JOINT OPERATOR SUBMISSION

Presented to

OFFSHORE HELICOPTER SAFETY INQUIRY

Presented by

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INTRODUCTION

The Offshore Helicopter Safety Inquiry (Inquiry) was established to review matters respecting worker safety associated with helicopter transportation in the Newfoundland and Labrador Offshore Area that are within the jurisdiction of the Canada-Newfoundland Offshore Petroleum Board (C-NLOPB) and the mandate of the Inquiry. The Inquiry's mandate is to determine and recommend improvements to the safety regime to ensure the risks of helicopter transportation of offshore workers in the Newfoundland and Labrador Offshore Area are as low as reasonably practicable. The Operators have supported and participated in the Inquiry since its initiation and value the comprehensive review and perspective demonstrated by the Commissioner's Phase I report, including 29 recommendations, which was issued in November, 2010. The Operators have reviewed the recommendations and since December 2010 have been actively involved with the C-NLOPB addressing the recommendations and reviewing implementation plans. As well, the Operators provided experienced, dedicated fulltime personnel to work with the C-NLOPB's Safety and Aviation teams, established in response to the Phase I report recommendations, to assist in their assessment of the recommendations and implementation plans and progress. The Operators also continue to work directly with the C-NLOPB to address the recommendations.

Phase II was initiated with the February 9, 2011 release of the Transportation Safety Board of Canada report on the crash of flight 491 (TSB Report). The TSB Report contained four recommendations as well as findings as to cause and contributing factors of the loss and as to risk. The mandate of Phase II of the Inquiry is to undertake a review of the TSB Report and its findings that are within the mandate of C-NLOPB and determine which should result in actions being recommended to be undertaken by C-NLOPB and by other legislative or regulatory agencies. The Operators have carefully reviewed the TSB Report. We are of the view that the findings and recommendations that fall within the mandate of C-NLOPB were addressed in the Phase I Report.

The Inquiry process has been a thorough and welcome addition to the Operators own continuous efforts to ensure the safety of our workforce. When Phase II commenced the Commissioner requested that the Operators provide information of the improvements to safety that they have undertaken since March 2009 and are now undertaking to improve safety. What follows below is a summary of that information.

Introduction to Safety Initiatives

Many safety initiatives have been taken since the loss of Cougar Flight 491 and many are still underway. Notable perhaps are the implementation of helicopter underwater escape breathing apparatus (HUEBA) and HUEBA training; enhanced first response search and rescue (SAR) including a dedicated SAR helicopter and reduced 'wheels up' time; the donation by HMDC of $2.4 million to the Marine Institute's Offshore Safety and Survival Centre to facilitate the installation of state-of-the-art simulation training equipment including a new helicopter underwater escape trainer (HUET) and training pool upgrades which can provide a higher level of fidelity for HUET training; greater workplace communication and involvement in helicopter safety matters; the provision of dedicated full time Operator personnel to C-NLOPB to assist its Safety and Aviation teams; and, ongoing research through the Canadian Association of Petroleum Producers (CAPP) to improve offshore training and development of an improved passenger helicopter transportation suit standard. These efforts are demonstrative of the Operators' ongoing commitment to safe offshore helicopter transportation.

SAFETY IMPROVEMENT INITIATIVES

Helicopter Operations Task Force/HUEBA

Immediately following the loss of Cougar 491, the Operators established the Helicopter Operations Task Force (HOTF). The HOTF evaluated all aspects of flight safety, including an aviation safety review to determine the readiness of Cougar Helicopters Inc. (Cougar) to resume helicopter passenger services. At the conclusion of this evaluation, the Operators recommended to the C-NLOPB that flight operations resume. That recommendation was accepted by the C-NLOPB on May 15, 2009.

The HOTF also offered a total of eighteen forward looking recommendations regarding helicopter passenger service. These eighteen recommendations were discussed in considerable detail by the Joint Operator Panel during the Phase I public hearings. The individual recommendations, and an overview of the action items taken in 2009, can be found in the Joint Operator Panel Presentation.

Many of the HOTF recommendations ultimately overlapped with the subsequent Phase I issues and recommendations including sea state limitations, SAR protocols, night flying and HUET training which are addressed below. The complete HUEBA implementation program, including associated training of the workforce, was completed by October, 2009. HUEBA training was subsequently incorporated into the Basic Survival Training program and is thereby subject to recurrent certification. A revised helicopter briefing video was also introduced which addressed many issues, including HUEBA and the HTS-1 suit. In late 2009, Cougar completed the introduction of its new Safety Management System.

Sea States/Flotation

The Operators, in consultation with Cougar , pursued the installation of enhanced floatation on the S-92A fleet. Parts were ordered in May 2009 and final installation on the core fleet (four S-92A's) was completed in March 2011. The Operators also implemented revised guidelines for restricting flight operations during higher sea states. This change was made effective February 10, 2011. Helicopters that are outfitted with enhanced flotation equipment are permitted to fly when offshore significant wave height is six metres or less.

Immersion Suit and Glove Enhancements

A suit assessment and fitting protocol, including training for Cougar heliport technicians, was developed and implemented in May, 2009. A database was created to link individual workers with their properly fitted suit size requirements. Helly Hansen and Cougar personnel continue to use this database to ensure that every worker traveling offshore is fitted with an immersion suit which meets the size requirements determined under the suit assessment and fitting protocol.

By June of 2010, Helly Hansen, in conjunction with the Operators, had developed and implemented the HTS-1 immersion suit; including individual fit testing and passenger orientation to the suit's features. The HTS-1 replaced the E-452 suit, and provided significant improvements in overall suit fit. 3036 personnel have been fitted with the HTS-1 suit. For the small number of workers who could not achieve a correct fit wearing the HTS-1 immersion suit, customized suits were created. Full accommodation was achieved in late 2010.

By mid-2010, the Operators had completed a replacement of the existing helicopter transportation suit glove with a new glove that provides easier donning capability.

Further, as a part of the CGSB review of helicopter passenger transportation suit standards in which the Operators are supporting and are participating, research to evaluate hand dexterity in cold water temperatures has been conducted.

First Response SAR Enhancements

The Operators, working in conjunction with Cougar, have made significant enhancements to the First Response SAR capability. The Operators provide the C-NLOPB with a quarterly update on the status of First Response SAR enhancements.

A specially equipped Sikorsky S-92A helicopter was procured and is designated as the dedicated First Response SAR air frame. This helicopter is equipped with a dual hoist, a stretcher stacker, FLIR and Night Sun capabilities. Auto-hover is awaiting regulatory approval.

In addition, since May 2010, a 30 minute 'wheels up' time for the First Response SAR helicopter has been maintained. Work is ongoing to further reduce the 'wheels up' time. A critical element of this improvement is the completion of a new hangar facility to support the dedicated First Response SAR helicopter and crew. With approvals in place as of the first quarter of 2011, the hangar is anticipated to be operational by the end of 2011.

Cougar has also retained additional pilots and rescue specialists. Pilots and rescue specialists are also receiving additional comprehensive SAR training.

To enhance in-flight tracking, the Blue Sky system has also been introduced at the Canadian Coast Guard Marine Rescue sub-center which provides with real time information on the location of all Operator helicopters and support vessels.

A protocol regarding search and rescue efforts is being developed between Cougar and the Department of National Defence. Operators are engaged in this process and are reporting to the C-NLOPB on its progress.

HUET/Facilities Enhancements

HMDC recently announced $2.4 million funding to the Marine Institute's Offshore Safety and Survival Centre (OSSC) to fund the installation of state-of-the-art simulation training equipment. OSSC will now purchase a new helicopter underwater escape trainer (HUET). The HUET will be equipped with windows that can be configured to conform with those found on the S-92A, high back seats with four point harnesses; stroking seats; auxiliary fuel tanks; and, cockpit.

In addition, OSSC's training pool will be upgraded to permit simulation of more realistic environmental conditions including a wind machine (80 km), wave machine (1 meter), rain machine (light to heavy rain); sound system (rotor noise); lighting system (search and strobe lights); and, an integrated control system.

This upgrade can provide a higher level of fidelity for HUET training.

Workforce Engagement and Communications

Significant efforts have been made to further enhance communications with the workforce regarding helicopter operations and safety. The Operators will continue to look for opportunities to further enhance communications practices.

Cougar Flight Information

Since October 2009 Cougar has been required to complete and submit to the Operators within 24 hours a flight notification form reporting any information such as turn arounds.

This form captures events related to helicopter transportation, including events that may not otherwise be defined as incidents or occurrences. These reports are reviewed weekly with Cougar. The flight notification information is maintained offshore and is available for review.

Pre-Flight Checks

In 2009 Cougar and the Operators took steps to enhance pre-flight checks. Each personal locator beacon (PLB) is subjected to a visual inspection each time it is issued with a suit for travel offshore (and are tested once a month). A suit donning check for each passenger is conducted before they embark. And, to ensure that the correct usage of passenger seatbelts was and is reinforced, prior to take off the Cougar ground crew (outbound) or the helideck personnel (in bound) conduct a check of each passenger's seatbelt to confirm the seatbelt is properly used and does not impede access to the PLB and HUEBA units affixed to each suit. Following the TSB's comments on the performance of the PLBs, the Operators have also asked Helly Hansen and Cougar to review their respective PLB maintenance protocols.

CAPP Safety Research

The Operators, through CAPP, are involved on an ongoing basis with the Canada General Standards Board evaluation of the existing Canadian helicopter passenger transportation suit standards and the development of a new standard. Research into the appropriate standard has included consideration of maximum escape buoyancy, hand dexterity in cold water, floating characteristics, stability, water ingress and thermal protection.

The Operators, through CAPP, are also in the process of reviewing and updating CAPP's Atlantic Canada Offshore Petroleum Industry Standard Practice for the Training and Qualifications of Personnel; conducting research and analysis for the purpose of making recommendations as to whether or not to use HUEBA in HUET training; conducting an evaluation of CAPP's Guide for Medical Assessment for Fitness to Work Offshore; and, development of a fatigue management best practice for the offshore.

C-NLOPB and OHSI Safety and Aviation Teams

The Operators, at C-NLOPB's request, have provided full time personnel with subject matter expertise to work with the C-NLOPB safety and aviation teams to assist them in their assessment of the Phase I recommendations and the development of implementation plans and process.

Additionally, the Operators continue to work directly with the C-NLOPB to address the recommendations that the C-NLOPB assigned to the Operators for implementation The Operators are reporting to the C-NLOPB on the progress of work plans and implementation. This information is available on the C-NLOPB website.

Pilot Helmets

While, the issue of pilot helmets is currently under consideration by the C-NLOPB, a program has been implemented to fully fund the cost of pilot helmets.