

Advice provided by the C-NLOPB's Offshore Helicopter Safety Inquiry (OHSI) Implementation Team to the C-NLOPB Board

Advising Document

OHSI Phase I, Recommendations 22-24

Regarding aviation expertise, oversight, and safety audits



In November 2010, the Honourable Robert Wells, QC, submitted the Report for Phase I of the OHSI to the C-NLOPB, containing 29 recommendations for enhancing the safety of helicopter travel offshore. Each Advising Document contains the text of the recommendation for which the advice is offered.

The Team's advice for Recommendations 22-24 was accepted in principle by the C-NLOPB Board at their meeting on April 28, 2011. At that time, the C-NLOPB took responsibility for developing its strategy to implement the recommendations.

The OHSI Reports, other Advising Documents, C-NLOPB OHSI Action Plans, and more can be found on the C-NLOPB website: http://www.cnlopb.nl.ca/ohsi_main.shtml

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Recommendations

22: It is recommended that the Regulator acquire sufficient aviation expertise, either in-house or by contract, to allow it to assess fully the oil operators' plans and proposals for helicopter safety.

23: It is recommended that the Regulator, assisted by independent aviation advice, establish appropriate areas of oversight for helicopter transportation and in that process that the Regulator consult with the oil operators, the helicopter operator(s), worker representatives, trainers, and, as appropriate, other stakeholders.

24: (a) It is recommended that auditors of helicopter operations have a prescribed level of aviation expertise, or be assisted by a person with aviation expertise, in conducting their audits.

(b) It is recommended that the Regulator's and oil operators' safety aviation audits of the helicopter operator(s) include reviews of past responses to declared emergencies and emergency preparedness exercises.

(c) It is recommended that auditors have access to reports as to what actions were taken to correct deficiencies, if any, found in previous audits.

Method

A working group of the C-NLOPB OHSI Implementation Team reviewed the recommendations, identified the system safety deficiencies (SSDs), and developed an implementation plan. The working group considered existing levels of aviation oversight, including C-NLOPB, Operator and Transport Canada (TC) audits, and the Operators' aviation expertise.

In addition, the working group:

- Examined OHSI Report Overarching Issues 16, 17, and 19, as well as other relevant sections
- Discussed qualifications and responsibilities for Aviation Advisor
- Reviewed other jurisdictions' aviation oversight
- Engaged the Board's aviation expert
- Brainstormed ideas to identify possible ways to conduct aviation oversight

The working group presented their information to the complete OHSI Implementation Team, and this information became the basis for the Team's proposed implementation strategy that will be considered by the C-NLOPB.

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System Safety Deficiency (SSD)

The Regulator does not have the expertise nor the appropriate evaluation tools or techniques to provide safety oversight of offshore helicopter transportation in a performance-based regulatory environment. Without aviation expertise, and the tools and techniques to oversee and evaluate helicopter operation in a performance-based regulatory environment, the Regulator will not be in a position to adequately assess and oversee helicopter safety.

Background

Recommendations 22, 23, and 24 address the employment of aviation expertise to develop and to carry out oversight and audits of helicopter operations. As these recommendations all relate to aviation expertise, they are dealt with as a group.

In his report, Commissioner Wells stated that in a performance- and goal-based regime, goals are set by the Regulator for the Operator to achieve. Therefore, “the Regulator must have the knowledge and expertise” to set goals and properly assess what the Operators propose to do to meet those goals (v. 1, p. 301).

The Commissioner went on to say that it is for the Operators and C-NLOPB to decide how often they will audit, but the depth of the audit and the level of expertise of the auditor are important. Depth and level of expertise are necessary to avoid what the Commissioner described as “a cursory audit by a person who knows little about aviation/helicopter operations and safety. A cursory audit,” he believed, “adds little value and may only serve to distract the helicopter operator from other tasks, but an informed audit by an auditor having aviation expertise would be a valuable safety asset,” and he recommended that this be done. (v. 1, p. 243)

In reviewing the recommendations, existing mitigating measures were examined. These include:

- C-NLOPB and Transport Canada (TC) Aviation relationship
- Helicopter Service Provider aviation expertise
- Operator aviation expertise
- C-NLOPB Audit of Helicopter Service Provider (without expertise)
- TC Audits

The group determined that the existing mitigating measures are not satisfactory to address the system safety deficiency, or to achieve the intent of the recommendations in setting goals, areas of oversight, or auditing of helicopter operations.

Discussion

The working group agreed that without aviation expertise, the depth and level of oversight of helicopter operations is not sufficient to ensure the risk of aviation operations is reduced to ALARP. Prior to the

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release of the Commissioner's report, the C-NLOPB did not engage aviation expertise to support Board audits. These audits include assessments of Operators' plans and proposals on helicopter operations.

The group concluded that the C-NLOPB needs access to an aviation expert (either as a staff function or as a contracted resource who would be easily readily available) to provide assistance, advice and direction regarding helicopter safety oversight, auditing and goal setting. This expert would also compile reports on aviation operations, which would include statistics on aviation safety in the C-NL Offshore Area. This position would need direct contact with helicopter service providers as well as logistics and safety personnel, and would sit on the proposed Helicopter Operations and Safety Steering Committee (see the Advising Document for Recommendation 20) for the C-NLOPB.

The aviation expert would be a specialist position similar to the Structural Engineer and Well Operations Engineer positions that currently exist within the C-NLOPB Operations and Safety division. In the current organizational structure, the aviation expert would report to the Chief Safety Officer (CSO) and would work directly with other Safety Officers to oversee and audit helicopter operations.

Whether or not the helicopter expertise is required on a full-time basis depends on the amount of work that will result from aviation safety oversight after the recommendation is implemented. The group did not explore in detail whether the aviation expertise should be a full-time or contracted position. It considered this to be a matter for the C-NLOPB. If the expertise is contracted, the expert needs to be available on a full-time basis to provide assistance and perform duties as described in Appendix A.

The group deemed that the best approach to implement these three recommendations was to develop a role description for the aviation expert position. Recommendations 22, 23, and 24 will be implemented when the incumbent conducts the activities described in the role description (Appendix A). The role description incorporates areas of oversight for helicopter operations and the auditing of helicopter operations.

Conclusion

To ensure the effective implementation of these recommendations, the C-NLOPB should have continuous access (either as a C-NLOPB staff function or on a contractual basis) to the necessary aviation expertise to assist in the setting of goals, in establishing areas of oversight, and in the auditing of helicopter operations. The aviation expert should report to the CSO.

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Appendix A

Aviation expertise role description

The Aviation Advisor should have experience with:

- Rotary aircraft
- Harsh operating environments
- Twin engines/heavy helicopters
- Search and Rescue (SAR) (good to have)
- The offshore industry (good to have)
- Safety management experience
- Transport Canada and aviation regulations
- Audit protocols

Roles and Responsibilities of the aviation expertise should include:

- Participation in audits of aviation operations
- Review of aviation incidents
- Establishing areas of regulatory oversight for helicopter transportation including periodic reviews of regulation, standards, and guidelines regarding offshore helicopter transport
- Assessing the Operators' plans and proposals
- Reviewing aviation components of Operators' authorizations
- Advising the CSO on matters relating to aviation and aviation safety
- Attending Forums and providing support in any issues arising
- Having a direct role in planning the Safety Conference
- Reviewing R&D proposals related to aviation
- Liaison with the Operators' aviation, logistics, and safety personnel
- Liaison with the helicopter service provider
- Liaison with Transport Canada
- Liaison with other jurisdictions' aviation industry
- Assisting the Board with monitoring fleet size
- Liaison with the Department of National Defence on search and rescue
- Supporting the activities of the Helicopter Operations and Safety Steering Committee

The Aviation expertise should report to the CSO and provide periodic reports on aviation including statistics on aviation safety.

Areas of Oversight for Helicopter Transportation that the Board should consider for Recommendation 23 include:

- Developing and awarding contracts
 - Contract scope
 - Aircraft specifications
 - Aircraft selection
- Pilot training
- Maintenance programs

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- Operators' helicopter operations manuals
- Helideck operations and design (certification)
- Incident investigation
- Passenger protective equipment; flight suits
- Personnel movement
- SAR protocols
- Spares inventory
- Security
- Passenger training (development and execution)
- Passenger safety orientation
- Combined operations (pooling) (e.g., maximum number of landings)
- Passenger briefings
- Review of statistics