recommendation is satisfactory for now.

The last recorded reassessment of Transport Canada's response to A91-08 dated 09 June 2004 stated the following:

Using current assessment criteria, proposed action would be assessed as "SI" vice "FS". Although, FAA took no immediate action, TC took unilateral action and issued Airworthiness Directive CF-96-06, March 5, 1996, to enlarge finger hold. As TC action did not address all aspects of deficiency (e.g. accessibility) it is assessed as SP.

Consequently, the assessment was rated as **Satisfactory in Part** and assigned an **Inactive** status.

## **Board Review of A91-08 Deficiency File Status (01 October 2010)**

The Board requested that all inactive aviation recommendations with an assigned rating other than **Fully Satisfactory** be reviewed to determine if their Deficiency File Status was appropriate. After an initial evaluation, it was decided that several such recommendations required that a deficiency analysis update be conducted to confirm if the associated risks remained substantial.

## **A91-08 Deficiency Analysis Update (12 October 2011)**

A review of the TSB occurrence reports issued since this recommendation was assigned an **Inactive** Deficiency File Status reveals no finding related to the deficiency identified in Recommendation A91-08. During the same time period, TSB did not publish any Aviation Safety Advisories or Aviation Safety Information related to the issue of emergency exit handles in Bell wide-body helicopters. Likewise, a search of the NTSB recommendations database yielded no recommendations associated with the deficiency described in Recommendation A91-08.

There are a significant number of Bell wide-bodied helicopter in the Canadian Civil Aircraft Register many of which are engaged in passenger carrying operations. Given the lack of occurrences involving the issue of Bell wide-bodied emergency exit handles since the issuance of Recommendation A91-08 it is concluded that the risk has been mitigated and that the deficiency associated with the Recommendation has been substantially reduced.

Therefore, the reassessment is changed to **Fully Satisfactory**.

**Next TSB Action (12 October 2011)**

As further action is unwarranted, the Board changes the Deficiency File Status to **Inactive**.