Transportation Safety Board of Canada

Bureau de la sécurité des transports du Canada

TSB presentation to NATA 2014

NATA Annual General Meeting 2014

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Canada

Outline

- About the TSB

- Lillabelle Lake
  - Report summary
  - Recommendations

- Resolute Bay
  - Report summary
  - Recommendation/Safety concern

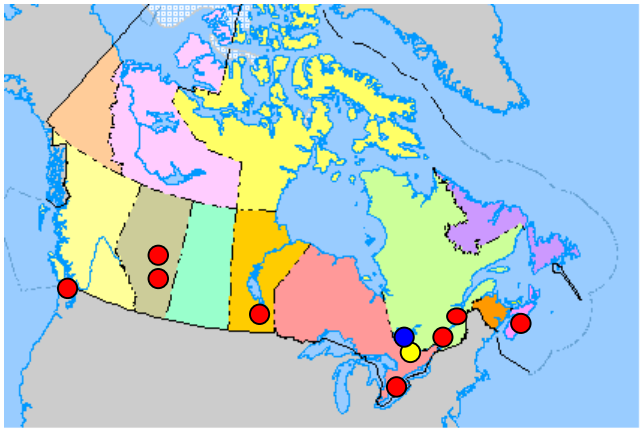
About the TSB

Mission: To advance transportation safety in the marine, pipeline, rail, and air modes of transportation that are under federal jurisdiction by:

- conducting independent investigations
- identifying safety deficiencies
- identifying causes and contributing factors
- making recommendations
- making our reports public

TSB Offices

- Head Office is in Gatineau, Quebec
- The Engineering Laboratory is in Ottawa, Ontario
- Regional offices are located across the country to allow investigators to quickly reach the scene of an accident:



- Vancouver, British Columbia
- Calgary, Alberta
- Edmonton, Alberta
- Winnipeg, Manitoba
- Toronto, Ontario
- Montréal, Quebec
- Québec, Quebec
- Halifax, Nova Scotia

Lillabelle Lake (A12O0071)

Lillabelle Lake: Key Findings

- There was significant mechanical turbulence and associated wind shear.
- During the attempted overshoot, the rapid application of full power caused the aircraft to yaw to the left, and a left roll quickly developed. This movement, in combination with a high angle of attack and low airspeed, likely caused the aircraft to stall.
- The pilot survived the impact, but was unable to exit the aircraft, possibly due to difficulties finding or opening an exit. The pilot subsequently drowned.
- The rear-seat passenger did not have a shoulder harness and was critically injured. The passenger's head struck the pilot's seat in front; this passenger did not exit the aircraft and drowned.

Lillabelle Lake: Recommendations

- *The Department of Transport require underwater egress training for all flight crews engaged in commercial seaplane operations.* (A13-02)

  Current status: *Satisfactory Intent*

- *The Department of Transport require that all seaplanes in commercial service certificated for 9 or fewer passengers be fitted with seatbelts that include shoulder harnesses on all passenger seats.* (A13-03)

  Current status: *Unsatisfactory*

Previous TSB Floatplane Recommendations

- The Department of Transport require that all new and existing commercial seaplanes be fitted with regular and emergency exits that allow rapid egress following a survivable collision with water. (A11-05)

  Current status: Unable to Assess

- The Department of Transport require that occupants of commercial seaplanes wear a device that provides personal flotation following emergency egress. (A11-06)

  Current status: Satisfactory Intent

Resolute Bay (A11H0002)


UTC: 16:38:00.0
Animation for landing approach of First Air flight 6560
Resolute Bay, Nunavut on 20 August 2011
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Stabilized approaches

Stabilized approaches: Recommendation

Transport Canada require CARs Subpart 705 operators to monitor and reduce the incidence of unstable approaches that continue to a landing. ***(A14-01)***

Crew Resource Management

CRM: Safety Concern

The Board is concerned that, without a comprehensive and integrated approach to CRM by Transport Canada and aviation operators, flight crews may not routinely practise effective CRM.

Conclusions

- Floatplanes: More is needed from the regulator, but …
- Many companies are already taking independent, proactive action, rather than waiting for mandatory regulations from TC. (e.g., egress training, PFDs, pop-out windows and doors)
- Stabilized approaches: Too many are continued to a landing. Companies need to provide specific guidance in SOPs, or use technology to monitor and identify instances of risk.
- CRM: we want to see a comprehensive and integrated approach to monitor and reinforce best practices.

Questions?


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