
**BRIEF OF THE COMMUNICATIONS, ENERGY AND
PAPERWORKERS UNION, LOCAL 2121 TO THE
OFFSHORE HELICOPTER SAFETY INQUIRY**

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THE INQUIRY'S MANDATE

1. The Inquiry's terms of reference state that the purpose of the Inquiry is to determine what improvements can be made so that the CNLOPB, the Canada Newfoundland and Labrador Offshore Petroleum Board, can determine that the risk of helicopter transportation of offshore workers is as low as is reasonably practicable in the Newfoundland and Labrador offshore area. It is most unfortunate that the stated purpose of this Inquiry incorporates what can only be described as "wobble words." It is far too easy to justify something less safe than it needs to be or the exposure of a worker to an unnecessary risk by saying that it wasn't reasonably practicable to remedy the risk. Risk management, safety plans and safety regulation are meaningless unless they are firmly rooted in the acceptance of the principle that above all every worker has the right to be safe at work and that unsafe work should never be undertaken.

2. The specific mandate of the inquiry requires that the Commissioner inquire into, report on and make recommendations in respect of :
 - (a) safety plan requirements for operators and the role that operators play in ensuring that their safety plans as represented to and approved by the Board are maintained by helicopter operators;

 - (b) search and rescue obligations of helicopter operators by way of contractual undertakings or legislative or regulatory requirements, and

 - (c) the role of the CNLOPB and other regulators in ensuring compliance with legislative requirements in respect of worker safety.

Implicit in this mandate is the idea that the current structure of safety plans approved and monitored by CNLOPB is a satisfactory structure. The specific mandate with respect to search and rescue obligations of helicopter operators targets organizations which are the subject of regulation by other agencies; these obligations are probably best seen as obligations of operators.

3. Like any mandate conceived after a major accident, the mandate of this Inquiry reflects the concerns that were paramount at the time. It is submitted that the work of the Inquiry has disclosed underlying issues concerning the nature and functioning of the organizations involved in the provision of the broad range of helicopter transportation and related services which raise equally fundamental issues about the way safety is assured in this part of offshore Newfoundland and Labrador operations, if not in all parts. Modifying or adjusting the safety plan requirements for operators by issuing guidelines or direction to operators as to how they should ensure that safety plans are maintained by helicopter operators will not address the fundamental issues and concerns that have been disclosed by the work of this Inquiry. A recasting of the role of the CNLOPB will not be sufficient to ensure compliance with legislative requirements in respect of worker safety.
4. When one looks at the legislation governing Newfoundland and Labrador offshore, one sees that there is very little in the way of legislative requirements. Rather the legislation is in essence enabling. The legislation does require review of the safety of an operation, but beyond that it enables the imposition of conditions with respect to safety in any authorization

and enables safety officers to act by prohibitory order in the circumstances of anticipated serious bodily harm. The legislation does not in and of itself require that the operation of an offshore installation be carried on in a safe manner. Rather, it is the Board, through its chief safety officer and safety officers, that must do that. By virtue of the 2001 Memorandum of Understanding under the Atlantic Accord Legislation, operators in the Newfoundland and Labrador offshore are bound to the provisions of the Newfoundland and Labrador Occupational Health and Safety Act and the employer's obligations thereunder. Administration of the Act does not however fall to the Newfoundland and Labrador Government Occupational Health and Safety Division, but rather to the Board's safety officers. Unfortunately, it appears that the Board's safety officers have been anything but proactive in respect of this aspect of their duties.

5. Safety is a matter of behaviour. All the statutory statements, opportunities for enforcement, efforts to educate and apparent systems to support "the culture of safety" mean absolutely nothing if there is not a will on the part of those with the power to act to enforce the obligations of the operators. Before this Inquiry resolves upon the questions that are identified for investigation, it must look at what we have learned about the will of CNLOPB and its officials, the operators and their officials and indeed workers to ensure that a state of safety as it relates to helicopter transportation is achieved.

**THE APPROACH TO HELICOPTER SAFETY ISSUES AS
DEMONSTRATED IN THE EVIDENCE BEFORE THE INQUIRY TO DATE**

6. The Inquiry heard extensive evidence about three issues which are critical to safety of transportation of workers by helicopter. These three issues illustrated how these matters of safety have been dealt with. These matters involve the introduction of a new helicopter transportation suit, the introduction and provision of an emergency breathing system and the dealing with helicopter search and rescue response time and equipment. Each of these matters will be examined in turn to demonstrate attitudes to improving safety, enforcement and the use of the occupational health and safety system as a means to attain a high degree of safety.

Helicopter Transportation Suits

7. The evidence before the Inquiry demonstrated that a large number of individuals were issued helicopter transportation suits that did not fit them properly. According to the evidence of Mark Collins with Helly Hansen, the fitting exercise undertaken after the March 2009 crash disclosed 107 individuals who did not have a proper face seal that could be resolved by the provision of a smaller hood and a further 180 individuals who required further modifications to make their suit fit, including 12 individuals who required a totally custom suit. Of the 180 persons who did not require a true custom suit, most were fitted by the development of a new suit called the HTS 1.

(Reference: Evidence of Mark Collins, November 18, 2009, Pages 138-143 - **Tab 1)**

8. The evidence of Howard Pike on February 18, 2010 at pages 50-55 acknowledges that the suits which did not fit the individuals to whom they were issued posed three distinct safety risks:

- (1) Leakage of water into the suit during usage due to improper seal leading to hypothermia on the part of the user;
- (2) Excess material in the fit leading to problems with air evacuation thereby causing increased buoyancy and buoyancy inherent in the material which interfered with the ability of an individual to exit a submerged helicopter;
- (3) Improper fit reducing the mobility of a suit user making mobility in the event of a helicopter ditching or crash a problem or leading to a fall while wearing the suit in the ordinary course.

(Reference: Evidence of Howard Pike, February 18, 2010, Pages 50-55 - Tab 2)

9. In practical terms, the suit issued to Robert Decker which was one of the new suits, did not function as required and indeed his body temperature dropped to 28 degrees Celsius while he was in the water.

10. The Minutes of the Suncor Occupational Health and Safety Committee meetings from April of 2008 through to the crash of Cougar Flight 491 consistently record the raising of issues with the fit of the helicopter transportation suit, and in one instance for one individual, the

issue of the seal provided by the suit is raised (See Exhibit C-00153). These Minutes were transmitted to the CNLOPB Safety Division and on their face disclosed participation in the meetings, where the issues were raised, by Suncor's most senior manager at the FPSO, the offshore installation manager. Additionally, the issue of the fit of the helicopter transportation suit was brought to the CNLOPB at the joint meetings of the Occupational Health and Safety Committees with CNLOPB in November of 2008.

(Reference: Evidence of Howard Pike, February 18, 2010, Page 60, Lines 10-13 - Tab 3)

11. There does not appear to be any record in the Minutes of the Hibernia Occupational Health and Safety Committee meetings concerning the issue of the suit fit. The Inquiry did not hear evidence of the dealings of the White Rose Occupational Health and Safety Committee with respect to the helicopter transportation suit.

12. The reaction of Suncor to the issue of the fit of the helicopter transportation suit is recorded in the Minutes of the Occupational Health and Safety Committees. Its reaction ranged from the suit meets Government Standards, to the company is working on it with the suit supplier, to nothing to report. The CNLOPB called upon the operators to provide them with a presentation as to how they were addressing the helicopter transportation suit issue in June of 2008. This presentation was done by the operators and would appear to be an indication that knowledge of issues with the helicopter transportation suits was in fact present with all of the operators.

(Reference: Evidence of Howard Pike, February 18, 2010, Page 48, Lines 12-17 - Tab 4)

13. CNLOPB accepted that the operators had identified a plan with respect to the suits in July of 2008 and were working on it.

(**Reference:** Evidence of Howard Pike, February 18, 2010, Page 54, Lines 22-25 - **Tab 5**)

14. CNLOPB did not deal with the Occupational Health and Safety Committees in respect to the helicopter transportation suit and specifically did not take any steps to investigate the risks identified with respect to the suit.

(**Reference:** Evidence of Howard Pike, February 18, 2010, Page 58, Lines 1-24 - **Tab 6**)

15. What actually happened with the helicopter transportation suit should be contrasted with the expectations contained in the safety plans of the operators. For instance, the HMDC safety plan, Exhibit C-00133 at page 40 suggests “passengers should check that they have been supplied with the correct size immersion suit.” Exhibit C-00131 at Page 179, section 4D.8 states “survival training for the helicopter occupants will maximize the likelihood of a successful rescue of personnel in the water.” The Suncor safety plan, Exhibit C-00139 at Page vi says of its Robust Risk Model “continued work utilizes quantitative and qualitative risk techniques, safety reviews, safety audits and other analytical processes, with the results linking back to the safety plan.” In Section 4.3.1, the safety plan talks of an integrated safety management system. Section 6.2.1 describes the Occupational Health and Safety Committees as assisting in the regulatory and organizational need to monitor health and safety standards, and to identify work place hazards.

16. Gary Vokey, one of the Suncor witnesses, indicated that the impetus for the ultimate sizing and fitting exercise that was done by Helly Hansen was the heightened concern over wrist seals and the issue with seals around the face was thought to be a function of stiffness of the zippers.

(**Reference:** Evidence of Gary Vokey, January 21, 2010, Pages 38-39, Lines 21-5 - **Tab 7**).

This heightened awareness apparently arose subsequent to the crash of Cougar Flight 491. Notwithstanding this, Ms. Farrell acknowledged that the company knew in April of 2008, that there was an issue with suit seals.

(**Reference** Evidence of Michelle Farrell, January 21, 2010, Page 15, Lines 1-20 - **Tab 8**).

When asked by Counsel for CEP if Suncor was prepared to leave one person flying with a suit that did not seal, Mr. Farrell stated:

“What I understood and what we were investigating is multiple things, whether the zippers were impacting the face seal ... we took a number of steps to try and address and understand that and at the same time we were proceeding down the path of understanding the implications of modifying suits for whatever reason.”

(**Reference:** Evidence of Michelle Farrell, January 21, 2010, Page 47, Lines 1-11 - **Tab 9**)

17. Helly Hansen had been commissioned to do a survey with respect to employee complaints respecting the new helicopter transportation suit. This survey was conducted a considerable period of time prior to the crash of Cougar Flight 491. Two particular answers in that survey provide interesting information. Thirty percent of the Respondents disagreed with the

statement that they had no trouble making the face seal. Twenty-two percent disagreed with the statement that they had no trouble getting the zipper all the way up. The conclusion from this is that eight percent of the users were in the category of people who agreed they had no trouble getting the zipper all the way up, but still disagreed with the statement that they had no trouble making the face seal. It would appear that nobody picked up on the fact that eight percent of the users were able to properly zip up the suit but still felt there was difficulty with the face seal.

18. The evidence of Michelle Farrell indicated that the previously used Mustang suit still met the helicopter transportation suit standard but did not meet the dual certification required to use the suit as an abandonment suit as well as a helicopter transportation suit.

(**Reference:** Evidence of Michelle Farrell, January 21, 2010, Page 61, Lines 2 - Page 62, Line 14 - **Tab 10**)

19. When asked about the Board's interaction with the suits, Ms. Farrell said:

"So we developed that presentation package. I do recall that there was considerable attendance by members of the Board. They understood the complexity of trying to work within a standard that is set by Transport Canada, Aviation and Marine, both divisions being different, and one seemingly much slower to respond than the other, and so they understand that we were working the issue, that we were continuing to engage the work force and they expected follow up from us."

(**Reference:** Evidence of Michelle Farrell, January 21, 2010, Page 78, Lines 10-20 - **Tab 11**)

20. The operators had issued a contract to Helly Hansen to provide the new helicopter transportation suit. However, review of the contract with Mark Collins of Helly Hansen demonstrated that there is no requirement on the part of Helly Hansen to train the Cougar employees issuing the suits as to how to determine whether the suits fit or for Helly Hansen to check the initial fit of the suits on the employees.

(Reference: Evidence of Mark Collins, November 18, 2009, Pages 189-190, Line 12 - Tab 12)

21. It is apparent from the evidence that the operators were focused on making the existing suit work and achieving their goal of having a single suit with dual certification. Despite significant information flowing from the workers in the Helly Hansen survey, the operators did not either recognize or focus on the safety implications for the individual helicopter passenger posed by the deficiencies in the E452 suit. Rather, the operators were focused on the issues such suits posed for them in dealing with Transport Canada.

22. Similarly, CNLOPB failed to focus on the safety risk for the individual passengers posed by the E452 helicopter transportation suit. They appear to have bought into the notion that the operators were working on the problem with a very difficult government agency and ignored the fact that the suits were for a significant number of helicopter passengers unable to perform the task required of them. One of these suits very nearly led to the death of Robert Decker after he miraculously survived the catastrophic crash of Cougar Flight 491. This is not hindsight. This is tangible evidence of what has been known in the scientific literature

for many decades; immersion in the waters of the North Atlantic without thermal protection for any significant duration is fatal.

23. The workers raised the issues with the suit through the joint Occupational Health and Safety system on the Terra Nova FPSO. The workers raised the issues with the suit through the joint Occupational Health and Safety Committee meetings with CNLOPB. The workers raised the issues in their responses to the Helly Hansen survey. It is apparent that some of the workers did not appreciate the significance of the issue as it apparently did not enter into the Occupational Health and Safety Committee process on the Hibernia Platform. There may be an issue with respect to workers' understanding of their rights in respect of the Committees and/or their understanding of the technical requirements of the helicopter transportation suits. What is clear is that the workers brought the issue forward to a sufficient degree such that it engaged the safety system.
24. The safety system failed. Neither CNLOPB nor the operators took the appropriate steps to reduce the risk to the workers posed by the suits. Rather, workers were to be subject to the risks while the operators' desired solution was worked upon. When the crash of Cougar Flight 491 brought matters into focus and in particular brought safety to its appropriate position at the top of the priority list, the obvious solution of no flights by persons who did not have a suit that fitted them was engaged. The crash of Cougar Flight 491 did not change the knowledge state with respect to the helicopter transportation flight suit. The information that the suit did not fit and in particular did not seal was known to the players. What the

crash of Cougar Flight 491 did was increase the concern of the employees about the deficiencies in the suits and change the position of safety on the priority list.

Emergency Breathing Systems

25. Studies by Tipton and others in the '90's and early 2000 had confirmed that the breath-hold time for persons submerged in cold waters (warmer than those often experienced in the Newfoundland and Labrador offshore) had a mean breath-hold time of 20 seconds which could be as little as 10 seconds. This is referenced in evidence in the report of Dr. Colshaw. The estimated time needed to escape from a submerged or capsized helicopter in a real accident appears to be from 45 to 60 seconds.

(Reference: Report of Dr. Susan R.K. Colshaw to the Inquiry, Paragraph 2.5.1 -Tab 13)

Shell Oil had adopted an emergency breathing system known as a rebreather in the later 1990's.

(Reference: Evidence of Dr. Susan Colshaw, June 29, 2010, Page 72, Lines 10-20 - Tab 14)

By the year 2003, most operators operating in the UK portion of the North Sea had some sort of emergency breathing system device available to their helicopter passengers. By the year 2006, all operators in the North Sea would have been using the hybrid device (a combination rebreather and compressed air device). These facts were not highly kept secrets; the work

of Dr. Colshaw and Dr. Tipton was extremely well known, and anyone familiar with the literature related to cold water survival would be familiar with their work.

26. Additionally, military helicopter pilots have been using a compressed air emergency breathing system from at least the 1990's and the compressed air system was used by professional and amateur scuba divers at least as early as the mid '80's.

(Reference: Evidence of Gregory Harvey, November 25, 2009, Page 79, Lines 19-24 - **Tab 15)**

27. The prevalence of emergency breathing systems appears to have been known to CNLOPB. On February 25, 2000, CNLOPB wrote the Canadian Association of Petroleum Producers and stated that "we understand several companies in the North Sea have adopted the use of 'escape breathing devices' to improve passengers' chances of surviving a crash." One would expect the bodies charged with the regulation of the safety of employees working in the offshore to be current with respect to the advances in safety assists. Safety is of course not a static matter, but rather it is a dynamic process where new understandings of risks and new technologies go hand in hand to maintain an optimal level of safety. The request to CAPP was that this organization discuss this technology and advise of any decisions.

(Reference: Exhibit P00053 - letter to CAPP, February 25, 2000 - **Tab 16)**

The response of CAPP after more than a year was to advise CNLOPB that matters would be delayed pending a literature review by the United Kingdom's civil aviation authority and the Norwegian Industry Initiative on new survival suit standards/specifications. It is interesting

to note that some eight years prior to actual implementation the Industry Association was tying the introduction of an emergency breathing system to the introduction of a new survival suit standard. On February 12, 2003, Mr. Peter Noel, a safety officer with CNLOPB wrote CAPP expressing concern with the pace of events and describing emergency breathing systems as a mature and tested technology. Mr. Howard Pike, as chief safety officer, disavowed this opinion in his evidence even though it is quite clear from the evidence of Dr. Colshaw that by 2003 most organizations in the North Sea, UK side, were in fact using some type of emergency breathing system.

(Reference: Evidence of Howard Pike, February 18, 2010, Page 44, Lines 20-25 - **Tab 17)**

Mr. Pike said that the Board concurred there was a need for further research.

(Reference: Evidence of Howard Pike, February 28, 2010, Page 45, Lines 1-4 - **Tab 18)**

CAPP responded to Mr. Noel's letter on March 20, 2003 by proposing an implementation committee which would include a representative from the Board's safety division and a worker representative, amongst others. Additionally, CAPP indicated that outstanding issues with respect to the EBS would be resolved by the end of 2003.

28. CNLOPB responded to CAPP indicating that it had supported its approach by letter dated April 8, 2003, and Mr. Peter Noel was appointed to act as the Board's representative. No formal written interaction between the Board and CAPP on the subject of emergency

breathing systems occurred for another four years although it is apparent that Board officials were aware of a CAPP workshop on the subject held in January of 2006. On March 13, 2007, the Chair of the CNLOPB wrote the president of CAPP requesting an update on the EBS project with a target date for implementation. CAPP responded to the Board stating that implementation was to begin in the fourth quarter of 2007. Notwithstanding these representations, the emergency breathing system (HUEBA) was not implemented until after the crash of Cougar Flight 491 although it is claimed that implementation was intended to start in late 2008.

29. The role of CNLOPB in this matter is marked by a lack of assertion. The long periods of time between formal communications with CAPP are apparent from the chronology just reviewed. It is also apparent that CNLOPB was prepared to have the Canadian Association of Petroleum Producers deal with a major issue respecting helicopter transportation safety on behalf of the operators, with the most substantial document in terms of describing the effort being the letter of March 20, 2003. This letter fell by the wayside in terms of its usefulness within nine months. Howard Pike confirmed that this letter was the extent of CNLOPB's engagement with CAPP.

(Reference: Evidence of Howard Pike, February 18, 2010, Page 15, Lines 23 to Page 16, Line 15 - **Tab 19)**

30. No effort was made to define expectations in terms of end result or time frame in which it would be achieved. There was no express delineation of the authority of CAPP and the

evidence disclosed that CAPP only has authority to deal on any individual matter on behalf of the operators if that authority is specifically extended. Indeed unbeknownst to the CNLOPB, CAPP had the matter withdrawn from it by the operators for most of 2004.

(Reference: Evidence of Paul Barnes, November 17, 2009, Page 54, Lines 15 - **Tab 20)**

Mr. Barnes confirmed that CAPP did not inform CNLOPB that it was no longer working on the issue of an emergency breather system.

(Reference: Evidence of Paul Barnes, November 17, 2009, Page 56-57 - **Tab 21)**

31. As the custodian of the workers' right to know of safety issues and the right to participate in respect of safety issues and the right to refuse dangerous work, CNLOPB's Safety Division would be required to support worker participation in EBS implementation which was represented in the letter of March 20, 2003. It is apparent that CNLOPB was aware not only of the failure to appoint a worker to the Implementation Committee, but also in respect of the fact that the Minutes of the Occupational Health and Safety Committee meetings of the operators did not demonstrate any involvement with this issue. As late as 2007 and 2008, workers at the joint Occupational Health and Safety Committee's meetings with CNLOPB were requesting communications on the development of the HUEBA.

(Reference: Evidence of Howard Pike, February 28, 2010, Page 36, Lines 13 to Page 39, Line 10 - **Tab 22)**

Requests from the workers to CNLOPB to intervene on the matter of communication in reference to the HUEBA did not produce results. This problem appears to be reflective of

a wider scale problem vis-a-vis worker involvement in safety matters. Mr. Pike confirmed that the joint Occupational Health and Safety Committee meetings had raised the issue of worker participation with respect to the CAPP Training and Qualifications Committee when changes in the standards established by that Committee were required to be passed through the Occupational Health and Safety Committees of the various operators. The fact that participation was raised as an issue is indicative of the fact that this obligation was not being honored by the operators or enforced by CNLOPB.

32. It is apparent from the evidence that workers wished to be involved in the emergency breathing system project but were not given that opportunity. The operators resisted worker involvement in the Implementation Committee and CNLOPB did nothing to support the involvement.

33. The activity of CNLOPB in respect of the development and implementation of an emergency breathing system for helicopter passengers can only be described as woefully inadequate. The inaction of CNLOPB took place against a backdrop of scientific information which established the critical necessity for such systems. It also took place against a backdrop of implementation of such systems by others which effectively denies the necessity of the development and research process adopted by the operators through CAPP. It is simply not plausible that it was necessary to move in the direction of a device that was different than that being used in the North Sea and that it would take such a protracted period of time to put it into operation. The delays demonstrate an incredible lack of will on the part of the

operators to make the implementation of an emergency breathing system happen. The fact that the Marine Institute had to apply to an oil industry-sponsored fund to develop the training for use of the device ultimately selected, underlines a total absence of motivation by the operators in this respect. Neither CNLOPB, CAPP or the operators presented any insight as to why their respective organizations failed so dismally in bringing this obvious safety improvement about.

Search and Rescue Response

34. Recommendation 56 of the Ocean Ranger Inquiry recommended that there be a full time Search and Rescue dedicated helicopter provided by either Government or Industry, fully equipped to Search and Rescue Standards, readily available to the Newfoundland and Labrador Offshore Petroleum Industry.

35. Operators are required to submit to the CNLOPB a safety plan which is approved as part of the authorization for work to be performed by an operator. This is a repeating exercise and the Board verifies that an appropriate safety plan is in place every time an authorization is given. During the undertaking of the activity authorized by an authorization, CNLOPB will verify and inspect to assure that operators are following their safety plans and the applicable statutory requirements.

(Reference: Evidence of John Andrews, October 20, 2009, Page 92, Lines 1-24 - **Tab 23)**

It is important to note that this is not in essence a prescriptive system. Rather the operator presents to the Board the means by which it will achieve safe operations. The operators have all discussed before the Inquiry their risk assessment and hazard identification programs. In their safety plans the operators discuss the various means by which they prevent hazards and mitigate such hazards. Operators identify levels of safety to be reached. Benchmarks are set in terms of risk of fatalities. Mitigation of risk is discussed at length. Notwithstanding this elaborate system, the Exxon Mobil Contract, in common with all other helicopter transportation contracts, provided: "During non core hours, wheels up response time shall be, at most, one hour."

(Reference: Exhibit "C-00132", Page 30 - Tab 24)

The response time contemplated that the helicopter which might be as much as 30 minutes away from St. John's, would require conversion to Search and Rescue status from passenger transportation status by the removal of seats and the installation of SAR equipment. This standard which was current at the commencement of the proceedings of this Inquiry is substantially less than that which is recommended by the Ocean Ranger Inquiry.

36. The standard of Search and Rescue response available is significantly higher than that for which the operators have contracted with Courier Helicopters. The evidence of Mr. Burt from Cougar Helicopters indicated that a response time of 15-20 minutes was available within services provided by Cougar. Reducing the response time is simply a question of applying resources.

(**Reference:** Evidence of Richard Burt, February 3, 2010, Pages 74 & 75 - **Tab 25**)

Equipment in use by DND on the Cormorant SAR helicopter but not available on the S-92, could have been installed on a dedicated SAR S92. Mr. Burt additionally testifies that the auto hover feature, while not available on the S92 at the present time, had been available on the Sikorsky S61 for some considerable period of time.

(**Reference:** Evidence of Richard Burt, February 4, 2010, Page 78 - **Tab 26**)

37. As the regulator of the provision of Search and Rescue response by the operators, CNLOPB was aware of the Ocean Ranger Inquiry report, the wheels up time for Squadron 103 in Gander during the daytime and that offshore oil production platform operators in the North Sea were providing a 15-minute wheels up time.

(**Reference:** Evidence of Howard Pike, February 18, 2010, Page 62, Line 11 to Page 63, Line 7 - **Tab 27**)

38. It appears from the evidence of Mr. Pike that CNLOPB simply saw itself as verifying that what was presented in the safety plan was in fact available.

(**Reference:** Evidence of Howard Pike, February 18, 2010, Page 64, Line 6 - **Tab 28**)

CNLOPB appeared to be satisfied that the operators were meeting a standard of one hour wheels up time and tolerated a first response helicopter being available only to the extent that

it was within 30 minutes flying time of St. John's and could meet the one hour wheels up time standard.

(Reference: Evidence of Howard Pike, February 18, 2010, Page 70, Line 16 - **Tab 29)**

39. The research paper presented by Mr. Taber indicated in Paragraph 1.1 that the crash/ditching survival rate during the hours 18:00 to 23:59 was 39 percent as opposed to 70 percent for crash/ditchings during the hours 06:00 to 17:59. Notwithstanding this marked differentiation in survival times between night flights and day flights, CNLOPB took no steps to limit night flights.

(Reference: Evidence of Howard Pike, February 18, 2010, Page 78, Lines 3-11 - **Tab 30)**

40. CNLOPB did not appear to have any knowledge of the appropriate level of continuing training for SAR-Tec technicians and was not aware of any standard.

(Reference: Evidence of Howard Pike, February 18, 2010, Page 72, Lines 5-23 - **Tab 31)**

41. When CNLOPB was challenged to explain why they had not recognized the issues of night flying and wheels up time for Search and Rescue First Response helicopters, the response was to talk about interaction with international colleagues and the approach taken by them in a goal-based system.

(Reference: Evidence of Howard Pike, February 18, 2010, Page 78, Lines 13 to Page 80, Line 16 - **Tab 32)**

42. CNLOPB showed absolutely no insight as to why they did not recognize that the goal established under the operators' safety plans through their contracts with Cougar Helicopters was unacceptably low.

43. As much as the activities of CNLOPB in respect of Search and Rescue appear to have been deficient, the position of the operators is no better. The operators in their safety plans speak of risk and hazard identification, risk assessment and mitigation and described elaborate systems for employees to report hazards. The employees of the operators by and large work in Newfoundland and are limited in their knowledge of the standards of safety available to what they experience in this jurisdiction. This is not the case for the operators. Each of the operators who have participated in this hearing operate internationally and are involved with the North Sea. There is nothing in the safety plan that prevents an operator from exceeding the goals or bench marks established. Indeed the language employed would give one the impression that safety is a matter of continuous improvement. The undeniable fact is that these operators operated in environments where the standard of Search and Rescue response has been and continues to be markedly higher than that for which they have contracted with Cougar Helicopters.

As this Inquiry has already found, the standard set by the operators is simply unacceptable. Similarly the acceptance of that standard by CNLOPB is equally unacceptable. The challenge that lies before us is to ascertain the 'why' of the failures respecting the helicopter transportation suit, the emergency breathing system and Search and Rescue response time.

That answer must inform everything that is recommended in respect of the issues which this Inquiry will deal with.

WHY HAVE THE OPERATORS AND CNLOPB BEEN DEFICIENT IN THEIR DEALINGS WITH HELICOPTER TRANSPORTATION SAFETY?

44. It his evidence on the second day of the inquiry, Mr. John Andrews said of the board's mandate:

“We are to be facilitators of exploration for and development of the hydro-carbons, hydro-carbon resources in the Newfoundland and Labrador offshore area in a manner that conforms to the statutory provisions. Again, you would note that our role is in fact operator driven. We facilitate the explanation for and development of the resources. We do not direct that it be undertaken. We do not in the ordinary instance, order that somebody drill a well. What we are doing is implementing our mandate in respect of the legislation to the plans of a party who comes forward to us wanting to explore and develop the hydro-carbon resources of the Newfoundland and Labrador offshore area. So our role, the implementation of the mandate, is to be responsive to the plans, the applications of parties who want to explore and develop those resources. Particularly, and in the statement of our role, we focus on what our five pillars of the legislative jurisdiction, primarily workers' safety, environment protection and safety, effective management of land tenure, maximum hydro-carbon recovery and value and Canada Newfoundland and Labrador benefits, the industrial benefits part.”

(Reference: Evidence of John Andrews, October 20, 2009, Page 87, Line 1 - Page 88, Line 2 - **Tab 33**)

45. However, when commission counsel explored a statement by CNLOPB that it does not have the responsibility for safety of workers and whether it meant that CNLOPB does not have an interest in the safety of workers, Mr. Andrews stated ...

“The words that I focused on is the oversight and the verification. Clearly we have an interest in all matters in respect to safety, risk assessment, risk management. But, the primary responsibility for worker safety is the operator of the facility on which the worker is to be found.”

(Reference: Evidence of John Andrews, October 20, 2009, Page 97, Lines 7-21 - **Tab 34**)

46. Mr. Andrews indicated that the objective of the Board would be to verify that the operator had an appropriate safety plan in place and thereafter during the undertaking of the activity authorized by the authorization, it would verify through audits and inspections that operators follow their safety plans and the applicable statutory requirements.

(Reference: Evidence of John Andrews, October 20, 2009, Page 91, Lines 16-24 - Tab 35)

47. When pressed by Commission Counsel to confirm that the safety officer would not require prior approval from the Board to shut down operations, Mr. Andrews made a very telling statement. He said,

“No, that would not - that would be a decision that the Chief Safety Officer could take in his own behalf. I will say, of course, that the culture in our office determines we cooperate at all times ... and decisions likely taken by the Chief Safety Officer would be in consultation with other technical experts at the Board and perhaps at the executive level ...”.

(Reference: Evidence of John Andrews, October 20, 2009, Page 128, Lines 14-25 -Tab 36)

48. The evidence of Michelle Farrell previously referred to is equally telling in terms of CNLOPB's attitude. Ms. Farrell said that CNLOPB understood the complexity of trying to work within a standard that is set by Transport Canada, that the companies were working with the issue, that they were continuing to engage the workforce and they expected follow up from us. CNLOPB is understanding of the problems of the oil companies in dealing with regulations that made it difficult for them to achieve their goal of a dual certification helicopter transportation suit that fit the workers and could be used also as an abandonment

suit. Their sympathy and understanding caused them to overlook the very real risks that employees were being exposed to. These were not risks that needed to be taken. The subsequent history of events with respect to the transportation safety suit showed that these risks could be very easily avoided by interim transportation by vessel.

49. CNLOPB, as Mr. Andrews said, is a facilitator of exploration for and development of hydrocarbons in Newfoundland and Labrador offshore. Simply put, the successes of the oil industry are the successes of CNLOPB. It is human nature to be supportive of those things which lead to success and avoid those things which tend to dampen or interfere with success. It is in our nature to align with the positives and to avoid being negative. Turning down safety goals as inadequate and telling organizations that they are not doing well enough is negative, and in an atmosphere where the successes of those same parties to whom you direct negative comment is seen as a success for your organization, the focus is on support rather than correction. The Chief Safety officer will consult with other technical experts and the executive before making a negative move against an operator. Presumably this is to obtain their perspective. However, their perspective is not the perspective of safety. Their jobs are facilitating exploration and development of hydrocarbons. The culture of cooperation within CNLOPB is the culture where the focus on safety is lost and any impetus to correction is dissipated.

50. The evidence before the Inquiry suggests that in the operational area, the safety record is strong. We point out that the operational area has not been subject to the kinds of scrutiny

that helicopter transportation safety has been. We hope that the perception is a reflection of the reality. It can be observed, however, that because certain safety issues potentially cause major damage to the production infrastructure and indeed can cause events like fires that could terminate production, there is a synergy between production and safety. Perhaps it is easier to maintain the focus on safety in that circumstance.

ISSUES

51. This Inquiry has proceeded on an extremely confined schedule. The goal of delivering a report by September 30, 2010 and the structure adopted by the Inquiry has significantly limited its investigations. The initial process of the Inquiry was intended to describe the status quo and identify issues. The experts retained by the Inquiry have dealt with very limited matters and on a very limited level. Only one of the expert witnesses, Dr. Colshaw, has a substantial reputation in the area of transportation to and from offshore installations in cold water environments. The role of the other individuals who gave evidence has been very narrow. Even Dr. Colshaw in her evidence declined to answer certain questions on the basis that the time allowed for the preparation of her report did not enable her to inquire into the areas questioned. Frankly, there is not an issue before the Inquiry which could not have benefited from a more indepth investigation.

The Overarching Issues

- (i) **Should there be a separation within the CNLOPB between offshore helicopter regulation and other offshore industry regulation.**
52. The evidence before the Inquiry demonstrates that the regulation of offshore helicopter transportation by CNLOPB has been woefully deficient. The Inquiry has not explored the manner in which the CNLOPB conducts other offshore regulation. The evidence indicates that CNLOPB has not been responsive to the Occupational Health and Safety system. It has operated throughout the entire history of its regulatory practice on a set of draft regulations.

The evidence demonstrates that it has not followed through appropriately when matters of safety are raised in the Minutes of the Occupational Health and Safety Committees i.e. fit problem with suits. CNLOPB has failed to assert the employee's right to participate in respect of the development of an EBS and in respect of the training and qualifications function delegated to CAPP. There is an apparent conflict of interest between the role of CNLOPB as a facilitator and promoter of offshore oil exploration and production and the role of a safety regulator. CNLOPB has shown an unwillingness to impose restraint and expectations upon the operators when it comes to issues of helicopter transport safety. It is difficult to conceive that these attitudinal problems do not extend to other areas of safety regulation. This Inquiry has not delved into the manner in which CNLOPB deals with other safety issues. It has only heard from the operators what is essentially a public relations piece about the strength of their safety systems. The problem is that that strength has not been apparent in the area of helicopter transportation safety.

53. Other jurisdictions have seen fit to separate the regulation of safety from the role of facilitator and promoter of exploration and development. Lord Cullen in his report into the Piper Alpha Disaster described the Department of Energy, which was then regulating both offshore safety and production as tending

“...towards over conservatism, insularity and a lack of ability to look at the regime and themselves in a critical way. From this certain practical results have followed; the introduction of improvement in safety has been hampered; the development of legislation on the basis of the HSWA (Health and Safety Work Act) has been kept back.”

(Reference: Report of the Public Inquiry into the Piper Alpha Disaster, Page 382, Paragraph 22.20 - Tab 37)

This comment could well be a description of the role that CNLOPB has played in respect of helicopter transportation safety. In particular, the lack of ability on the part of CNLOPB to look at the regime and themselves in a critical way is striking. Even the terms of reference and mandate of this Inquiry presuppose that CNLOPB is the body appropriate to perform the safety function. It is submitted that the safety regulation mandate must be removed from CNLOPB. The behaviour of CNLOPB in matters related to Search and Rescue, helicopter transportation suits, the EBS and indeed their dealing with the Occupational Health and Safety Committees are such that no reasonable person could have confidence in the ability of CNLOPB to carry out the safety mandate properly.

(ii) **Are the risk management systems of the operators and helicopter operators sufficient and adequate to ensure the risk of helicopter transportation is as low as reasonably practicable in the Newfoundland and Labrador offshore.**

54. A risk management system is only as good as the diligence with which it is applied. This Inquiry has seen two contrasting examples of how risk management systems can fail to achieve levels of safety. The implementation of the EBS was in fact delayed by the application of the Petro Canada Risk Management System. The focus on training risks contributed to the deferral of the implementation of an emergency breathing system for workers in the Newfoundland and Labrador offshore, even though such systems were the standard in the most comparable environment where offshore oil exploration and

development was being conducted, the North Sea. While the experience of others in the industry should not necessarily be accepted without a degree of skepticism, the reality in this particular instance is that the North Sea systems were being used by employees of the same operators as those operating in the Newfoundland and Labrador Offshore. The risk management system of Petro Canada really meant that there was a significant amount of remaking the wheel performed in this jurisdiction. On the other hand, the risk management systems of the operators failed to identify the need to reduce Search and Rescue response time and the ability to do that in this jurisdiction as had been done in other jurisdictions where once again the Newfoundland and Labrador offshore operators were also present. It appears that risk management analysis with its mathematical formulas and models sometimes misses the big picture. These systems did not meet a requirement of identifying current industry best practices and asking the question why they are not applicable to this jurisdiction. This is unsatisfactory. The inquiry has had little opportunity to scrutinize the risk management system of Cougar Helicopter. Questions which would test the adequacy of that system inevitably brought the Inquiry into the territory of the Transportation Safety Board investigation. The adequacy of the helicopter operator risk management systems is a question which will need to be addressed in the context of the report of the Transportation Safety Board. CEP, Local 2121 has been concerned that the pilots employed by Cougar Helicopters were under a misapprehension as to the capacity of the S-92 to operate in a condition of loss of oil. If there was such a misapprehension, the question will have to be asked as to why this was not picked up through the Cougar Helicopter safety

management/risk management system. Unfortunately, this is not a question that this Inquiry can answer at this time.

55. The risk management systems of the oil operators failed to identify the need to respond to the problems with the new helicopter transportation suit. Whether this failure arose from an inadequacy of the system or an inadequacy in the application of the risk management system is not apparent on the basis of the evidence before the Inquiry. We do know that a very simple means of managing the risk was identified, once the focus shifted away from the complications of dealing with modifications to the suit to the safety of the users. This would tend to suggest that the problem with risk management on the part of the operators as it related to this issue, was one of people rather than systems.

(iii) What is the role of Organizational Safety Culture in Offshore Helicopter Transport.

56. From the perspective of the worker, the foundations of an organizational safety culture are the three pillars of Occupational Health and Safety, the right to know, the right to participate and the right to refuse unsafe work. The evidence of the workers who appeared before the Inquiry suggests that there has been a significant change in the flow of information about helicopter safety issues to the workers since the crash of Flight 491. The importance of the workers' right to know was underlined by Ms. Lori Chin in her presentation on February 10, 2010 when she said

“I’ve also heard phrases such as risk assessment and safety culture used throughout the Inquiry. I have to question though why aren’t the passengers flying offshore not provided with alert service bulletins pertaining to the helicopters that transport workers to the offshore. I believe that workers have the right to be provided with pertinent information so that they themselves can assess the risk and make informed decisions on managing their own risk.

Given John’s aversion for flying, I strongly believe that if he was provided with the information regarding the problems with the helicopter studs, he would have opted not to fly on Flight 491 on March 12, 2009.”

(Reference: Evidence of Lori Chin, February 10, 2010, Page 24, Lines 3-18 - Tab 38)

Knowledge of risks is an absolute precondition to being able to deal with them.

57. Beyond knowledge, the right to participate and the right to refuse require genuine acceptance on the part of the operators that these rights are in the interests of all persons. The experience with the EBS demonstrates that the right to participate has not been supported by the operators and the regulators. The value of the right to participate is underlined by the role played by the Terra Nova FBSO Occupational Health and Safety Committee. The fact that the individuals on this Committee insisted that concerns about the fit of the helicopter transportation suit remain in the Minutes of that Committee for a period of 11 months has provided this Inquiry with a meaningful reference point as to how concern respecting these suits was dealt with. It is interesting that no such references appeared in the Minutes of the Hibernia Occupational Health and Safety Committee, although clearly the concerns were brought up at the joint Occupational Health and Safety Committee meetings with CNLOPB during that period. The problem with the suits was pervasive and in a properly functioning safety culture, it should have been brought forward by the employees and acted upon by the

operators. Clearly there is still a need to facilitate the bringing forward of concerns in the area of safety. This is undoubtedly a continuing challenge. It is not easy to change a culture in which it has historically been unwise for employees to bring forward safety issues. As sincere and diligent as the operators might be in this respect, it is reality that old attitudes die slowly.

- (iv) **What are the most appropriate practices, standards and forms of interaction between CNLOPB and the following: (a) industry (including supplies and providers); (b) industry associations; (c) regulators of associated services; (d) other domestic and foreign oil and gas regulators, and (e) worker representatives.**

58. In respect of the interaction of CNLOPB with industry and industry associations, it is the position of CEP, Local 2121 that to the extent that these interactions relate to the regulation of safety, CNLOPB is not the appropriate body to undertake these interactions. There is an inherent conflict in the mandate of CNLOPB as a facilitator and promoter of hydro-carbon exploration and production which, for the reasons previously stated in this Submission, make it inappropriate for CNLOPB to regulate safety.

59. In the context of an appropriate regulator of safety, further studies should be undertaken with respect to the mode of regulation. Both the prescriptive and goal-based forms of regulation have their strengths and weaknesses. Insufficient information has been placed before this Inquiry to come to a definitive position on the appropriate mode of regulation. The regulators of associated services clearly have overlapping authority with respect to CNLOPB. Transport Canada provides a classic example of the difficulties associated with this. While

Transport Canada requires travellers to the Newfoundland and Labrador offshore to wear the helicopter transportation suit, its regulations appear to be drawn largely in a context of overall helicopter transportation. While egress through windows and flotation equipment are major concerns for the regulator of flights to the offshore, they are not addressed by Transport Canada. Transport Canada does however regulate the airframe in which these concerns reside. It is apparent that there needs to be a clear agreement between Transport Canada and the regulator of safety in the Newfoundland and Labrador offshore, updated on a very regular basis to ensure that regulations do not conflict and that the regulatory jurisdiction of Transport Canada does not inhibit the implementation of the highest standards for workers in the Newfoundland and Labrador offshore. The Newfoundland and Labrador offshore is but a very small part of the international offshore oil and gas industry. Canadian regulators must recognize that there is a wealth of experience in regulation of the offshore residing in other jurisdictions. While it is not appropriate for Canadian regulators to abdicate their jurisdictional authority, neither is it appropriate that all matters be dealt with ab initio by Canadian regulators.

60. Safety regulation onshore has benefited from a consistent tripartite approach where worker representatives, employer representatives and the regulator work together to achieve optimal safety conditions. This has not been the situation in the Newfoundland and Labrador offshore. The regulator has failed to ensure the involvement of worker representatives at all points in the development of safety standards and regulation. In particular, it is nothing short of distressing to see that Government and CNLOPB are moving ahead with new

Occupational Health and Safety Regulations while this Inquiry is ongoing. Whether it is the development of an EBS or the provision of the regulatory regime for Occupational Health and Safety, worker participation does not mean the opportunity to comment when the process is 90% complete. Worker participation must mean involvement from the earliest stages.

(v) Does the CNLOPB use best practices in relation to its regulatory role in helicopter transport safety.

61. The answer to this question is simply 'no'. CNLOPB has been woefully deficient in this respect. For the reasons previously stated, CNLOPB has defaulted in its role as safety regulator when it comes to helicopter transport safety.

SPECIFIC ISSUES

(vi) What is the appropriate standard of First Response Search and Rescue that the CNLOPB should require of all operators in Newfoundland and Labrador offshore.

62. The answer to this issue is quite simple. The safety regulator should require of the operators in the Newfoundland and Labrador offshore the highest standard of First Response Search and Rescue available in the world. We know that the conditions in the Newfoundland and Labrador offshore are indeed the most challenging faced by the offshore petroleum industry anywhere in the world. It flows from this that the required standard of First Response Search and Rescue must be the best that is possibly available.

(vii) Are there circumstances, other than declared emergencies, when a rescue helicopter should be dispatched to assist a transport helicopter.

63. Anytime when a helicopter cannot perform in accordance with its designed capabilities, there is the potential for a life threatening problem. There is without question a high frequency of sensor alerts that indicate a problem with the sensor rather than a problem with the aircraft. The problem is of course, it is not known until the helicopter has safely landed which kind of problem exists. Anytime there is an indication of the possibility of a loss of flight capability by a helicopter, then a rescue helicopter should be dispatched. The inquiry has heard ample evidence as to the perils of cold water immersion. As good as the helicopter transportation suits may be, there is no guarantee of perfection. The fact of the matter is that a downed helicopter will leave its passengers potentially in the water for periods of hours. Minutes can be critical when it comes to avoiding the consequences of hypothermia. Seventeen passengers in the water would be a massive helicopter rescue operation. Any means to avoid delay in undertaking that operation must be adopted.

(viii) Should there be a more formal protocol regarding the roles of the Department of National Defence and the helicopter operator regarding first response.

64. The evidence of Paul Drover indicated that irrespective of the ownership of the Search and Rescue assets, helicopter or otherwise, once a Search and Rescue mission is commenced, DND and Coast Guard take control of the operation. There does not appear to be any evidence before the Inquiry which suggests that this arrangement does not work or that some modifications are needed. A more formal protocol may have the effect of creating the

impression that the role of DND and Coast Guard in Search and Rescue for the Newfoundland and Labrador offshore is diminished. Effective Search and Rescue in the Newfoundland and Labrador offshore will require the resources and expertise of DND and Coast Guard and nothing should be done which potentially diminishes that involvement.

- (ix) **Are operational limitations on helicopter transport, in addition to those dictated by Transport Canada, required to ensure the standard of First Response Search and Rescue is able to be maintained at all times.**

65. The evidence before the Inquiry has demonstrated two matters. Firstly, the instance of fatality in a night crash or ditching of a helicopter appears to be 70% as opposed to 39% for a daytime incident. Secondly, current flotation devices attached to the helicopters being used in Newfoundland and Labrador offshore are ineffective above certain sea states. Night time helicopter transportation to the Newfoundland and Labrador offshore is only necessary in the event of an emergency. Regularly scheduled flights should not occur during the night. The argument put forward by the operators that night time flights are necessary to deal with back ups caused by poor weather conditions is not a sufficient answer to the heightened risk to helicopter passengers on a helicopter which ditches at night. Additionally, the necessity of visual reference for a successful ditching heightens the risk of night flying. Without question, the same issues arise because of fog; however, fog is much less easy to predict than darkness and would likely render helicopter transportation unavailable for a large part of the year. As the witness, Brian Murphy, has said in his evidence, the events of the crash of Cougar flight 491 have increased the probability of a controlled ditching. In high sea states,

however, the control of a ditching will soon be lost as the high centre of gravity will soon mean that a ditched helicopter quickly becomes an overturned submerged helicopter in the absence of appropriate flotation. Proper operational limitations should be imposed so as to limit flights to times when the sea state will not compromise the floatation of a helicopter and day light is available.

- (x) **Should the CNLOPB impose additional operational requirements on operators to ensure that the risk from helicopter travel in the Newfoundland and Labrador offshore is as low as is reasonably practical.**

66. The mere fact that this question has to be asked is another condemnation of CNLOPB. It is the job of CNLOPB to ensure that appropriate steps are taken by the operators to achieve this result. If ancillary fuel tanks are to be located within the helicopter, they should be equipped with hand grabs to enable them to be used as an assist to exiting a submerged or submerging helicopter. Seating should be arranged so as to minimize the potential of obstruction to window exits and of course should be managed in such a manner that the aircraft balance is maintained. Mr. Tabers work indicates that the effect of the stroking seat on egress needs to be explored. The absence of safety screening for passengers departing the offshore installations is understandable in a context where everybody is required to wear helicopter transportation suits and luggage is dealt with by the operator. It is a reality, however, that these are situations with helicopter transportation which are a highly stressful situation. It is submitted that the likelihood of an individual being able to bring a dangerous object onto

a helicopter should be examined by the safety regulator to determine whether or not screening for departure from the offshore installations is necessary.

(xi) Can helicopter transport safety be affected by the capacity of the helicopter transport fleet and, if so, what role should CNLOPB play in the determination of fleet capacity.

67. As indicated previously, night flying should be prohibited. The operators use as a justification for night flying the need to clear up backlogs of passengers caused by cancelled flights during the foggy seasons. A certain amount of redundancy within the fleet can alleviate backlogs. CNLOPB, however, should set the requirements for safety and let the operators determine how to meet those requirements. The safety regulator will have to verify that the operators are meeting the safety requirements. It is not necessarily the case that helicopter fleet size is the only solution to the backlogs caused by cancelled flights.

(xii) What are the appropriate standards of offshore helicopter safety training to ensure that the risk to passengers is as low as is reasonably practicable both during training and helicopter transport.

68. It is apparent from Mr. Taber's paper that a more intense level of helicopter transport safety training than that currently being delivered by the Marine Institute and to a lesser extent, Survival Systems, is beneficial. There is no indication from Mr. Taber that increased repetitions of core escape exercises increase the risk to the trainees. Indeed, repetition would appear to increase comfort with the exercise and enhance the safety. It would also appear from the evidence of Dr. Colshaw and Mr. Taber that absolute fidelity to a particular aircraft

is not necessary for successful training. However, fidelity to the actual steps that an individual will have to take in exiting from a submerged helicopter like jettisoning the window underwater do seem to be more important. Additionally, fidelity to the types of mechanisms to be used for opening exits or restraining the passenger while seated also appears to be important. The UK experience seems to suggest that fidelity to weather and temperature conditions during training can be unduly dangerous. It appears, however, that the Marine Institute is a very long way away from the reality of the situation and that a greater degree of fidelity, while not an exact replication of the likely environment in a crash or ditching situation, would enhance the learning of helicopter passengers, and as such, their potential for survival.

(xiii) What personal protective equipment clothing is necessary for helicopter passengers and pilots; what are the standards and should the CNLOPB require guidelines to ensure such equipment and clothing is properly fitted.

69. A safety regulator, properly functioning, will ensure that prescribed protective equipment is functioning properly. The direction from the regulator should not be a checklist for equipment and a verification that each item is working or properly fitted. Rather the direction from the safety regulator should be that a given standard of safety equipment, be it clothing or electronics, that is supplied to the workers shall achieve the function for which they were designed. The inspection or audit process of the safety regulator is what determines the effectiveness of this approach. Inspection and audits should be functional and not just limited to checklists. The question is not 'does the operator have the equipment'.

The question is 'does it fulfill its purposes'. When a safety regulator has knowledge of a deficiency raised about a safety item, it should be able to undertake such exercises as are necessary to ascertain whether or not the equipment or clothing concerned is properly functioning. Most of all, the safety regulator should have an attitude and disposition that safety is first and it should not accept explanations as to why safety cannot be achieved. If safety cannot be achieved, then an alternate means of operation must be substituted.

(xiv) Are changes needed to maximize worker and pilot participation in the development, implementation and monitoring of helicopter safety initiatives and activities.

70. It is apparent that the current safety regulator has not been supportive of the Occupational Health and Safety system as it relates to helicopter transportation safety. The Provincial Occupational Health and Safety regime generally has a very good record in supporting and promoting safety initiatives and activities. The instances reviewed earlier in this submission with respect to CNLOPB's response to the activities the Occupational Health and Safety Committees, whether, not following up on items in Minutes, not enforcing employee participation, not enforcing information flow from the operators on the HUEBA, or not ensuring participation in the training and qualifications process, all indicate that there is a problem not with the regulatory system but with the attitude and motivation of the regulator. What is needed is a new independent safety regulator that is not drawn into a culture of facilitation and promotion of offshore hydro-carbon exploration and production.

(xv) Should offshore workers have a level of personal accountability for their own safety in helicopter transport.

71. There is absolutely no question that offshore workers should have a level of personal accountability for their own safety in helicopter transport, and this includes above all speaking out when something is not right. The precondition to personal accountability is knowledge, and it is apparent that the information flow both in terms of what individuals can do to improve their chances for surviving a helicopter ditching or crash and the actual risks they are dealing with has been deficient. The auxiliary fuel tank on the S-92 was situated between passengers and window access for a long time before it was changed, yet most people only spoke up after a catastrophic event. Suits did not fit and many people just put up with it. Some questions remain unanswered, however; did persons actually know that the seals in their suits were not working; did persons know the risk of increased buoyancy caused by the excess material in the suit; did persons know the difficulty caused by the auxiliary tank in terms of an individual pushing out a window. Knowledge goes hand in hand with accountability. Before we hold individuals accountable, we must provide them with the knowledge they need. Workers can only dress appropriately for flights if they know what appropriate dress is. Personal accountability must also take into account the realities of the work force. A 50-year old who has been overweight for most of his or her adult life is unlikely to find it very easy to change his/her fitness level. Personal accountability must not be implemented in a manner that it provides a tool for employers to get rid of persons they do not like.

(xvi) Does the CNLOPB exercise sufficient oversight of the oil operators, aviation contractors and subcontractors to ensure the risk to workers from helicopter transport is as low as reasonably practicable.

72. The answer to this question is clearly 'no'. The helicopter transportation suit was brought in in late 2008 in a manner that clearly posed unacceptable risk to the safety of employees of the operators. These risks were apparently observed by the CNLOPB's safety officers to the extent that the additional risk of excessive buoyancy was identified by one of them. Notwithstanding this identification and knowledge of risk, the only step that was taken was to ask the operators to do a presentation on how they intended to resolve the issues. At no time did CNLOPB assess the risk and the options for reducing it. The changes to the location of the auxiliary fuel tank occurred long after it had been put in place. It is a reasonable inference that CNLOPB safety officers would have flown on flights with the auxiliary fuel tank posing the risk that it did. No action was taken by CNLOPB in this respect. The process of the introduction of the EBS could only be described as a nine-year default in oversight by CNLOPB. CNLOPB was aware of the benefits and the availability of the EBS and stood by only uttering the occasional grumble as the operators meandered their way to implementation. CNLOPB provided some of the last evidence to this Inquiry. One would think it would have recognized the problems with its role disclosed in the evidence and have taken the opportunity to show examples of its active regulation. Nothing was forthcoming.

(xvii) Should the CNLOPB and oil operators aviation audits include reviews of past responses to declared emergencies and emergency preparedness exercises.

73. It is one thing to have a safety plan and it is another thing to use it. Emergency preparedness exercises are designed to test the validity of the safety plan. A response to a declared emergency is an actual exercise of the safety plan. Any safety professional will tell you that the one thing that is done after such events is a debriefing to ascertain if the safety plan worked. The job of the safety regulator is to verify that the safety plan is appropriate. No better means exists than to audit those events when the plan has actually been acted upon, either in reality or simulation.

(xviii) What information from the helicopter operator about flight operation should the CNLOPB require the oil operators to provide to offshore workers.

74. As previously stated, the first pillar of Occupational Health and Safety is the right to know. Nothing ensures that a safety risk will be eliminated or mitigated like the knowledge on the part of the persons exposed to the risk that it exists. Consider whether extraordinary efforts to change out the studs on the S-92 oil filter mounting would have been made if workers like Lori Chin's husband had started to refuse to fly because they had knowledge of this risk. Knowledge of risk harms no one. The ability to keep it secret potentially delays its elimination. The true safety culture does not hide anything. Information promotes participation and participation promotes safety.

(xix) Does the CNLOPB have sufficient resources and expertise, including access to independent aviation expertise, to evaluate whether a proposal or plan for helicopter transport from the industry ensures that the risks of helicopter transport are as low as reasonably practicable.

75. The offshore oil industry is the most wealthy industrial enterprise that has ever existed in this jurisdiction. The cost of regulation is a cost of doing business. Resources and expertise can be purchased. They need not be a permanent part of the establishment but can be provided on a contractual basis. CNLOPB has not done the job properly. We submit, however, that it is not really a question of resources and expertise; rather, it is a question of motivation. CNLOPB has not been motivated to exercise its regulatory authority in respect of helicopter transportation safety in the Newfoundland and Labrador offshore. CEP, Local 2121 does not doubt for a moment that such expertise would be available were CNLOPB motivated to access it. The validation of a proposal or plan for helicopter transport takes time and potentially delays the operators in moving forward as they wish. The operators had a plan to have a single suit that doubled for helicopter transportation and abandonment. This potentially saved money and eliminated logistical issues. CNLOPB was not motivated to tell them that their plan was not working and to proceed by an alternate means. Had they been so motivated, we have no difficulty in believing that the resources are out there to evaluate such a plan and that CNLOPB would have been able to pay for such an evaluation.

(xx) Should the CNLOPB more directly involve itself in studies and research in Newfoundland and Labrador and in other jurisdictions to improve safety where offshore oil industry uses helicopter transport.

76. If a safety regulator accepts that safety is a process of continual improvement, then it will support research and investigation in those areas. Whether this is done by direct involvement or by moral suasion on the operators to support such research is a matter of some

indifference to CEP, Local 2121. The important thing is that such research be continued. Without the research that has been before this Inquiry, it would be greatly handicapped in its ability to ascertain whether or not CNLOPB has met the standards required of the safety operator. For example, the research on breath-hold time in cold waters has really provided the impetus for developing EBS. The operators are required under the legislation to allocate money for research and development. It should not be difficult for a portion of these funds to be directed to research applicable to helicopter transport in this jurisdiction.

(xxi) Should there be safety conferences for all parties involved in offshore helicopter transport, and if so, how often should they be held.

77. Safety conferences can provide a focus for a process of continuous improvement in safety. If such conferences are to be held, they should be closely aligned with the Occupational Health and Safety system so that they do not tend to diminish the importance of that process. The Occupational Health and Safety system is the grass roots basis of advances in safety. An enhanced Occupational Health and Safety system, which genuinely values the input of all the participants in the offshore petroleum industry will provide a continuing focus on safety on a daily basis.

(xxii) How often should the CNLOPB review its regulations, guidelines and standards with respect to offshore helicopter transport.

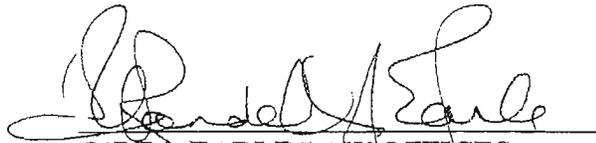
78. The idea of a time to review regulations, guidelines and standards is inconsistent with an optimal safety system. An optimal safety system works on the basis of continuous

improvement. More study is required as to the mode of regulation to be used by a safety regulator in the Newfoundland and Labrador offshore. This is not a matter that has been sufficiently explored by this Inquiry. The mode of regulation will determine whether or not a review cycle is necessary. The danger with a review cycle is that things are written in stone pending review. One need only look at the review cycle associated with the Newfoundland and Labrador Work Health, Safety and Compensation Commission Act. While it unquestionably does lead to a comprehensive review of that Act, it tends to support the status quo in between reviews. With offshore oil and helicopter transportation, we are dealing with a rapidly evolving industry. This Inquiry has not even glanced at the issues posed for helicopter transportation by distant drilling in the Orphan Basin. Currently helicopters travelling to the Orphan Basin have two internal auxiliary tanks. The question might be asked in light of a refusal to work where one tank was installed, what investigation CNLOPB has made of the effect of two such tanks on helicopter transport. Likewise, it might be appropriately asked what consideration of demands on Search and Rescue response time has been made by CNLOPB in light of the extended distance such helicopters will travel and limitations imposed on onsite rescue time for Search and Rescue helicopters posed by the distance. Clearly, such reviews and necessary adaptations to this safety regime cannot be left to a periodic review. The system must be dynamic and able to respond to challenges as they arise.

CONCLUSION

79. CEP Local 2121 would like to thank the Inquiry for the opportunities it has had to make submissions in respect of its important work. The assistance and cooperation of Inquiry Counsel and staff is sincerely appreciated. The Inquiry staff and the Commissioner can feel with some confidence that their work has already contributed to the improvement of safety in Newfoundland and Labrador offshore. We ask you though not to rest on your laurels for there is much to be done and a large challenge to be met.

DATED at St. John's, NL this 30th day of July, 2010.


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Counsel for CEP Local 2121

**LIST OF AUTHORITIES
OF THE COMMUNICATIONS, ENERGY
AND PAPERWORKERS UNION, LOCAL 2121
TO THE OFFSHORE HELICOPTER SAFETY INQUIRY**

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Report of the Public Inquiry into the Piper Alpha Disaster, Page 382, Paragraph 22.20	37
Evidence of Lori Chin, February 10, 2010, Page 24, Lines 3-18	38

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1 indicated to us, and this was done verbally,
 2 but immediately acted on, by the C-NLOPB that
 3 fit checks were going to be done on every
 4 employee, every person travelling offshore
 5 prior to flight.
 6 ROIL, Q.C.:
 7 Q. And whose employees were doing that work?
 8 MR. COLLINS:
 9 A. Helly Hansen was doing that work for the first
 10 12 weeks.
 11 ROIL, Q.C.:
 12 Q. And then afterwards, who continued to do that
 13 work?
 14 MR. COLLINS:
 15 A. We have now set up a training protocol for
 16 Cougar staff members that handle suit
 17 issuance. So it's a seven-day training
 18 program where they come into our shop. They
 19 do the first same three days as any new
 20 technicians would do in our shop, on all our
 21 maintenance procedures and then they did four
 22 days of fitting training.
 23 ROIL, Q.C.:
 24 Q. And what have you determined as the result of
 25 this fitting process? We heard some evidence

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1 about people being on a fly and a no-fly list.
 2 MR. COLLINS:
 3 A. Correct.
 4 ROIL, Q.C.:
 5 Q. You're familiar with those kinds of
 6 expressions?
 7 MR. COLLINS:
 8 A. Yes. Well, if a passenger do not fit--pass
 9 the fitting test, they were immediately not
 10 cleared for flight and would have to travel
 11 offshore by alternative means until a properly
 12 fitting suit was available.
 13 ROIL, Q.C.:
 14 Q. And what, if anything, was done to make or
 15 procure a properly fitting suit?
 16 MR. COLLINS:
 17 A. Through our fitting process found that some
 18 passengers had issues with the face seal. So
 19 we introduced four new suit sizes, often
 20 referred to as the modified suits. So these
 21 would have been a standard medium suit with a
 22 smaller hood. By smaller hood, it allowed a
 23 proper safe face seal to be formed. So that
 24 was done as quickly as possible and currently
 25 today, 100 and--bear with me as I look through

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1 my notes. 107 people are flying in those
 2 modified suits.
 3 ROIL, Q.C.:
 4 Q. 107 are flying, okay. Do you know, as of
 5 today, approximately how many people are not
 6 flying?
 7 MR. COLLINS:
 8 A. 180.
 9 ROIL, Q.C.:
 10 Q. Sorry?
 11 MR. COLLINS:
 12 A. 180.
 13 ROIL, Q.C.:
 14 Q. 180, okay. Now are those 180 people, to your
 15 knowledge, all travelling by vessel or what is
 16 the make-up of these people?
 17 MR. COLLINS:
 18 A. They are either travelling by vessel or not
 19 travelling. This list would employ regular
 20 rotators, office staff that may travel
 21 offshore once every few years. It may be
 22 service contractors that may be required to
 23 fly offshore. So the spectrum of fittings
 24 went deep into the organizations, including,
 25 you know, seldom travellers where it might be

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1 an office person that flies once every three
 2 or four years.
 3 ROIL, Q.C.:
 4 Q. And so that 180, what is that out of? What is
 5 the maximum number of people that have been
 6 examined and tested and fitted by you or the
 7 Cougar people under your direction?
 8 MR. COLLINS:
 9 A. It's approximately 3,000 is where we have the
 10 number pegged in terms of fittings that have
 11 been done. We've done both at the heliport,
 12 outside fitting locations is our shop. In our
 13 shop alone, we've done 830 odd fittings at our
 14 location on Airport Road.
 15 ROIL, Q.C.:
 16 Q. Here in Newfoundland?
 17 MR. COLLINS:
 18 A. Here in Newfoundland.
 19 ROIL, Q.C.:
 20 Q. Yes, and the changes that you have made, for
 21 instance, putting a smaller hood on a larger
 22 jacket, is that something that requires that
 23 that suit be approved by Transport Canada as
 24 well?
 25 MR. COLLINS:

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<p>1 A. Yes, we had to put a compliance plan in to</p> <p>2 Transport Canada for their agreement and their</p> <p>3 agreement was that if we went to smaller</p> <p>4 components, i.e. smaller hoods, where that was</p> <p>5 a proven component, being smaller would be</p> <p>6 tighter seals, that we were still compliant</p> <p>7 with our approval. Any time that we wanted to</p> <p>8 make changes the other way to larger</p> <p>9 components, we have additional testing to do</p> <p>10 and pool work to do to get those approved.</p> <p>11 ROIL, Q.C.:</p> <p>12 Q. So we now have a pool of the so-called</p> <p>13 standard suit, the E-452?</p> <p>14 MR. COLLINS:</p> <p>15 A. Correct.</p> <p>16 ROIL, Q.C.:</p> <p>17 Q. We have a series of amended or slightly</p> <p>18 modified suits?</p> <p>19 MR. COLLINS:</p> <p>20 A. And there's four suit sizes there.</p> <p>21 ROIL, Q.C.:</p> <p>22 Q. Okay.</p> <p>23 MR. COLLINS:</p> <p>24 A. So we have now the total of 11 sizes in use.</p> <p>25 ROIL, Q.C.:</p>	<p>1 been identified as custom suits. We have</p> <p>2 already prototyped three new suit sizes to add</p> <p>3 to the HTS-1 range, which we either have</p> <p>4 already fitted or expect to fit 13 of those 25</p> <p>5 people, and at the end of the day, we would</p> <p>6 finish up with 12 true custom suits.</p> <p>7 ROIL, Q.C.:</p> <p>8 Q. Okay, and the true custom suit, what kind of</p> <p>9 an item would be there that would require them</p> <p>10 to have a--for me to have a made-to-measure</p> <p>11 suit, if you will?</p> <p>12 MR. COLLINS:</p> <p>13 A. It would be significant changes required to</p> <p>14 leg length, arm length, whether there's a cuff</p> <p>15 change that would be required to go outside</p> <p>16 the standard range of cuffs. So the person's</p> <p>17 size, being that everybody is typically</p> <p>18 unique, would require specific changes to fit</p> <p>19 them.</p> <p>20 ROIL, Q.C.:</p> <p>21 Q. The HTS-1 suit project, when was that started?</p> <p>22 MR. COLLINS:</p> <p>23 A. That was started in December 2008.</p> <p>24 ROIL, Q.C.:</p> <p>25 Q. And you're expecting within the 12 calendar</p>
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<p>1 Q. With a total of 11 sizes, as opposed to the</p> <p>2 initial?</p> <p>3 MR. COLLINS:</p> <p>4 A. Initial 7.</p> <p>5 ROIL, Q.C.:</p> <p>6 Q. Okay. What about custom suits?</p> <p>7 MR. COLLINS:</p> <p>8 A. In Newfoundland, prior to the accident, there</p> <p>9 were seven custom suits made.</p> <p>10 ROIL, Q.C.:</p> <p>11 Q. And since the incident?</p> <p>12 MR. COLLINS:</p> <p>13 A. The custom suit process, because we had the</p> <p>14 HTS-1 project ongoing and that HTS-1 suit</p> <p>15 project is a partnership of the three</p> <p>16 Newfoundland operators, the Nova Scotia</p> <p>17 operators and Helly Hansen, we looked at that</p> <p>18 as a potential solution for some of the fit</p> <p>19 issues. So of the 180 people that are</p> <p>20 currently on the no-fly list, eight are</p> <p>21 labelled to come in and have fitting in the</p> <p>22 modified suits. 40 are still labelled to come</p> <p>23 in for fitting in the HTS-1, and 115 have had</p> <p>24 fittings done and are cleared to fly in the</p> <p>25 HTS-1. So that leaves 25 people that have</p>	<p>1 months that it will be final and have full</p> <p>2 approval?</p> <p>3 MR. COLLINS:</p> <p>4 A. Yes.</p> <p>5 ROIL, Q.C.:</p> <p>6 Q. What will happen then with respect to the E-</p> <p>7 452 suit?</p> <p>8 MR. COLLINS:</p> <p>9 A. Well, the HTS-1 suit, first off, is approved</p> <p>10 to only the aviation standard.</p> <p>11 ROIL, Q.C.:</p> <p>12 Q. Yes, why is that?</p> <p>13 MR. COLLINS:</p> <p>14 A. As part of the HTS-1 project, we started the</p> <p>15 project essentially with, you know, a white</p> <p>16 sheet of paper and then went "what are the</p> <p>17 constraints that we're going to put on the</p> <p>18 suit?" So the first one was, okay, what</p> <p>19 standards are we going to approve to? One of</p> <p>20 the features of the HTS-1 suit is an internal</p> <p>21 adjustable suspension system, so you can</p> <p>22 adjust the suit length to allow for a better</p> <p>23 fit. The downside is trying to pass cold</p> <p>24 donning and two-minute donning tests that are</p> <p>25 required in the marine standard are nearly</p>

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<p>1 closure at top puts sideways pressure on neck, 2 presenting a risk of neck injury, and C- 3 NLOPB", if you'll go to the right side, "is 4 aware of these concerns and has brought them 5 to the attention of the operators. We're also 6 aware of a possible problem with excess 7 buoyancy and a problem related to sizing of 8 the suits, too few sizes to fit all 9 individuals, and as the current suits have 10 been certified as meeting Canadian Standard, 11 there has been some reluctance on the part of 12 the industry to modify them". So you actually 13 -- I was interested to hear how this come 14 about. You actually brought a new issue with 15 these suits to the table, and it's the first 16 time I had heard it being brought up, you 17 indicated that one of your safety officers 18 during training had identified that there was 19 an issue of excess buoyancy with these suits, 20 so that increasing the risk, for instance, 21 that in the event of a submerged helicopter, 22 an individual would be jammed against the 23 upside of the unit? 24 MR. PIKE: 25 A. Certainly make it more difficult for them to</p>	<p>1 pull the zipper tight -- 2 MR. PIKE: 3 A. That would compromise the suit, yes. 4 EARLE, Q.C.: 5 Q. Yes, and, of course, a poor seal in the event 6 of the use of the suit offshore, the risk is 7 hypothermia? 8 MR. PIKE: 9 A. Yes. 10 EARLE, Q.C.: 11 Q. As well we had the issue of potential direct 12 injury from the suit? 13 MR. PIKE: 14 A. That risk existed. 15 EARLE, Q.C.: 16 Q. We had the issue of over buoyancy which your 17 staff identified in training? 18 MR. PIKE: 19 A. Yes. 20 EARLE, Q.C.: 21 Q. And that's the potential of someone being 22 floated, as I said, against the upside of a 23 submerged helicopter? 24 MR. PIKE: 25 A. Created a difficulty in exiting the</p>
<p>1 exit, yes. 2 EARLE, Q.C.: 3 Q. So these were issues you were aware of? 4 MR. PIKE: 5 A. Yes. 6 EARLE, Q.C.: 7 Q. And you enlarged upon them yesterday and told 8 us that you were aware that there was an issue 9 in respect of the fit, that people -- they fit 10 so poorly that people could be caused to trip 11 when wearing them? 12 MR. PIKE: 13 A. Yes. 14 EARLE, Q.C.: 15 Q. So, Mr. Pike, it seems to me that at that 16 point in time, the following safety risks were 17 out there; the risk of a poor seal because 18 somebody couldn't pull it up tight because the 19 suit didn't fit? 20 MR. PIKE: 21 A. In hindsight, that certainly is a piece. It 22 was not seen to be that at the time, no, but 23 in hindsight, you're correct. 24 EARLE, Q.C.: 25 Q. Well, would you not agree that being able to</p>	<p>1 helicopter, yes. 2 EARLE, Q.C.: 3 Q. The reason -- 4 MR. PIKE: 5 A. I'm distinguishing it between what you're 6 saying and what I'm saying, is the buoyancy 7 issue was one of making it more difficult to 8 get out. I'm distinguishing here, but -- 9 EARLE, Q.C.: 10 Q. Okay, increasing the difficulty. 11 MR. PIKE: 12 A. I'm acknowledging, in part, what you're 13 saying. 14 EARLE, Q.C.: 15 Q. We're going to get into later on what's an 16 appreciable increase in risk. 17 COMMISSIONER: 18 Q. This might be a good time to break. 19 EARLE, Q.C.: 20 Q. And just one other, and the risk that someone 21 might injure themselves while walking, you know, 22 moving about in the suit because of tripping? 23 MR. PIKE: 24 A. That was identified as a hazard, yes. 25 EARLE, Q.C.:</p>

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1 Q. I think we're dead on quarter to 11 now.
 2 COMMISSIONER:
 3 Q. We'll take the break now.
 4 (RECESS)
 5 EARLE, Q.C.:
 6 Q. Continuing on the risks that were out there, I
 7 suggest to you as well that -- by the way, if
 8 you could speak up a little in your answers.
 9 I'm not -- I'm having no problem hearing you,
 10 but I understand some of the people in the
 11 back of the room are really having trouble.
 12 MR. PIKE:
 13 A. That's the message I received.
 14 EARLE, Q.C.:
 15 Q. Hearing those answers. So on the risks that
 16 were out there, there's also I suggest to you
 17 a risk of the suit interfering with an
 18 individual's ability to function in an
 19 emergency situation. If you've got a suit
 20 that's got material hanging down, that your
 21 feet tend to pull out of the shoes when you
 22 move, this is not going to allow you to move
 23 at the pace and in the manner that you should
 24 in an emergency, would you agree with me on
 25 that?

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1 MR. PIKE:
 2 A. That would be a challenge, yes, sir.
 3 EARLE, Q.C.:
 4 Q. Yeah, so we have these risks. So the question
 5 is what did you do about it at C-NLOPB,
 6 because if we look at the bottom of page 10 of
 7 Exhibit 200, which is still up on the screen,
 8 we see, "JOHS Committees are rarely informed
 9 about these discussions in respect of flight
 10 suits. The best way to ensure that the
 11 committee is informed is to raise the issue in
 12 a JOHS meeting which obliges operators to
 13 respond within 30 days. The C-NLOPB monitors
 14 the JOHS committee's meeting Minutes and
 15 verifies that operators respond to issues
 16 raised in these Minutes". That's what you're
 17 telling people, that's what happened at the
 18 FPSO, the Terra Nova FPSO, and over that 11
 19 month period time and time again it's NTR,
 20 nothing to report. So what did you do?
 21 MR. PIKE:
 22 A. My understanding was that the committees were
 23 being informed -- the operators were working
 24 this issue. They identified a plan in July
 25 and they were working on it. My understanding

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1 was that that plan was shared with the
 2 committees. My understanding was that my
 3 staff, with the different installations, were
 4 following those folks. So we were following
 5 up, these issues were being worked. I had --
 6 the communication may not have been as good as
 7 it should have been, but my understanding was
 8 that the committees were being made aware of
 9 what actions the operators were taking to
 10 correct the problems with the suits.
 11 EARLE, Q.C.:
 12 Q. But what were you doing about the risks?
 13 MR. PIKE:
 14 A. One of the ways you mitigate the risk is by
 15 using a piece of equipment that meets the
 16 standard. These suits met the standard. So
 17 we had a challenge, and we were attempting to
 18 work through that piece.
 19 EARLE, Q.C.:
 20 Q. Mr. Pike, this is, I've got to say, part of
 21 your evidence that troubles me the most. This
 22 suit met a Transport Canada standard, but it
 23 was no good we found out after an extensive
 24 sizing exercise had been done, it was no good
 25 for 9 percent of the workers. Surely, Mr.

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1 Pike, C-NLOPB has the power to say the suit
 2 might meet the Transport Canada standard, but
 3 it doesn't do what we need?
 4 MR. PIKE:
 5 A. We can certainly say that, yes.
 6 EARLE, Q.C.:
 7 Q. So why didn't C-NLOPB do exactly what the
 8 operators did when they were met by the uproar
 9 in their town hall meetings, and say until we
 10 get a suit that fits you, you go back and
 11 forth by boat? Why didn't C-NLOPB, when it
 12 knew about these risks, turn around and say
 13 the suit doesn't meet our requirements, people
 14 will have to travel by boat if you can't have
 15 a suit that fits?
 16 MR. PIKE:
 17 A. Your comments are being made in hindsight,
 18 sir. At the time, we understood there was --
 19 the significance of those risks that you refer
 20 to are looked at in a very different context
 21 today, or post March 12th, than they were in
 22 the summer of 2008. We're also dealing with a
 23 suit that had been used, at least its previous
 24 model had been used extensively, and
 25 successfully in Nova Scotia. So they had used

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<p>1 it in Nova Scotia for an extended period of</p> <p>2 time successfully, a similar design, not</p> <p>3 exactly the same suit. What we were supposed</p> <p>4 to be dealing with was a newer suit. What had</p> <p>5 happened between the model that had been used</p> <p>6 successfully in Nova Scotia and the model that</p> <p>7 we had implemented here in this area, to say</p> <p>8 why wasn't that done in the summer of 2008 is</p> <p>9 to say that with knowledge of hindsight of</p> <p>10 what happened on March 12th. Were the issues</p> <p>11 being worked with the industry, were we</p> <p>12 looking at the suits, were those issues being</p> <p>13 taken; yes, they were, sir. Did we go far</p> <p>14 enough; in hindsight, no, but we were working</p> <p>15 those issues, sir, the operators were working</p> <p>16 those issues, and we were trying to identify</p> <p>17 what the problems were.</p> <p>18 EARLE, Q.C.:</p> <p>19 Q. Mr. Pike, did C-NLOPB do an inspection on the</p> <p>20 suits after the item had appeared in the</p> <p>21 Petro-Canada Minutes for two months, for three</p> <p>22 months?</p> <p>23 MR. PIKE:</p> <p>24 A. What do you mean by did we do an inspection?</p> <p>25 EARLE, Q.C.:</p>	<p>1 Q. Mr. Pike, you say we operate with hindsight.</p> <p>2 Yesterday you talked about the necessity for</p> <p>3 focus. I put it to you that March 12th didn't</p> <p>4 provide that much new information. What it</p> <p>5 did was it provided focus, and the people I</p> <p>6 represent looked to the regulator to ensure</p> <p>7 that there was focus.</p> <p>8 MR. PIKE:</p> <p>9 A. Just a follow-up comment here, Mr. Earle, I</p> <p>10 personally spent three days on Hibernia</p> <p>11 Platform in August of 2008 addressing the</p> <p>12 issues of the worker representatives on that</p> <p>13 committee, and at no point did any one of</p> <p>14 those people raise the issue of the flight</p> <p>15 suits.</p> <p>16 EARLE, Q.C.:</p> <p>17 Q. Yes, but --</p> <p>18 MR. PIKE:</p> <p>19 A. I can't say we didn't discuss it, but when we</p> <p>20 identified the issues during those meetings,</p> <p>21 flight suits did not come up. That's my</p> <p>22 personal piece in this. We understood there</p> <p>23 was an issue, we were following the issue.</p> <p>24 EARLE, Q.C.:</p> <p>25 Q. Mr. Pike, this is not personal, this is about</p>
<p>1 Q. Did you say to one of your safety officers,</p> <p>2 listen, go out to the heliport, look at the</p> <p>3 people when they're suited up, watch ten</p> <p>4 flights go out, and do a report on your</p> <p>5 observations as a safety expert on these</p> <p>6 suits?</p> <p>7 MR. PIKE:</p> <p>8 A. There was not a specific inspection required.</p> <p>9 Our safety officers travel offshore on a</p> <p>10 regular basis, they were observing what was</p> <p>11 happening as they travelled offshore with</p> <p>12 these suits.</p> <p>13 EARLE, Q.C.:</p> <p>14 Q. Yes, one of your safety officers in his</p> <p>15 training reported that there was a buoyancy</p> <p>16 problem with the suit?</p> <p>17 MR. PIKE:</p> <p>18 A. Yes.</p> <p>19 EARLE, Q.C.:</p> <p>20 Q. But you took no specific action. The</p> <p>21 collection of information was incidental to</p> <p>22 the performance of your other duties.</p> <p>23 MR. PIKE:</p> <p>24 A. Taken from that perspective, yes.</p> <p>25 EARLE, Q.C.:</p>	<p>1 the role of the Chief Safety Officer.</p> <p>2 MR. PIKE:</p> <p>3 A. I understand, sir.</p> <p>4 EARLE, Q.C.:</p> <p>5 Q. This is about the role of C-NLOPB, but it did</p> <p>6 come up, Mr. Pike, in your November meetings?</p> <p>7 MR. PIKE:</p> <p>8 A. It did, sir.</p> <p>9 EARLE, Q.C.:</p> <p>10 Q. You were aware of it from the Terra Nova FPSO</p> <p>11 Minutes?</p> <p>12 MR. PIKE:</p> <p>13 A. Yes, sir.</p> <p>14 EARLE, Q.C.:</p> <p>15 Q. Okay, let's turn now to C-NLOPB's role vis a</p> <p>16 vis search and rescue. You mentioned at the</p> <p>17 beginning of your evidence that we have just</p> <p>18 passed the anniversary again of the Ocean</p> <p>19 Ranger. Now I take it that the Ocean Ranger</p> <p>20 Report occupies a prominent place in the</p> <p>21 library of C-NLOPB?</p> <p>22 MR. PIKE:</p> <p>23 A. Yes.</p> <p>24 EARLE, Q.C.:</p> <p>25 Q. And that you are all aware of its</p>

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<p>1 acknowledge that the operators came back when</p> <p>2 they said that there were some things that</p> <p>3 needed to be further researched on this</p> <p>4 technology. We concurred. Are we satisfied</p> <p>5 with the progress on this piece in hindsight;</p> <p>6 no, sir. Are we satisfied with CAPP's</p> <p>7 performance in this regard; no. You asked me</p> <p>8 earlier and I indicated -- I'm not sure how I</p> <p>9 answered it, but certainly in conversations</p> <p>10 with our Executive, we are not satisfied with</p> <p>11 CAPP's response in this regard, and that is</p> <p>12 one of the things that will be reviewed as to</p> <p>13 how we progress these things in the future.</p> <p>14 EARLE, Q.C.:</p> <p>15 Q. Mr. Pike, are you satisfied with the way C-</p> <p>16 NLOPB managed the issue?</p> <p>17 MR. PIKE:</p> <p>18 A. No.</p> <p>19 EARLE, Q.C.:</p> <p>20 Q. You used the phrase yesterday, "it required</p> <p>21 more focus".</p> <p>22 MR. PIKE:</p> <p>23 A. Yes.</p> <p>24 EARLE, Q.C.:</p> <p>25 Q. Did C-NLOPB take any steps to cause there to</p>	<p>1 instance it is the workplace that is to work</p> <p>2 out these issues. So, yes, we look at them to</p> <p>3 ensure that the committee is meeting, it is a</p> <p>4 way for us to monitor as to whether the</p> <p>5 committee is functioning. In the first</p> <p>6 instance when issues are raised, it is again</p> <p>7 on the premise that it is an internal</p> <p>8 responsibility system that in the first</p> <p>9 instance it is the workplace that works those</p> <p>10 issues.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. On one of your documents and we'll probably</p> <p>13 get to it later, I believe it's said that</p> <p>14 employees are told bring matters to the</p> <p>15 Occupational Health and Safety Committee, and</p> <p>16 if they're not resolved within 30 days, C-</p> <p>17 NLOPB can have a look at them. Do you</p> <p>18 understand that to be the standard?</p> <p>19 MR. PIKE:</p> <p>20 A. In general, yes.</p> <p>21 EARLE, Q.C.:</p> <p>22 Q. You are aware, and you were aware at the time,</p> <p>23 that at least with Petro-Canada, now Suncor,</p> <p>24 the issue of suit fit was -- appeared in their</p> <p>25 Minutes, the Occupational Health and Safety</p>
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<p>1 be more focus?</p> <p>2 MR. PIKE:</p> <p>3 A. The senior safety officer was following this</p> <p>4 particular file and working with this file, so</p> <p>5 from our perspective we had a focus. Whether</p> <p>6 he was able to devote the attention on this</p> <p>7 file that it may have needed, given his other</p> <p>8 duties, we can certainly review it, but in</p> <p>9 hindsight it is a file that required greater</p> <p>10 focus.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. Now let's turn to the issue of the suits</p> <p>13 specifically, and in that context, I think we</p> <p>14 should have an understanding at the outset,</p> <p>15 why do you understand C-NLOPB is copied</p> <p>16 monthly with the Minutes of the occupational</p> <p>17 health and safety committees?</p> <p>18 MR. PIKE:</p> <p>19 A. The principal reason is that the committees</p> <p>20 are there and working, they're there and</p> <p>21 meeting. The second piece is it's a way for</p> <p>22 us to monitor how the committee is</p> <p>23 functioning, that in the first instance, it's</p> <p>24 based in Canada on the premise of the internal</p> <p>25 responsibility system, that in the first</p>	<p>1 Committee Minutes, for a period from the end</p> <p>2 of March, 2008, right up to the last meeting</p> <p>3 prior to the crash of Flight 491?</p> <p>4 MR. PIKE:</p> <p>5 A. Yes.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. And C-NLOPB was aware at the time of that</p> <p>8 fact?</p> <p>9 MR. PIKE:</p> <p>10 A. Yes.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. And, in fact, in June of 2008, the operators</p> <p>13 were requested by C-NLOPB to make a</p> <p>14 presentation on what was going on with the</p> <p>15 suit issue, correct?</p> <p>16 MR. PIKE:</p> <p>17 A. Yes.</p> <p>18 EARLE, Q.C.:</p> <p>19 Q. And the issues that C-NLOPB was aware of, I</p> <p>20 think, can be identified if we look at Exhibit</p> <p>21 200, page 10, and if you look there, the</p> <p>22 second box down at the bottom under flight</p> <p>23 suits, "There are many concerns about the new</p> <p>24 suits. They are hard to zip up for many</p> <p>25 people, sizes don't fit bigger workers,</p>

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1 Q. I think we're dead on quarter to 11 now.
 2 COMMISSIONER:
 3 Q. We'll take the break now.
 4 (RECESS)
 5 EARLE, Q.C.:
 6 Q. Continuing on the risks that were out there, I
 7 suggest to you as well that -- by the way, if
 8 you could speak up a little in your answers.
 9 I'm not -- I'm having no problem hearing you,
 10 but I understand some of the people in the
 11 back of the room are really having trouble.
 12 MR. PIKE:
 13 A. That's the message I received.
 14 EARLE, Q.C.:
 15 Q. Hearing those answers. So on the risks that
 16 were out there, there's also I suggest to you
 17 a risk of the suit interfering with an
 18 individual's ability to function in an
 19 emergency situation. If you've got a suit
 20 that's got material hanging down, that your
 21 feet tend to pull out of the shoes when you
 22 move, this is not going to allow you to move
 23 at the pace and in the manner that you should
 24 in an emergency, would you agree with me on
 25 that?

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1 MR. PIKE:
 2 A. That would be a challenge, yes, sir.
 3 EARLE, Q.C.:
 4 Q. Yeah, so we have these risks. So the question
 5 is what did you do about it at C-NLOPB,
 6 because if we look at the bottom of page 10 of
 7 Exhibit 200, which is still up on the screen,
 8 we see, "JOHS Committees are rarely informed
 9 about these discussions in respect of flight
 10 suits. The best way to ensure that the
 11 committee is informed is to raise the issue in
 12 a JOHS meeting which obliges operators to
 13 respond within 30 days. The C-NLOPB monitors
 14 the JOHS committee's meeting Minutes and
 15 verifies that operators respond to issues
 16 raised in these Minutes". That's what you're
 17 telling people, that's what happened at the
 18 FPSO, the Terra Nova FPSO, and over that 11
 19 month period time and time again it's NTR,
 20 nothing to report. So what did you do?
 21 MR. PIKE:
 22 A. My understanding was that the committees were
 23 being informed -- the operators were working
 24 this issue. They identified a plan in July
 25 and they were working on it. My understanding

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1 was that that plan was shared with the
 2 committees. My understanding was that my
 3 staff, with the different installations, were
 4 following those folks. So we were following
 5 up, these issues were being worked. I had --
 6 the communication may not have been as good as
 7 it should have been, but my understanding was
 8 that the committees were being made aware of
 9 what actions the operators were taking to
 10 correct the problems with the suits.
 11 EARLE, Q.C.:
 12 Q. But what were you doing about the risks?
 13 MR. PIKE:
 14 A. One of the ways you mitigate the risk is by
 15 using a piece of equipment that meets the
 16 standard. These suits met the standard. So
 17 we had a challenge, and we were attempting to
 18 work through that piece.
 19 EARLE, Q.C.:
 20 Q. Mr. Pike, this is, I've got to say, part of
 21 your evidence that troubles me the most. This
 22 suit met a Transport Canada standard, but it
 23 was no good we found out after an extensive
 24 sizing exercise had been done, it was no good
 25 for 9 percent of the workers. Surely, Mr.

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1 Pike, C-NLOPB has the power to say the suit
 2 might meet the Transport Canada standard, but
 3 it doesn't do what we need?
 4 MR. PIKE:
 5 A. We can certainly say that, yes.
 6 EARLE, Q.C.:
 7 Q. So why didn't C-NLOPB do exactly what the
 8 operators did when they were met by the uproar
 9 in their town hall meetings, and say until we
 10 get a suit that fits you, you go back and
 11 forth by boat? Why didn't C-NLOPB, when it
 12 knew about these risks, turn around and say
 13 the suit doesn't meet our requirements, people
 14 will have to travel by boat if you can't have
 15 a suit that fits?
 16 MR. PIKE:
 17 A. Your comments are being made in hindsight,
 18 sir. At the time, we understood there was --
 19 the significance of those risks that you refer
 20 to are looked at in a very different context
 21 today, or post March 12th, than they were in
 22 the summer of 2008. We're also dealing with a
 23 suit that had been used, at least its previous
 24 model had been used extensively, and
 25 successfully in Nova Scotia. So they had used

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1 it in Nova Scotia for an extended period of
 2 time successfully, a similar design, not
 3 exactly the same suit. What we were supposed
 4 to be dealing with was a newer suit. What had
 5 happened between the model that had been used
 6 successfully in Nova Scotia and the model that
 7 we had implemented here in this area, to say
 8 why wasn't that done in the summer of 2008 is
 9 to say that with knowledge of hindsight of
 10 what happened on March 12th. Were the issues
 11 being worked with the industry, were we
 12 looking at the suits, were those issues being
 13 taken; yes, they were, sir. Did we go far
 14 enough; in hindsight, no, but we were working
 15 those issues, sir, the operators were working
 16 those issues, and we were trying to identify
 17 what the problems were.

18 EARLE, Q.C.:

19 Q. Mr. Pike, did C-NLOPB do an inspection on the
 20 suits after the item had appeared in the
 21 Petro-Canada Minutes for two months, for three
 22 months?

23 MR. PIKE:

24 A. What do you mean by did we do an inspection?

25 EARLE, Q.C.:

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1 Q. Did you say to one of your safety officers,
 2 listen, go out to the heliport, look at the
 3 people when they're suited up, watch ten
 4 flights go out, and do a report on your
 5 observations as a safety expert on these
 6 suits?

7 MR. PIKE:

8 A. There was not a specific inspection required.
 9 Our safety officers travel offshore on a
 10 regular basis, they were observing what was
 11 happening as they travelled offshore with
 12 these suits.

13 EARLE, Q.C.:

14 Q. Yes, one of your safety officers in his
 15 training reported that there was a buoyancy
 16 problem with the suit?

17 MR. PIKE:

18 A. Yes.

19 EARLE, Q.C.:

20 Q. But you took no specific action. The
 21 collection of information was incidental to
 22 the performance of your other duties.

23 MR. PIKE:

24 A. Taken from that perspective, yes.

25 EARLE, Q.C.:

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1 Q. Mr. Pike, you say we operate with hindsight.
 2 Yesterday you talked about the necessity for
 3 focus. I put it to you that March 12th didn't
 4 provide that much new information. What it
 5 did was it provided focus, and the people I
 6 represent looked to the regulator to ensure
 7 that there was focus.

8 MR. PIKE:

9 A. Just a follow-up comment here, Mr. Earle, I
 10 personally spent three days on Hibernia
 11 Platform in August of 2008 addressing the
 12 issues of the worker representatives on that
 13 committee, and at no point did any one of
 14 those people raise the issue of the flight
 15 suits.

16 EARLE, Q.C.:

17 Q. Yes, but --

18 MR. PIKE:

19 A. I can't say we didn't discuss it, but when we
 20 identified the issues during those meetings,
 21 flight suits did not come up. That's my
 22 personal piece in this. We understood there
 23 was an issue, we were following the issue.

24 EARLE, Q.C.:

25 Q. Mr. Pike, this is not personal, this is about

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1 the role of the Chief Safety Officer.

2 MR. PIKE:

3 A. I understand, sir.

4 EARLE, Q.C.:

5 Q. This is about the role of C-NLOPB, but it did
 6 come up, Mr. Pike, in your November meetings?

7 MR. PIKE:

8 A. It did, sir.

9 EARLE, Q.C.:

10 Q. You were aware of it from the Terra Nova FPSO
 11 Minutes?

12 MR. PIKE:

13 A. Yes, sir.

14 EARLE, Q.C.:

15 Q. Okay, let's turn now to C-NLOPB's role vis a
 16 vis search and rescue. You mentioned at the
 17 beginning of your evidence that we have just
 18 passed the anniversary again of the Ocean
 19 Ranger. Now I take it that the Ocean Ranger
 20 Report occupies a prominent place in the
 21 library of C-NLOPB?

22 MR. PIKE:

23 A. Yes.

24 EARLE, Q.C.:

25 Q. And that you are all aware of its

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1 Q. Okay. So what you're saying is -- I'm glad
 2 you made that point because this is a
 3 different impression than I had from HMDC in
 4 their evidence. What you're essentially
 5 saying is the effort by Helly Hansen in May of
 6 2009 was simply a part of the return to flying
 7 exercise and that was what uncovered the large
 8 problem?
 9 MS. FARRELL:
 10 A. I wouldn't say simply. I would say that this
 11 was a significant effort on the part of the
 12 operators to ensure due diligence with return
 13 to flying operations.
 14 EARLE, Q.C.:
 15 Q. So, and straightforward simple, when do you
 16 see the larger problem of a ten percent non-
 17 fit being discovered?
 18 MS. FARRELL:
 19 A. As we started to put people through that
 20 flight suit fit testing process and Helly
 21 Hansen flagged that there were concerns, that
 22 is when ultimately we could conclude we have a
 23 significant issue.
 24 EARLE, Q.C.:
 25 Q. Okay, and what was the impetus for that

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1 testing?
 2 MS. FARRELL:
 3 A. We asked Helly Hansen to be there, again, to
 4 provide the due diligence. As part of that,
 5 and the work that Suncor had already started
 6 to ensure that people were fitted, they were
 7 measured. I'll be honest, the path that we
 8 were on, and I think I said that in the
 9 presentation yesterday, the path that we were
 10 on is one that started with Suncor, that
 11 rolled into the work that started at the
 12 heliport with return to service and ultimately
 13 we are where we are.
 14 EARLE, Q.C.:
 15 Q. The question I asked you, Ms. Farrell, was
 16 what was the impetus? What caused this higher
 17 level of fit testing to be engaged?
 18 MS. FARRELL:
 19 A. Our due diligence.
 20 MR. VOKEY:
 21 A. And if I can just comment, there was a
 22 heightened sensitivity and we did have more
 23 individuals coming forward, and as Ms. Farrell
 24 indicated, for quite a period of time, the
 25 issue was tight wrist seals, which wouldn't

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1 impede, it was a comfort issue, and the issue
 2 with the seals around the face was thought, by
 3 all concerned, including Helly Hansen, to be a
 4 function of the stiffness of the zippers and
 5 the fact that the suits were new.
 6 EARLE, Q.C.:
 7 Q. Okay, it was -- the impetus was the heightened
 8 concern?
 9 MR. VOKEY:
 10 A. That is part of it, yes.
 11 EARLE, Q.C.:
 12 Q. Yeah.
 13 MS. FARRELL:
 14 A. And our need as operators to ensure that our
 15 people who are travelling offshore are doing
 16 so safely.
 17 EARLE, Q.C.:
 18 Q. Yeah, but simply put, and we know from the
 19 minutes, and let's go through them now.
 20 Starting at April 19th, we have at least one
 21 person saying the suit doesn't seal.
 22 MS. FARRELL:
 23 A. There was a person that indicated a concern
 24 with face seals, yes. I can't conclude from
 25 this that it didn't seal. The person had a

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1 concern with the face seal.
 2 EARLE, Q.C.:
 3 Q. Well, there was a person saying it didn't
 4 seal.
 5 MS. FARRELL:
 6 A. I think the words are there.
 7 EARLE, Q.C.:
 8 Q. Yeah, that was a person at risk.
 9 MS. FARRELL:
 10 A. Correct, it was a hazard.
 11 EARLE, Q.C.:
 12 Q. And, but what we see is, on the next page, is
 13 that the action is closed, and I take that to
 14 mean that it is considered to be dealt with by
 15 that response?
 16 MS. FARRELL:
 17 A. You actually need to speak to the members of
 18 the OHS committee. I don't get to close
 19 actions. They have to agree in their meeting
 20 to close it. I think you'll see in the next
 21 meeting that the action gets reopened.
 22 EARLE, Q.C.:
 23 Q. Yeah.
 24 MS. FARRELL:
 25 A. And in fact, in some cases, there are several

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1 actions are in place", and this is a little
 2 different than your evidence was yesterday, I
 3 believe, "Cougar personnel will survey
 4 outbound and inbound passengers for a six week
 5 period to determine whether seal and zipper
 6 issues are continuing to cause concerns.
 7 Cougar personnel will continue to check all
 8 outbound passengers to ensure personnel are
 9 able to properly zip the suits and don the
 10 hood prior to departure. Helly Hansen is
 11 continuing to apply products to the zipper to
 12 increase flexibility. As the cycle time on the
 13 suits increases, they expect the material and
 14 the zippers will relax. Helly Hansen also
 15 report that wrist seals are easing as cycle
 16 times on the suits increases. A follow-up
 17 meeting will be held in June, 2008, to discuss
 18 any continuing issues/concerns and determine
 19 whether any additional actions are required".
 20 So we're common ground this was what was
 21 before the Occupational Health and Safety
 22 Committee?
 23 MS. FARRELL:
 24 A. I think that's what I communicated yesterday.
 25 EARLE, Q.C.:

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1 Q. Yes. Now you notice that this says that
 2 Cougar will do the survey, and I think your
 3 evidence was that Helly Hansen was to do the
 4 survey?
 5 MS. FARRELL:
 6 A. Helly Hansen designed the survey, Cougar
 7 administered it. Helly Hansen compiled the
 8 results.
 9 EARLE, Q.C.:
 10 Q. Okay. That clarifies that. So the issue was
 11 on the table, and it appears actually to have
 12 been on the table back in March of 2008,
 13 right, because the response to something
 14 raised at an April meeting refers back to a
 15 meeting that was held in March?
 16 MS. FARRELL:
 17 A. I can't speak to what was on the March agenda.
 18 It came to my attention in April.
 19 EARLE, Q.C.:
 20 Q. You're not understanding me. You see the
 21 response on the second page of that Minute, it
 22 says, "A joint meeting was held on March
 23 31st".
 24 MS. FARRELL:
 25 A. Yes.

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1 EARLE, Q.C.:
 2 Q. So I think we can conclude from that, that the
 3 issue related to seals and zippers was on the
 4 table, if you will, extant any other words you
 5 want to use, prior to it coming up at this
 6 meeting of the Occupational Health and Safety?
 7 MS. FARRELL:
 8 A. I'm saying I became aware of it in April.
 9 There would be regular meetings between our
 10 supply chain people, the other operators
 11 supply chain people, and Helly Hansen. They
 12 would occur on a regular basis at this time,
 13 anyway, so I can't speak to what was in the
 14 OHS Minutes prior to this. I can simply say
 15 it came to my attention in April.
 16 EARLE, Q.C.:
 17 Q. That would be because you get copies of the
 18 OHS Minutes?
 19 MS. FARRELL:
 20 A. And I was asked to follow up on items, yes.
 21 EARLE, Q.C.:
 22 Q. Yeah, so somebody was dealing with it prior to
 23 yourself because clearly, you know, the whole
 24 business of the survey, the whole business of
 25 six week period of check, and the follow up on

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1 June 8th, this had come up at a March 31st
 2 meeting, right? Do you agree with that? If
 3 you could answer orally; remember now, this
 4 don't go on the transcript.
 5 MS. FARRELL:
 6 A. Okay.
 7 EARLE, Q.C.:
 8 Q. Okay, and in addition to yourself, this
 9 information would have gone to the -- I think
 10 you people use the EHS acronym. So the EHS,
 11 Environment Health and Safety Advisor, who
 12 attends all occupational health and safety
 13 meetings, one of the people in your
 14 department, Ms. Farrell, that person had that
 15 information and now we know from what you just
 16 told us that you had that information?
 17 MS. FARRELL:
 18 A. As of April, yes.
 19 EARLE, Q.C.:
 20 Q. And it was only after the crash, and town hall
 21 meetings, it was suggested by HMDC the other
 22 day that information on Robert Decker's body
 23 temperature triggered things, that the impetus
 24 arose that, you know, we've got a major
 25 problem here, if you will, to use the

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1 requirements, we will not be in a position to
 2 entertain requests for individual flight suit
 3 modifications. Moved to close" and then "will
 4 continue to track." Now there seems to be a
 5 little bit of difference within the committee
 6 there as to -
 7 MS. FARRELL:
 8 A. No, that's specific to moving to close a
 9 particular ProAct and agreeing to track it
 10 under a different ProAct. That's what that
 11 means.
 12 EARLE, Q.C.:
 13 Q. It appears to me, from reading this, that the
 14 issue is being perceived at this point in time
 15 as the fit of the suits in the sense of they
 16 are cumbersome, you know, lots of excess
 17 material for the person, not a comfortable
 18 fit. Is that how you saw it at that time?
 19 MS. FARRELL:
 20 A. No.
 21 EARLE, Q.C.:
 22 Q. You did not?
 23 MS. FARRELL:
 24 A. No, it was -- I was not looking at this as a
 25 comfort issue. That's not -- that was not my

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1 perception.
 2 EARLE, Q.C.:
 3 Q. So did you -
 4 MS. FARRELL:
 5 A. We were working -
 6 EARLE, Q.C.:
 7 Q. At that point in time, did you still see this
 8 as a question of seals?
 9 MS. FARRELL:
 10 A. We were working with Helly Hansen to
 11 understand how to modify the suits while
 12 maintaining a dual standard, which is what --
 13 we're required to fly people in a certified
 14 suit. It's not like a suit that you can take
 15 to the tailor shop and modify. If you change
 16 it, you no longer have a certified suit. So
 17 from our perspective, there was a considerable
 18 effort associated with understanding the CGSB
 19 standard, the rigour that goes into that
 20 testing requirement and the impact of
 21 modifying a suit. That's what this is about.
 22 EARLE, Q.C.:
 23 Q. Ms. Farrell, this is a very important
 24 question. Did you, as the senior person in
 25 this division, see this as being a situation

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1 where the question of seal of the suit for at
 2 least one individual was still outstanding?
 3 MS. FARRELL:
 4 A. What I understood and what we were
 5 investigating is multiple things. Whether the
 6 zippers were impacting the face seal, and as I
 7 indicated yesterday, we took a series of steps
 8 to try and address and understand that, and at
 9 the same time, we were proceeding down the
 10 path of understanding the implications of
 11 modifying suits for whatever reason.
 12 EARLE, Q.C.:
 13 Q. Now, you will recall that the very first
 14 notation was not about zipper on face seal.
 15 It was about facial features, and my question
 16 really is oriented to the fact that I would
 17 have thought that if at this point in time you
 18 thought that there was a person out there who
 19 didn't have a suit that properly sealed around
 20 their face, you would have said "look, someone
 21 go find that individual and get it checked
 22 out, whether their suit fits or not, because
 23 this is no different than if we've got
 24 somebody who's using a respirator which is
 25 defective or we've got somebody who's using

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1 safety glasses that are defective. We don't
 2 want this sort of thing happening." So I need
 3 to know where Petro-Canada's mind, which I
 4 take you to be representative of in this
 5 issue, was at that point in time.
 6 MS. FARRELL:
 7 A. I can speak for all of us when I can say that
 8 not only were we trying to address the face
 9 seal zipper issues, the wrist seal issues, we
 10 were also trying to simultaneously understand
 11 and address suit modification issues for a
 12 suit which, again I will say, was certified to
 13 a Transport Canada aviation and marine
 14 standards with robust testing associated with
 15 those standards. That is exactly where we
 16 were at this point in time.
 17 MR. VOKEY:
 18 A. Excuse me.
 19 EARLE, Q.C.:
 20 Q. Are you saying that you were prepared, at that
 21 point in time, unlike your later position
 22 where people who didn't fit, didn't have suits
 23 fit, went by boat, that you were prepared, at
 24 that point in time, to tolerate people flying
 25 with suits that did not fit while the problems

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1 EARLE, Q.C.:

2 Q. Are you saying that the Mustang suit lost its

3 certification?

4 MS. FARRELL:

5 A. The Mustang suit was not designed to the most

6 recent CGSB standard and we were looking for a

7 dual certified suit. We wanted a suit that

8 was certified to the marine and the aviation

9 standard.

10 EARLE, Q.C.:

11 Q. Yes. I realize you wanted a marine and

12 aviation standard suit. You decided to go

13 with a dual.

14 MS. FARRELL:

15 A. Yes.

16 EARLE, Q.C.:

17 Q. But -

18 MS. FARRELL:

19 A. So the Mustang suit couldn't meet that

20 standard.

21 EARLE, Q.C.:

22 Q. - the Mustang suit would still have met the

23 helicopter transportation suit standard.

24 MS. FARRELL:

25 A. It didn't meet the dual standard. That's what

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1 this was saying.

2 MR. VOKEY:

3 A. And I think it's fair to say -

4 EARLE, Q.C.:

5 Q. No, hold -- excuse me, Mr. Vokey. Ms.

6 Farrell, did the Mustang suit, at that point

7 in time, meet the helicopter transportation

8 suit -

9 MS. FARRELL:

10 A. The single standard, yes.

11 EARLE, Q.C.:

12 Q. Yes, thank you.

13 MS. FARRELL:

14 A. Not the dual standard that we had requested.

15 EARLE, Q.C.:

16 Q. Now Mr. Vokey?

17 MR. VOKEY:

18 A. No, the question is answered.

19 EARLE, Q.C.:

20 Q. Thank you. To modify Rumboldt, he who must be

21 obeyed has told me that we've reached break

22 time.

23 COMMISSIONER:

24 Q. We'll take 15 minutes.

25 (BREAK)

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1 COMMISSIONER:

2 Q. Yes, Mr. Earle.

3 EARLE, Q.C.:

4 Q. Okay. Just wondering if it was my job to turn

5 the mike on or it came on automatically. So

6 if we could go to the July 12th minutes and

7 we'll see that the July 12th update is

8 "awaiting response from onshore. Note: member

9 of this committee would prefer to have

10 certified suit and is prepared to wait" and

11 not much more added to it than that. Then we

12 go August 2nd 2008, the update, and you've

13 already referred to a presentation which was

14 not included with the minutes we received, but

15 thank you for adding it overnight. August 2nd

16 update "presentation reviewed. Background on

17 suit certification reviewed. Reviewed issues

18 raised with suit. Mustang suits will not be

19 used. Committee member raised the issue that

20 the process is taking too long for the people

21 who the suits do not fit. Issue is with the

22 certification and is being worked with the

23 applicable parties. Committee member stated

24 that there were other suits being used.

25 Follow up required. Action by ES&SR advisor."

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1 So you indicated that the position of

2 Suncor or Petro-Canada as it was, I believe at

3 that point in time, was that the suit that you

4 wanted to use had to be one with dual

5 certification?

6 MS. FARRELL:

7 A. That's correct.

8 EARLE, Q.C.:

9 Q. And if we go then to the August 23rd meeting

10 and we see that this August 23rd update

11 "Cougar confirmed that the only suit used by

12 the three operators, Hibernia, Husky and

13 Petro-Canada, for Terra Nova FPSO, Sea Rose,

14 Glomar Grand Banks, Henry Goodrich and the

15 Hibernia Platform is the HHE452." So this

16 appears to be a response to the suggestion by

17 a committee member that another suit was

18 available for use?

19 MS. FARRELL:

20 A. That's correct.

21 EARLE, Q.C.:

22 Q. And the presentation was again given to this

23 group because this is a reflection of the fact

24 that you have two parallel, if you will,

25 Occupational Health and Safety Committees

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1 MR. VOKEY:
 2 A. As indicated the other day, we have regularly
 3 quarterly meetings with the C-NLOPB. We also
 4 have ad hoc meetings with them to discuss
 5 issues. In each of those meetings, we would
 6 discuss issues like the flight suits, and they
 7 were brought up. I think it's fair that the
 8 Board recognized the complexity of the issue
 9 that we were dealing with. They were also
 10 satisfied with the integrity that we were
 11 putting into the evaluation, and as Ms.
 12 Farrell indicated, and hindsight is 20/20, but
 13 we did end up with a best practice, but we did
 14 continue to work the issue and I think that's
 15 reflected in the minutes here. You know,
 16 we've got hundreds and hundreds of things to
 17 talk about, but suits was always on the agenda
 18 and suits were important and they still are.
 19 EARLE, Q.C.:
 20 Q. Yeah. Now I'd like you to tell us a little
 21 bit more about the interaction with C-NLOPB on
 22 the suits, Mr. Vokey.
 23 MS. FARRELL:
 24 A. The July presentation that I think was
 25 attached to one of those sets of minutes was a

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1 specific request or in response to a specific
 2 request from the C-NLOPB to address the topic
 3 at our quarterly meeting. So when we go to
 4 meet with them, we will present our
 5 environment, health and safety performance for
 6 the quarter and if they have topics that they
 7 want to talk to us about, they will simply say
 8 "and come prepared to tell us about the
 9 following topics." That's the way the
 10 meetings work. So we developed that
 11 presentation package. I do recall that there
 12 was considerable attendance by members of the
 13 Board. They understood the complexity of
 14 trying to work within a standard that is set
 15 by Transport Canada, aviation and marine, both
 16 divisions being different, and one seemingly
 17 much slower to respond than the other, and so
 18 they understood that we were working the
 19 issue, that we were continuing to engage the
 20 workforce and they expected follow up from us.
 21 EARLE, Q.C.:
 22 Q. Was there, to your knowledge, communication
 23 from C-NLOPB to your employees -
 24 MS. FARRELL:
 25 A. Certainly, I -

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1 EARLE, Q.C.:
 2 Q. - of their involvement on the issue? Because
 3 I have to tell you, in what's been made
 4 available to me, I haven't seen any evidence
 5 of it.
 6 MS. FARRELL:
 7 A. Obviously it was discussed at their annual
 8 meeting with the workforce and management reps
 9 of the OHS committees. The fact that they ask
 10 us as an operator "tell us what you're doing"
 11 I think suggests that they saw it as a
 12 significant concern and they wanted to make
 13 sure we were addressing it.
 14 EARLE, Q.C.:
 15 Q. But I find it interesting that they had you,
 16 as an operator, come in in July and the matter
 17 came up in the fall meeting of the
 18 Occupational Health and Safety Committee.
 19 Seems to me that there's not much
 20 communication of their involvement with this
 21 issue if in the fall people are coming back
 22 and raising it almost as if it's a first time
 23 of going to C-NLOPB.
 24 MS. FARRELL:
 25 A. I really think you need to ask the Board what

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1 they were hearing and doing. I know from our
 2 perspective, as the regulator of our operating
 3 license, they were certainly holding our feet
 4 to the fire saying "what are your issues and
 5 what are you doing?"
 6 EARLE, Q.C.:
 7 Q. Okay. Let's turn to another area now, and
 8 this is with respect to the number of
 9 helicopters. As I understand your evidence,
 10 you have regularly scheduled flights Monday to
 11 Friday.
 12 MR. VOKEY:
 13 A. Yes.
 14 MR. STACEY:
 15 A. Yes, that's correct.
 16 EARLE, Q.C.:
 17 Q. And the helicopter capacity with the tank in,
 18 which seems to be more the norm than the
 19 exception, is 17 persons.
 20 MR. VOKEY:
 21 A. Yes.
 22 EARLE, Q.C.:
 23 Q. So, and you have a POB of 120?
 24 MR. VOKEY:
 25 A. Maximum during operations, yes.

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<p>1 A. Those seven suits have not been approved.</p> <p>2 EARLE, Q.C.:</p> <p>3 Q. None of the suits have been approved?</p> <p>4 MR. COLLINS:</p> <p>5 A. No.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. Okay. I thought you said some of them. Now</p> <p>8 item 4.1.2.</p> <p>9 MR. COLLINS:</p> <p>10 A. Okay.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. And .1, "the bidder shall deliver the suits,</p> <p>13 life jackets, EBS/HUEBA units and PLBs to the</p> <p>14 heliport and pick them up when they return</p> <p>15 from offshore. The helicopter provider shall</p> <p>16 issue suits, life vests and EBS/HUEBA bottles</p> <p>17 to all passengers travelling offshore."</p> <p>18 EARLE, Q.C.:</p> <p>19 Q. I take it that you understood from this</p> <p>20 paragraph here that there was no obligation on</p> <p>21 the part of Helly Hansen in respect of seeing</p> <p>22 to it that the suits fit the passengers on the</p> <p>23 helicopters?</p> <p>24 MR. COLLINS:</p> <p>25 A. That is correct.</p>	<p>1 suit systems, and three days -- sorry, four</p> <p>2 days on fittings.</p> <p>3 EARLE, Q.C.:</p> <p>4 Q. So you trained helicopter company personnel</p> <p>5 for four days --</p> <p>6 MR. COLLINS:</p> <p>7 A. Correct.</p> <p>8 EARLE, Q.C.:</p> <p>9 Q. On fitting suits? That's correct, isn't it?</p> <p>10 MR. COLLINS:</p> <p>11 A. That is correct.</p> <p>12 EARLE, Q.C.:</p> <p>13 Q. So I take it from the fact that it takes</p> <p>14 somebody four days to learn how to do this,</p> <p>15 that it is not something that you can figure</p> <p>16 out on your own, it requires some significant</p> <p>17 training by people with expertise?</p> <p>18 MR. COLLINS:</p> <p>19 A. By the new protocol we developed, that</p> <p>20 protocol to go through and do fittings with</p> <p>21 students so that they can see real life</p> <p>22 examples takes four days.</p> <p>23 EARLE, Q.C.:</p> <p>24 Q. Well, there's not much point doing it on</p> <p>25 dolls, is it?</p>
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<p>1 EARLE, Q.C.:</p> <p>2 Q. Now the next paragraph says, "The bidder shall</p> <p>3 train the helicopter company in how to</p> <p>4 complete daily inspections and issue all the</p> <p>5 above named equipment".</p> <p>6 MR. COLLINS:</p> <p>7 A. Correct.</p> <p>8 EARLE, Q.C.:</p> <p>9 Q. Did that include training the helicopter</p> <p>10 company in fitting?</p> <p>11 MR. COLLINS:</p> <p>12 A. At that time it did not, no.</p> <p>13 EARLE, Q.C.:</p> <p>14 Q. So we have a gap?</p> <p>15 MR. COLLINS:</p> <p>16 A. Yes.</p> <p>17 EARLE, Q.C.:</p> <p>18 Q. And the result has been that your contract has</p> <p>19 now been amended such that initially Helly</p> <p>20 Hansen personnel fitted the suits, and</p> <p>21 subsequently you trained for a period, I think</p> <p>22 you said, of four days --</p> <p>23 MR. COLLINS:</p> <p>24 A. It was seven day training, three of which</p> <p>25 focused on suit maintenance procedures and</p>	<p>1 MR. COLLINS:</p> <p>2 A. No, there's not.</p> <p>3 EARLE, Q.C.:</p> <p>4 Q. Now if we could go to your presentation, and</p> <p>5 your issues arising.</p> <p>6 MR. COLLINS:</p> <p>7 A. Okay.</p> <p>8 EARLE, Q.C.:</p> <p>9 Q. It says, "The following is an outline of</p> <p>10 issues arising in the first two years of the</p> <p>11 service contract and how they were addressed".</p> <p>12 Are you saying that these are the issues which</p> <p>13 arose, there aren't others?</p> <p>14 MR. COLLINS:</p> <p>15 A. I guess, the only other comments would have</p> <p>16 been that we lumped comfort issues to include</p> <p>17 boot, weight and bulkiness, the stiffness of</p> <p>18 the zipper, that would be classified under the</p> <p>19 comfort issues, but that was grouped as</p> <p>20 comfort issues.</p> <p>21 EARLE, Q.C.:</p> <p>22 Q. And comfort issues, I take it, the wearer is</p> <p>23 told to suck it up and get on with it, is that</p> <p>24 correct?</p> <p>25 MR. COLLINS:</p>

The Canadian and Norwegian sectors provide suits that have sufficient buoyancy to provide flotation, with an integral additional inflatable buoyancy element to further support the head. In the Canadian standard a minimum flotation buoyancy of 156N is currently required (CGSB, 1999). It is understood that spray hood performance, to protect the airways and further reduce the risk of drowning, is provided in CAN/CGSB-65.16-2005 'Immersion suit systems' (CGSB, 2005). The suit system must provide a stable floating position i.e. once the user is floating on their back, it must be easy for them to stay in that position.

In the UK offshore industry, a separate lifejacket is worn over the helicopter suit. This is a manually operated inflatable jacket. Once the user has escaped from the helicopter they are required to pull a tag to inflate the jacket. An oral inflation backup is provided. CAA Specification 5 (CAA, 1979) required an aviation lifejacket to have a minimum buoyancy of 16 kg (157N), and capability to turn the unconscious wearer to a face-up position. Later requirements were brought in to ensure compatibility between helicopter suits and any lifejacket worn with them.

The European standards cover both options. ETSO-2C502 covers helicopter suits which incorporate the functionality of a lifejacket. The wearer must be able to turn themselves from a face-down into a stable face-up position. ETSO-2C504 covers helicopter constant wear lifejackets. This standard requires the lifejacket to turn an unconscious wearer from a face-down into a stable face-up position. No minimum buoyancy value is stipulated; buoyancy must be sufficient to support the wearer in the required floating position. A spray hood is required.

The overall performance requirements for flotation are thus similar in Canada and Europe.

2.5 Emergency breathing systems (EBS)

2.5.1 EBS performance

It has been recognised for some years that the time needed to escape from a submerged or capsized helicopter, estimated to be 45 to 60 seconds in a real accident, exceeds the time that most individuals can breath-hold in cold water due to the effects of cold shock. In subjects wearing helicopter suits, immersed in water colder than 10°C, mean breath-hold

time is likely to be close to 20 seconds, but can be as little as 10 seconds in some individuals (Tipton and Vincent, 1989, Tipton et al, 1995, Tipton et al, 1997). This would allow very little time for an individual to escape from a capsized helicopter. Maximum breath-hold time is therefore a limiting factor in the survival of the individual. EBS provide a means of extending the time that can be spent underwater, and thus a means of increasing the probability of making a successful underwater escape in water impact incidents.

The effectiveness of EBS will to some extent be dependent upon the type of water impact that occurs. In a controlled ditching, the crew and passengers will have some warning of the impending alighting on water, and therefore have some time and opportunity at least to think through the escape process and prepare for impact. In sea states up to 4 or 5 there is a reasonable chance that the helicopter will remain afloat for long enough for occupants to be evacuated from the cabin. However, in controlled ditchings, relatively few lives are lost and the incidence of drowning is low, despite the helicopter inverting immediately of sinking in at least 24% of cases (Clifford, 1996). Given the low incidence of drowning, the benefits of EBS may be limited to incidents occurring in the higher sea states. In this situation, EBS users will have the best chance of having time to deploy the equipment if the need arises.

In vertical descents with limited control, there is likely to be a little warning, and less time to prepare than might be expected in a controlled ditching. In these situations, fatality rates are much higher, and the majority are due to drowning. Clifford's data shows that inversion occurred immediately in about 60% of cases. The incidence of drowning increased further with fly-in accidents. In these accidents there would be no warning and it can be assumed that in many cases the cabin would rapidly flood. Time to deploy an EBS could be very limited in this situation. The ability to deploy underwater would then be an advantage.

The last category of water impact described by Clifford related to uncontrolled impacts with high impact forces. Fatalities due to impact injuries predominated over drowning in this group. It must be questioned how many occupants would manage to deploy and use EBS in this type of accident.

To be effective in these circumstances, EBS must be easy to use under emergency conditions, must be quick to deploy, must be compatible with other equipment and must not impair the normal escape process (see Coleshaw, 2003). When this is achieved, EBS may reduce the level of panic experienced, increasing the likelihood of a successful escape. Successful deployment would allow the user additional time to complete a number of complex actions which must or may have to be undertaken in the process of escape:

- overcome disorientation;
- release the seat harness - particularly if the harness jams or snags;
- locate an exit - allowing time to cross the cabin if the nearest exit route is blocked;
- jettison an exit - operate a handle, remove window rip cord if present, push out window;
- escape through exit - overcoming any snagging;
- overcome impact injuries which would slow but not prevent escape.

The ability to deploy the EBS with one hand would allow the occupant to keep one hand locating the nearest exit. Two hands could be used as long as the harness is still secured, but the user would need time to relocate the nearest exit once deployment was completed. Once the harness is released, both hands will be needed to maintain a grip on the escape route, bearing in mind that buoyancy problems may be experienced.

EBS are likely to be of little or no benefit to individuals who are seriously injured by impact with the water, particularly serious head and facial injuries or hand/arm injuries incurred as a result of flailing, both of which would prevent deployment.

Three generic designs of EBS have been developed for helicopter underwater escape; compressed air devices (being introduced for the Canadian offshore workforce, and favoured by the military), rebreather systems (used by the Norwegian offshore workforce) and a hybrid system consisting of a rebreather bag with a small cylinder of additional air (used by the UK offshore workforce). All tend to be carried in a pouch or pocket, which may be fitted to the lifejacket or suit. In all cases, it is important that it is easy to open this pouch and remove the EBS.

Compressed air systems tend to be relatively simple to deploy, with air on demand. They have the disadvantage that once deployed, the air supply is starting to run out, so they should only be deployed just before submersion. A big advantage is that, with training on purging techniques, they can be deployed underwater. Rebreather systems must be activated once the mouthpiece is in place. This is an additional task compared to the compressed air device, but it has the advantage that, if time allows, the user can deploy the mouthpiece in advance, breathing to the atmosphere, and only switch to breathing to the counterlung just before submersion. Some rebreathers have been designed with automatic activation, opening the system to allow breathing from the counterlung when immersed. This simplifies deployment, but has the disadvantage that if not deployed before submersion, the system will be open to the water, making successful underwater deployment very unlikely. In general, most rebreathers have been designed for the scenario where there is time to deploy before submersion, whereas compressed air systems have the capability for underwater deployment. The hybrid system used in the UK was originally designed for the controlled ditching scenario. However, with manual activation, it is possible to purge water from the system during underwater deployment, before switching to breathe to the bag. The additional air means that the user has sufficient air to breathe from the counterlung. Thus, though not designed for this purpose, underwater deployment is possible.

With compressed air systems, including the hybrid EBS, there is a very small risk of barotrauma injuries if the user holds their breath during ascent to the surface. This is only of concern during training, with many hundreds of personnel trained in a year. Some authorities regard compressed air EBS as mini diving equipment, meaning that specific requirements may be imposed in relation to medicals.

When introducing EBS it is important to make certain that the benefits outweigh any disadvantages, to ensure that there is an overall improvement in safety.

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<p>1 following the EBS workshop, and it was</p> <p>2 probably about a year after that. I can</p> <p>3 remember it actually started in about 2001.</p> <p>4 EARLE, Q.C.:</p> <p>5 Q. And would it be correct that the genesis, if</p> <p>6 you will, of this EBS work was the recognition</p> <p>7 which you've mentioned earlier in your</p> <p>8 evidence in 2000, that the breath hold time of</p> <p>9 the average person in a submerged helicopter</p> <p>10 which was for a large percentage insufficient</p> <p>11 to allow escape, is that correct?</p> <p>12 DR. COLESHAW:</p> <p>13 A. Yes, in cold water that would be the case.</p> <p>14 EARLE, Q.C.:</p> <p>15 Q. Yes. So I was wondering could you tell us by</p> <p>16 the time that you published this paper in</p> <p>17 2003, what was the state of affairs in terms</p> <p>18 of the prevalence of use of the EBS in its</p> <p>19 various iterations in your part of the world?</p> <p>20 DR. COLESHAW:</p> <p>21 A. At that time, we probably got to the point</p> <p>22 where the majority of offshore operators were</p> <p>23 then using either Air Pocket, which was the</p> <p>24 pure rebreather, the original design, or Air</p> <p>25 Pocket Plus, which is the hybrid device, and I</p>	<p>1 that theirs were introduced.</p> <p>2 EARLE, Q.C.:</p> <p>3 Q. You did another paper which was delivered</p> <p>4 January 30th, 2006.</p> <p>5 DR. COLESHAW:</p> <p>6 A. Uh-hm.</p> <p>7 EARLE, Q.C.:</p> <p>8 Q. To a CAPP workshop.</p> <p>9 DR. COLESHAW:</p> <p>10 A. That's right.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. In Canada. What was the prevalence in the</p> <p>13 North Sea at that time in terms of the use of</p> <p>14 rebreathers and the hybrids?</p> <p>15 DR. COLESHAW:</p> <p>16 A. I think by then everybody would have been</p> <p>17 using hybrid devices.</p> <p>18 EARLE, Q.C.:</p> <p>19 Q. Now we - as I understand it from you, have yet</p> <p>20 to have a technical standard for these things.</p> <p>21 DR. COLESHAW:</p> <p>22 A. Uh-hm.</p> <p>23 EARLE, Q.C.:</p> <p>24 Q. So I take it from this, that the technical</p> <p>25 standard - the absence of a technical standard</p>
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<p>1 think by 2003 the majority were probably using</p> <p>2 Air Pocket Plus. There was at least one</p> <p>3 company that took a long time to adopt, and I</p> <p>4 think it was only really when training in EBS</p> <p>5 was introduced that it was across the board</p> <p>6 because then it became part of the OPITO</p> <p>7 training to actually use EBS.</p> <p>8 EARLE, Q.C.:</p> <p>9 Q. So by 2003, it was -</p> <p>10 DR. COLESHAW:</p> <p>11 A. Most had devices of some type.</p> <p>12 EARLE, Q.C.:</p> <p>13 Q. Really the norm for passengers in the North</p> <p>14 Sea -</p> <p>15 DR. COLESHAW:</p> <p>16 A. In the UK sector. I think Norway was somewhat</p> <p>17 later before they started using their</p> <p>18 rebreather systems.</p> <p>19 EARLE, Q.C.:</p> <p>20 Q. And how much later would that have been?</p> <p>21 DR. COLESHAW:</p> <p>22 A. As far as I remember, several years. I think</p> <p>23 they've been using them for several years now,</p> <p>24 say, maybe three years that they've been</p> <p>25 using. I couldn't tell you the actual date</p>	<p>1 has not stood in the way of implementing this</p> <p>2 device?</p> <p>3 DR. COLESHAW:</p> <p>4 A. I think that's partly because of the devices</p> <p>5 that have been used there's either published</p> <p>6 information or there has been a large body of</p> <p>7 work in terms of the development of the</p> <p>8 devices. In terms of what we use in the UK,</p> <p>9 it was Shell that instigated the original</p> <p>10 development of the Air Pocket Rebreather, and</p> <p>11 so they, as the end user, had control over the</p> <p>12 work that was done and it was a very extensive</p> <p>13 program or research that was undertaken up to</p> <p>14 the point when the final device was developed</p> <p>15 and implemented.</p> <p>16 EARLE, Q.C.:</p> <p>17 Q. It's my understanding that Shell brought the</p> <p>18 rebreather in in the late 90s?</p> <p>19 DR. COLESHAW:</p> <p>20 A. Yes.</p> <p>21 EARLE, Q.C.:</p> <p>22 Q. So it was, if you will, an industry driven -</p> <p>23 DR. COLESHAW:</p> <p>24 A. It was an industry led initiative, yes.</p> <p>25 EARLE, Q.C.:</p>

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1 over the recommendations -- the findings on
 2 Parks Canada and others.
 3 The conclusion on Paragraph 42, "A lack
 4 of strategic management within the SAR Program
 5 has resulted in each department developing
 6 standby postures in isolation, without
 7 consultation with other SAR Departments. As a
 8 result, there's no common rationale driving
 9 standby postures", and one of the
 10 recommendations found in 43 of this review
 11 team recommended that, "The standby postures
 12 of primary SAR resources should be determined
 13 principally through analysis of demand for
 14 services".
 15 It's my submission that this Commission
 16 should heed the spirit of the recommendations
 17 set forth in Paragraph 43(a) above and
 18 determine a standard for readiness and
 19 response time for service in the Newfoundland
 20 and Labrador offshore through an analysis
 21 based on the need and demand for service, and
 22 based on a thorough assessment of the risks,
 23 including the presence of a large number of
 24 people in a high risk environment.
 25 However, there is a real question as to

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1 whether this Commission can effectively do
 2 that, given the potential constraints of the
 3 Terms of Reference. The Commission is
 4 specifically mandated in Paragraph 5 of the
 5 Terms of Reference to inquire into, report on,
 6 and make recommendations in respect of search
 7 and rescue obligations of helicopter operators
 8 by way of contractual undertakings or
 9 legislative or regulatory requirements.
 10 Paragraph 6, however, places a limitation on
 11 the Commissioner's mandate in that it does not
 12 include an examination by the provision of the
 13 Government of Canada [Department of National
 14 Defence] of search and rescue facilities for
 15 all marine incidents and the location of such
 16 facilities within the Province of Newfoundland
 17 and Labrador. As stated earlier, I believe
 18 this Commission cannot effectively carry out
 19 its mandate without at the very least
 20 examining what the Department of National
 21 Defence does in the provision of Search and
 22 Rescue services to Newfoundland and Labrador.
 23 The provision of search and rescue services by
 24 in the current case, Cougar Helicopters, on
 25 contract to the operators of the oil

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1 production facilities, is but one piece of a
 2 larger puzzle, which includes services
 3 provided by the Department of National
 4 Defence, the Canadian Coast Guard, and others
 5 who are involved in the whole search and
 6 rescue establishment. How can one possibly
 7 make effective recommendations without
 8 examining the status quo, the lay of the land.
 9 You haven't even had an effective
 10 presentation from DND, only a backgrounder,
 11 without any witness to answer questions. What
 12 exactly is the relationship between Cougar and
 13 the Joint Rescue Coordinating Centre in
 14 Halifax operated by the Department of National
 15 Defence. It is obviously important to know,
 16 yet the Terms of Reference arguably prevent
 17 you from even asking. What is the current
 18 relationship between Cougar and DND regarding
 19 search and rescue training and assessment.
 20 The Ocean Ranger Royal Commission discussed
 21 this in the context of this recommendation,
 22 #56, which reads as follows, "That there be
 23 required a full time search and rescue
 24 dedicated helicopter, provided either by
 25 government or industry, fully equipped to

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1 search and rescue standards stationed at the
 2 airport nearest to ongoing drilling
 3 operations, and that it be readily available,
 4 the trained crew able to perform all aspects
 5 of the rescue". Now without debating as to
 6 whether that recommendation has, in fact, been
 7 fulfilled, arguably it has not. The
 8 Government of Canada maintains that it is, by
 9 the way, in the House of Commons, but since
 10 March 12th, 2009 crash there's been a lot of
 11 talk about this recommendation; however,
 12 there's a nuance to this recommendation, I
 13 think, needs to be further explored.
 14 In the preamble to this recommendation,
 15 the Royal Commission Report refers to the
 16 December, 1983, Guidelines to Operators East
 17 Coast of COGLA. Remember that, Canada Oil and
 18 Gas Lands Administration, the predecessor of
 19 the Canada Newfoundland and Labrador Offshore
 20 Petroleum Board. Included in these guidelines
 21 is the following, "Operators on the Grand
 22 Banks shall on a joint and continuing basis
 23 maintain a helicopter dedicated to search and
 24 rescue with personnel trained and qualified in
 25 the use of such equipment". According to the



February 25, 2000

Mr. Paul Barnes
East Coast Manager
Canadian Association of Petroleum Producers
Suite 905, Scotia Centre
235 Water Street
St. John's, NF
A1C 1B6

Dear Paul:

Subject: Escape Breathing Devices for Helicopter Transportation

The results of research and experience indicate that the probability of successfully exiting an overturned helicopter in cold water is low even by passengers who have the benefit of escape training and an approved transportation suit. We understand that several companies in the North Sea have adopted the use of "Escape Breathing Devices" to improve passengers' chances of surviving a crash. While we recognize that there are risks and issues associated with the use of these devices, we believe that progress, to date, in this area represents a significant step forward in reducing the risk associated with helicopter travel offshore. Consequently, we request that you discuss this matter with your safety committee and advise us of any decisions on this issue.

Should you or the committee wish to discuss this further with us please contact Mr. Peter Noel at 778-1410.

Yours Truly,



Howard Pike
Manager, Operations & Safety

CC A. Parker
J. O'Neill

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1 Q. Is there a page number on the top?
 2 EARLE, Q.C.:
 3 Q. There is a page number, but my page numbers
 4 don't match up with yours.
 5 MS. FAGAN:
 6 Q. They might.
 7 EARLE, Q.C.:
 8 Q. They don't, we've been through that exercise--
 9 ROIL, Q.C.:
 10 Q. We're trying to help --
 11 EARLE, Q.C.:
 12 Q. A few minutes ago, and we actually -- as I
 13 recall, we went through this exercise when we
 14 were examining CAPP. It's a problem with the
 15 software, the way we get the exhibits.
 16 REGISTRAR:
 17 Q. I believe they're scanned in.
 18 MS. FAGAN:
 19 Q. Some of them have been --
 20 EARLE, Q.C.:
 21 Q. On this particular lot, we got page numbers
 22 that you people don't have. In any event, I
 23 don't --
 24 COMMISSIONER:
 25 Q. Is it a lengthy letter, Mr. Earle?

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1 EARLE, Q.C.:
 2 Q. Pardon?
 3 COMMISSIONER:
 4 Q. Is it a lengthy letter?
 5 EARLE, Q.C.:
 6 Q. It's the letter -- I'm sure Mr. Pike
 7 practically knows it by heart.
 8 REGISTRAR:
 9 Q. May I suggest I photocopy it for the witness.
 10 MS. FAGAN:
 11 Q. Or perhaps just the date.
 12 EARLE, Q.C.:
 13 Q. The witness referred to it yesterday.
 14 COMMISSIONER:
 15 Q. Have you got it in front of you there?
 16 EARLE, Q.C.:
 17 Q. I've got it down here.
 18 COMMISSIONER:
 19 Q. Perhaps you could read it to us if it's not a
 20 lengthy letter.
 21 EARLE, Q.C.:
 22 Q. Mr. Commissioner, I've got about a space of a
 23 foot and a half square feet here, and those
 24 tabs represent documents that I've got here.
 25 I'm trying to keep this in some sort of

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1 organized fashion.
 2 COMMISSIONER:
 3 Q. Okay. Are you looking at the letter now?
 4 MS. FAGAN:
 5 Q. It's on the screen.
 6 EARLE, Q.C.:
 7 Q. It's on the screen. Thank you.
 8 COMMISSIONER:
 9 Q. Oh, okay.
 10 EARLE, Q.C.:
 11 Q. This letter, you indicated, is a strong letter
 12 or a stern letter from your CEO to the
 13 operators pushing them to get this thing under
 14 way?
 15 MR. PIKE:
 16 A. It's a letter to CAPP, but, yes, it's a stern
 17 letter to get this thing moving, yes.
 18 EARLE, Q.C.:
 19 Q. You had previously written CAPP and said we
 20 view this as a mature and tested technology?
 21 MR. PIKE:
 22 A. Mr. Noel said that.
 23 EARLE, Q.C.:
 24 Q. Yeah, he's your senior safety officer, right.
 25 The question I have for you is a fairly simple

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1 question. This thing had been going on for
 2 seven years. What is it about your
 3 organization that it takes seven years before
 4 you start pushing?
 5 MR. PIKE:
 6 A. You're going to have to repeat the question.
 7 I'm trying to --
 8 EARLE, Q.C.:
 9 Q. You had asked -- your original request to CAPP
 10 was February 25th, 2000. This is now seven
 11 years later. What is it about your
 12 organization that it requires you seven years
 13 to start pushing on a matter which your senior
 14 safety officer had said several years before
 15 in correspondence to CAPP, "We view this as
 16 mature and tested technology", what is it
 17 about your organization that takes that long
 18 to push?
 19 MR. PIKE:
 20 A. Mr. Noel believed that it was mature, and what
 21 was the exact words, mature and tested
 22 technology. That was his view, but as we
 23 reviewed the piece, there were a number of
 24 pieces in here that did need to be reviewed.
 25 He -- basically that was his view. We

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1 acknowledge that the operators came back when
 2 they said that there were some things that
 3 needed to be further researched on this
 4 technology. We concurred. Are we satisfied
 5 with the progress on this piece in hindsight;
 6 no, sir. Are we satisfied with CAPP's
 7 performance in this regard; no. You asked me
 8 earlier and I indicated -- I'm not sure how I
 9 answered it, but certainly in conversations
 10 with our Executive, we are not satisfied with
 11 CAPP's response in this regard, and that is
 12 one of the things that will be reviewed as to
 13 how we progress these things in the future.

14 EARLE, Q.C.:

15 Q. Mr. Pike, are you satisfied with the way C-
 16 NLOPB managed the issue?

17 MR. PIKE:

18 A. No.

19 EARLE, Q.C.:

20 Q. You used the phrase yesterday, "it required
 21 more focus".

22 MR. PIKE:

23 A. Yes.

24 EARLE, Q.C.:

25 Q. Did C-NLOPB take any steps to cause there to

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1 be more focus?

2 MR. PIKE:

3 A. The senior safety officer was following this
 4 particular file and working with this file, so
 5 from our perspective we had a focus. Whether
 6 he was able to devote the attention on this
 7 file that it may have needed, given his other
 8 duties, we can certainly review it, but in
 9 hindsight it is a file that required greater
 10 focus.

11 EARLE, Q.C.:

12 Q. Now let's turn to the issue of the suits
 13 specifically, and in that context, I think we
 14 should have an understanding at the outset,
 15 why do you understand C-NLOPB is copied
 16 monthly with the Minutes of the occupational
 17 health and safety committees?

18 MR. PIKE:

19 A. The principal reason is that the committees
 20 are there and working, they're there and
 21 meeting. The second piece is it's a way for
 22 us to monitor how the committee is
 23 functioning, that in the first instance, it's
 24 based in Canada on the premise of the internal
 25 responsibility system, that in the first

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1 instance it is the workplace that is to work
 2 out these issues. So, yes, we look at them to
 3 ensure that the committee is meeting, it is a
 4 way for us to monitor as to whether the
 5 committee is functioning. In the first
 6 instance when issues are raised, it is again
 7 on the premise that it is an internal
 8 responsibility system that in the first
 9 instance it is the workplace that works those
 10 issues.

11 EARLE, Q.C.:

12 Q. On one of your documents and we'll probably
 13 get to it later, I believe it's said that
 14 employees are told bring matters to the
 15 Occupational Health and Safety Committee, and
 16 if they're not resolved within 30 days, C-
 17 NLOPB can have a look at them. Do you
 18 understand that to be the standard?

19 MR. PIKE:

20 A. In general, yes.

21 EARLE, Q.C.:

22 Q. You are aware, and you were aware at the time,
 23 that at least with Petro-Canada, now Suncor,
 24 the issue of suit fit was -- appeared in their
 25 Minutes, the Occupational Health and Safety

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1 Committee Minutes, for a period from the end
 2 of March, 2008, right up to the last meeting
 3 prior to the crash of Flight 491?

4 MR. PIKE:

5 A. Yes.

6 EARLE, Q.C.:

7 Q. And C-NLOPB was aware at the time of that
 8 fact?

9 MR. PIKE:

10 A. Yes.

11 EARLE, Q.C.:

12 Q. And, in fact, in June of 2008, the operators
 13 were requested by C-NLOPB to make a
 14 presentation on what was going on with the
 15 suit issue, correct?

16 MR. PIKE:

17 A. Yes.

18 EARLE, Q.C.:

19 Q. And the issues that C-NLOPB was aware of, I
 20 think, can be identified if we look at Exhibit
 21 200, page 10, and if you look there, the
 22 second box down at the bottom under flight
 23 suits, "There are many concerns about the new
 24 suits. They are hard to zip up for many
 25 people, sizes don't fit bigger workers,

Page 13

1 MR. PIKE:
 2 A. It has not been the practice of the Board to
 3 engage initially in the research and
 4 development, but had we -- the initial
 5 approach is to approach industry to get
 6 consensus. It was a newer technology. We
 7 certainly, and as identified in our policy,
 8 our compliance and enforcement, is to engage
 9 them at an early stage to start doing that
 10 work and to take a look at it. That was
 11 certainly one of the options we could have
 12 used, but at that time, we did not.
 13 EARLE, Q.C.:
 14 Q. So that's an option you could have used?
 15 MR. PIKE:
 16 A. Yes.
 17 EARLE, Q.C.:
 18 Q. But it's not your practice. Why is it not
 19 your practice? What's the rationale for going
 20 to -- for you, as a regulator, to go to an
 21 interested party and say to them "study this
 22 issue. Give us your advice on what we should
 23 be using here, how we should put it in place,"
 24 et cetera, et cetera?
 25 MR. PIKE:

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1 A. That is not an uncommon practice for other
 2 regulators, particularly when you're
 3 introducing a new technology, is to engage the
 4 stakeholders as you move forward with that
 5 technology. We've done it successfully.
 6 Unfortunately in the HUEBA case, it was not as
 7 successful as we would have liked, but we have
 8 used it for other pieces with CAPP and I know
 9 that other international regulators have used
 10 the same approach. So it is an approach that
 11 is well accepted by regulators to engage the
 12 stakeholders when you're about to introduce a
 13 new piece of technology.
 14 EARLE, Q.C.:
 15 Q. Mr. Pike, it's one thing to engage the
 16 stakeholders. It's another thing to be
 17 allowing the stakeholders to decide: a.
 18 whether the technology is appropriate; b.
 19 which of a range of technologies will be
 20 chosen; c. when it will be implemented. Quite
 21 frankly, I suggest to you, that this amounts
 22 to C-NLOPB contracting out a significant part
 23 of its role to one of the interested parties.
 24 So what's the, you know, the rationale for
 25 that beyond "well, other people do it"?

Page 15

1 MR. PIKE:
 2 A. I'm not sure that I understand what
 3 specifically you're asking here, Mr. Earle.
 4 Can you -
 5 EARLE, Q.C.:
 6 Q. Look, I asked you why did you choose to go
 7 this way, and you tell me "well, it's not
 8 uncommon for other regulators to do it. It's
 9 done here and there." But you haven't told me
 10 beyond other people are doing it, why you
 11 would do it.
 12 MR. PIKE:
 13 A. We have done it with other technologies and it
 14 has been successful and I think we freely
 15 admit that this implementation was certainly
 16 not a success and it took far too long.
 17 EARLE, Q.C.:
 18 Q. Okay. So you've done it with other
 19 technologies?
 20 MR. PIKE:
 21 A. Yes, sir.
 22 EARLE, Q.C.:
 23 Q. Now you choose to go this route. What kind of
 24 structure do you put in place when you ask, as
 25 I say, an interested player, an interested

Page 16

1 party, to proceed with this? Do you have a
 2 contract with them?
 3 MR. PIKE:
 4 A. No.
 5 EARLE, Q.C.:
 6 Q. Do you have a regulatory guideline?
 7 MR. PIKE:
 8 A. No.
 9 EARLE, Q.C.:
 10 Q. Do you have anything other than a letter
 11 requesting them to look at the technology?
 12 MR. PIKE:
 13 A. That was the extent of our engagement with
 14 CAPP, yes. In hindsight, there could have
 15 been better approaches.
 16 EARLE, Q.C.:
 17 Q. Hindsight is a wonderful thing. It has great
 18 clarity of vision, and of course, the luxury
 19 of being in a position like I'm in is that I
 20 get the luxury of looking at things in
 21 hindsight. Have you considered, as C-NLOPB,
 22 the structuring and the regularizing of
 23 mechanisms by which you engage industry
 24 players in these kinds of essentially
 25 regulatory development roles?

Page 53	<p>1 industry on a number of these issues.</p> <p>2 EARLE, Q.C.:</p> <p>3 Q. Mr. Barnes, how did we then get to a situation</p> <p>4 where in 2005 when training was identified in</p> <p>5 2003 as an issue and hygiene was identified in</p> <p>6 an issue, that in 2005, we're doing a risk</p> <p>7 assessment on the training -</p> <p>8 MR. BARNES:</p> <p>9 A. Yes.</p> <p>10 EARLE, Q.C.:</p> <p>11 Q. - which is the document that starts at page 38</p> <p>12 of the exhibit.</p> <p>13 MR. BARNES:</p> <p>14 A. Sorry, you had a question on that risk</p> <p>15 assessment?</p> <p>16 EARLE, Q.C.:</p> <p>17 Q. How is it that if you've identified training</p> <p>18 as being an issue, your March 20th, 2003</p> <p>19 letter identified design, training, health and</p> <p>20 hygiene, along with use in the cold Atlantic</p> <p>21 waters as being issues that have to be</p> <p>22 resolved, and then it appears that, I think it</p> <p>23 was January 30th or 31st of 2005, you're doing</p> <p>24 a risk assessment on training for EBS use?</p> <p>25 MR. BARNES:</p>	Page 55	<p>1 EARLE, Q.C.:</p> <p>2 Q. So you're basically saying it's systemic lag?</p> <p>3 MR. BARNES:</p> <p>4 A. It is the process that unfolded in those</p> <p>5 years.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. I see we're at quarter to 11, Mr.</p> <p>8 Commissioner.</p> <p>9 COMMISSIONER:</p> <p>10 Q. Okay then, we'll take a break now.</p> <p>11 (BREAK)</p> <p>12 EARLE, Q.C.:</p> <p>13 Q. Mr. Barnes, I just want to be clear on</p> <p>14 something. The 2003 to 2005 lag, did you say</p> <p>15 that the members decided to take the EBS</p> <p>16 project away from CAPP for a period of time</p> <p>17 there?</p> <p>18 MR. BARNES:</p> <p>19 A. I said that when--I guess I should just</p> <p>20 clarify that. The members of CAPP decided</p> <p>21 that the Safety Committee of CAPP should stop</p> <p>22 working on this issue and that they, as</p> <p>23 individual operators, would take the issue</p> <p>24 away and have further discussion within their</p> <p>25 own companies. So the Safety Committee, for a</p>
Page 54	<p>1 A. Yes, decision was made -</p> <p>2 EARLE, Q.C.:</p> <p>3 Q. How does it take you from identifying the</p> <p>4 issue in 2003 to the beginning of 2005, a year</p> <p>5 and a half plus, how does it take you that</p> <p>6 long to get to the simple step of doing a risk</p> <p>7 assessment on training?</p> <p>8 MR. BARNES:</p> <p>9 A. Because in 2003, when we had the discussion</p> <p>10 paper, it identified all the issues, including</p> <p>11 training, as you mentioned. What followed</p> <p>12 that was a discussion with our Executive</p> <p>13 Policy Group regarding the actual device that</p> <p>14 we would select for the east coast, and that</p> <p>15 device was the compressed air device. Also,</p> <p>16 in that timeframe, our members, as I</p> <p>17 mentioned, took this issue away from our</p> <p>18 association for a period of time, most of</p> <p>19 2004, to have discussions internally within</p> <p>20 their organizations, and then after those</p> <p>21 discussions took place, it was brought back</p> <p>22 into the CAPP safety committee and there was a</p> <p>23 decision made then to undertake the risk</p> <p>24 assessment of using the compressed air device</p> <p>25 and the issues around that device.</p>	Page 56	<p>1 period of time in 2004, stopped working on the</p> <p>2 issue.</p> <p>3 EARLE, Q.C.:</p> <p>4 Q. So it came off the agenda essentially?</p> <p>5 MR. BARNES:</p> <p>6 A. Well, it stayed on the agenda, but there was</p> <p>7 no work being done for a period of time in</p> <p>8 2004.</p> <p>9 EARLE, Q.C.:</p> <p>10 Q. How long a period of time was that?</p> <p>11 MR. BARNES:</p> <p>12 A. Eight months, six to eight months.</p> <p>13 EARLE, Q.C.:</p> <p>14 Q. And how did it get back on the agenda?</p> <p>15 MR. BARNES:</p> <p>16 A. Our members basically brought the issue back</p> <p>17 to CAPP and said, "okay, we've had some</p> <p>18 internal discussions. We're going in the</p> <p>19 right direction that we want to go in. Please</p> <p>20 proceed with implementation."</p> <p>21 EARLE, Q.C.:</p> <p>22 Q. Did you inform the regulator during that</p> <p>23 period of time that your members would be</p> <p>24 dealing with the issue individually rather</p> <p>25 than it being dealt with as an industry wide</p>

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1 industry on a number of these issues.

2 EARLE, Q.C.:

3 Q. Mr. Barnes, how did we then get to a situation

4 where in 2005 when training was identified in

5 2003 as an issue and hygiene was identified in

6 an issue, that in 2005, we're doing a risk

7 assessment on the training -

8 MR. BARNES:

9 A. Yes.

10 EARLE, Q.C.:

11 Q. - which is the document that starts at page 38

12 of the exhibit.

13 MR. BARNES:

14 A. Sorry, you had a question on that risk

15 assessment?

16 EARLE, Q.C.:

17 Q. How is it that if you've identified training

18 as being an issue, your March 20th, 2003

19 letter identified design, training, health and

20 hygiene, along with use in the cold Atlantic

21 waters as being issues that have to be

22 resolved, and then it appears that, I think it

23 was January 30th or 31st of 2005, you're doing

24 a risk assessment on training for EBS use?

25 MR. BARNES:

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1 A. Yes, decision was made -

2 EARLE, Q.C.:

3 Q. How does it take you from identifying the

4 issue in 2003 to the beginning of 2005, a year

5 and a half plus, how does it take you that

6 long to get to the simple step of doing a risk

7 assessment on training?

8 MR. BARNES:

9 A. Because in 2003, when we had the discussion

10 paper, it identified all the issues, including

11 training, as you mentioned. What followed

12 that was a discussion with our Executive

13 Policy Group regarding the actual device that

14 we would select for the east coast, and that

15 device was the compressed air device. Also,

16 in that timeframe, our members, as I

17 mentioned, took this issue away from our

18 association for a period of time, most of

19 2004, to have discussions internally within

20 their organizations, and then after those

21 discussions took place, it was brought back

22 into the CAPP safety committee and there was a

23 decision made then to undertake the risk

24 assessment of using the compressed air device

25 and the issues around that device.

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1 EARLE, Q.C.:

2 Q. So you're basically saying it's systemic lag?

3 MR. BARNES:

4 A. It is the process that unfolded in those

5 years.

6 EARLE, Q.C.:

7 Q. I see we're at quarter to 11, Mr.

8 Commissioner.

9 COMMISSIONER:

10 Q. Okay then, we'll take a break now.

11 (BREAK)

12 EARLE, Q.C.:

13 Q. Mr. Barnes, I just want to be clear on

14 something. The 2003 to 2005 lag, did you say

15 that the members decided to take the EBS

16 project away from CAPP for a period of time

17 there?

18 MR. BARNES:

19 A. I said that when--I guess I should just

20 clarify that. The members of CAPP decided

21 that the Safety Committee of CAPP should stop

22 working on this issue and that they, as

23 individual operators, would take the issue

24 away and have further discussion within their

25 own companies. So the Safety Committee, for a

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1 period of time in 2004, stopped working on the

2 issue.

3 EARLE, Q.C.:

4 Q. So it came off the agenda essentially?

5 MR. BARNES:

6 A. Well, it stayed on the agenda, but there was

7 no work being done for a period of time in

8 2004.

9 EARLE, Q.C.:

10 Q. How long a period of time was that?

11 MR. BARNES:

12 A. Eight months, six to eight months.

13 EARLE, Q.C.:

14 Q. And how did it get back on the agenda?

15 MR. BARNES:

16 A. Our members basically brought the issue back

17 to CAPP and said, "okay, we've had some

18 internal discussions. We're going in the

19 right direction that we want to go in. Please

20 proceed with implementation."

21 EARLE, Q.C.:

22 Q. Did you inform the regulator during that

23 period of time that your members would be

24 dealing with the issue individually rather

25 than it being dealt with as an industry wide

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<p>1 initiative by CAPP?</p> <p>2 MR. BARNES:</p> <p>3 A. There was no formal discussion with the</p> <p>4 regulator, and I don't recall any informal</p> <p>5 discussion on that issue either.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. So January 30th and 31st of 2006, you have a</p> <p>8 workshop?</p> <p>9 MR. BARNES:</p> <p>10 A. Yes.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. What's the idea of having the workshop?</p> <p>13 MR. BARNES:</p> <p>14 A. Industry was proceeding with the</p> <p>15 implementation of the compressed air device</p> <p>16 and it was decided, because there were some</p> <p>17 medical aspects around the use of the device</p> <p>18 and the use of the device in training that</p> <p>19 needed to be further understood that were</p> <p>20 identified in the risk assessment that took</p> <p>21 place in 2005 and through some other research</p> <p>22 that took place in the years following that we</p> <p>23 needed to bring in some external expertise</p> <p>24 from other international jurisdictions that</p> <p>25 had some knowledge about risks, especially</p>	<p>1 sure we haven't missed anything from</p> <p>2 discounting it.</p> <p>3 EARLE, Q.C.:</p> <p>4 Q. Well, the Hybrid was the preferred device?</p> <p>5 MR. BARNES:</p> <p>6 A. The compressed air device was the preferred</p> <p>7 device that we were working towards</p> <p>8 implementing in eastern Canada.</p> <p>9 EARLE, Q.C.:</p> <p>10 Q. And if we go back to your earlier document, so</p> <p>11 you're talking about the Hybrid as preferred.</p> <p>12 MR. BARNES:</p> <p>13 A. In one of the discussion papers in 2002, the</p> <p>14 consultant recommended going with the Hybrid</p> <p>15 Rebreather, yes.</p> <p>16 EARLE, Q.C.:</p> <p>17 Q. And then in this, at this workshop, you say</p> <p>18 the compressed air device is the preferred</p> <p>19 one?</p> <p>20 MR. BARNES:</p> <p>21 A. In 2004, our members made a decision to go</p> <p>22 towards compressed air device and to work</p> <p>23 towards implementation of that device and in</p> <p>24 the timeframe of this workshop, which was</p> <p>25 2006, we want to discuss the medical</p>
Page 58	Page 60
<p>1 along the lines of medical risks.</p> <p>2 EARLE, Q.C.:</p> <p>3 Q. At page 70, you state the objective, in the</p> <p>4 second paragraph there.</p> <p>5 MR. BARNES:</p> <p>6 A. Um-hm.</p> <p>7 EARLE, Q.C.:</p> <p>8 Q. The objective of the workshop was to provide</p> <p>9 stakeholders with accurate medical training</p> <p>10 and operational EBS information that would</p> <p>11 allow CAPP members to make an informed</p> <p>12 decision on which type of device should be</p> <p>13 implemented in east coast Canada.</p> <p>14 MR. BARNES:</p> <p>15 A. Yes.</p> <p>16 EARLE, Q.C.:</p> <p>17 Q. So we're still selecting the device six years</p> <p>18 -</p> <p>19 MR. BARNES:</p> <p>20 A. No, the general direction in 2004 was to go</p> <p>21 with a compressed air device, but the thought</p> <p>22 was if we had the medical providers or</p> <p>23 medical--international medical expertise</p> <p>24 available for this workshop that they should</p> <p>25 also look at the other device, just to make</p>	<p>1 implications and risks associated with not</p> <p>2 only the compressed air device, which was the</p> <p>3 decision we had made of the device to use, but</p> <p>4 we also included Hybrid rebreather or the</p> <p>5 rebreathers as well, just so that we didn't</p> <p>6 miss any information by discounting those two</p> <p>7 devices. Because even at that point in time,</p> <p>8 the devices weren't in widespread use in the</p> <p>9 UK.</p> <p>10 EARLE, Q.C.:</p> <p>11 Q. If in 2004 there's a decision to go with the</p> <p>12 compressed air, and this is the wonders of</p> <p>13 going backwards, because September 2002,</p> <p>14 you're in the discussion paper, Hybrid seems</p> <p>15 to be the way to go.</p> <p>16 MR. BARNES:</p> <p>17 A. That was the recommendation of the consultant,</p> <p>18 yes.</p> <p>19 EARLE, Q.C.:</p> <p>20 Q. Where's the decision making process that led</p> <p>21 to compressed air in your exhibits?</p> <p>22 MR. BARNES:</p> <p>23 A. It occurred--there's nothing in our exhibits.</p> <p>24 It occurred in our Executive Policy Group, one</p> <p>25 of their meetings in 2004.</p>

Page 33	<p>1 MS. FAGAN: 2 Q. Is it this? 3 EARLE, Q.C.: 4 Q. That's it, yeah. Okay, if you could give that 5 to the witness, Ms. Fagan? And then I'll just 6 - 7 REGISTRAR: 8 Q. Here you go, sir. 9 EARLE, Q.C.: 10 Q. I draw your attention particularly to the 11 third paragraph, "To facilitate a successful 12 implementation of EBS, it is paramount that an 13 implementation committee be commissioned to 14 oversee the recommendations and findings in 15 the discussion paper we have prepared on this 16 issue. See attached. Our research understood 17 and resolved. This committee should be 18 comprised of east coast operators who have 19 helicopter contracts and representative from 20 CAODC, a worker representative, and a safety 21 representative from the Board, as well as 22 other operating companies who have an interest 23 and knowledge of the EBS". Have you got that? 24 MR. PIKE: 25 A. Yes, sir.</p>	Page 35	<p>1 date when the committee chose to function. 2 MS. CROSBIE: 3 Q. You want the date when the committee -- 4 EARLE, Q.C.: 5 Q. Started to function. 6 MS. CROSBIE: 7 Q. Began functioning? 8 EARLE, Q.C.: 9 Q. Began functioning, yes, and Mr. Neary sat on 10 the committee? 11 MR. PIKE: 12 A. Mr. Noel. 13 EARLE, Q.C.: 14 Q. Mr. Noel, sorry, Mr. Noel, sat on the 15 committee. Now you'll notice that this also 16 suggested a worker representative? 17 MR. PIKE: 18 A. Yes. 19 EARLE, Q.C.: 20 Q. And we know from the evidence that that went 21 by the wayside, according to Mr. Barnes, that 22 there were other means desired by the 23 operators in terms of worker representation. 24 Given that you're the custodian of the worker 25 right to participate, what steps did C-NLOPB</p>
Page 34	<p>1 EARLE, Q.C.: 2 Q. And now I won't bring us all through the 3 exercise of trying to find the next letter, 4 but the next document in that system is -- of 5 Exhibit 57, is April 8th, 2003. It's a letter 6 from C-NLOPB to CAPP, in which you put forward 7 Mr. Neary as your nominee to this committee. 8 Did that committee ever function? 9 MR. PIKE: 10 A. I believe it did, sir. 11 EARLE, Q.C.: 12 Q. Pardon? 13 MR. PIKE: 14 A. Yes. 15 EARLE, Q.C.: 16 Q. It did? 17 MR. PIKE: 18 A. My understanding is it did. 19 EARLE, Q.C.: 20 Q. When did it start to function? 21 MR. PIKE: 22 A. I don't have that exact detail, but I can 23 certainly get that for you. 24 EARLE, Q.C.: 25 Q. If you would, please, undertaking to provide</p>	Page 36	<p>1 take to see, in fact, that there was worker 2 representation? 3 MR. PIKE: 4 A. I would have to review the file, sir. I don't 5 have the answer to that at this point. Mr. 6 Noel, who was part of the committee, would 7 have reported back, and I don't recall the 8 detail of what he did or didn't tell me, or 9 what he did or didn't do at the committee 10 meeting when there was not a worker 11 representative present. 12 EARLE, Q.C.: 13 Q. Well, if we could go to Exhibit 199, page 3. 14 So we can be clear on this, this is as I 15 understand it, the 2007 joint meetings of the 16 occupational health and safety committees from 17 the various installations. These are notes or 18 minutes entitled "A report on discussions", 19 and at page -- so this is 2007. At page 3, 20 it's noted, "The new helicopter underwater 21 escape breathing apparatus, HUEBA equipment, 22 the C-NLOPB will ask the CAPP HUEBA Committee 23 to issue clear communications to the industry 24 about development with regard to the 25 introduction of this equipment and its</p>

Page 37	Page 39
<p>1 implications for training and procedures".</p> <p>2 You would obviously be aware of this?</p> <p>3 MR. PIKE:</p> <p>4 A. Yes.</p> <p>5 EARLE, Q.C.:</p> <p>6 Q. Is this not an indication that there was even</p> <p>7 at 2007, seven years after you had asked this</p> <p>8 initiative to be undertaken, an issue amongst</p> <p>9 workers about the kind of communication that</p> <p>10 was coming from this CAPP Committee on the</p> <p>11 HUEBA?</p> <p>12 MR. PIKE:</p> <p>13 A. The comment, I think, is self-explanatory,</p> <p>14 fairly straightforward. This is not the same</p> <p>15 committee that we just discussed in 2003. My</p> <p>16 understanding is that the 2003 committee</p> <p>17 disbanded when there became a disagreement on</p> <p>18 the implementation of the compressed air</p> <p>19 device. My understanding is that it was</p> <p>20 reformed and we felt that CAPP -- indeed CAPP</p> <p>21 had the committee at that stage, should be the</p> <p>22 ones to clearly communicate with the workers</p> <p>23 what was happening. My understanding was that</p> <p>24 you need to have -- in order to present</p> <p>25 something, you need to have something to</p>	<p>1 continue to work on this issue with CAPP. CAPP</p> <p>2 will be asked to clearly communicate the</p> <p>3 status of this issue to offshore workers".</p> <p>4 Can we not take it from that, Mr. Pike, that a</p> <p>5 year after the fact, the issue of -- C-NLOPB</p> <p>6 has not been able to resolve satisfactorily</p> <p>7 the issue of communications from CAPP to the</p> <p>8 workers on the HUEBA?</p> <p>9 MR. PIKE:</p> <p>10 A. Yes, you can conclude that.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. Mr. Pike, there's another area in which this</p> <p>13 participation with CAPP comes into play, and</p> <p>14 that is with respect to this training and</p> <p>15 qualifications role, and if we could look at</p> <p>16 Exhibit 199 again, page 11, right down at the</p> <p>17 bottom of the page, "CAPP Training and</p> <p>18 Qualifications Committee, who are the members,</p> <p>19 questions were raised why there are no</p> <p>20 representatives of the employees on CAPP's</p> <p>21 training committee. The C-NLOPB agreed to</p> <p>22 pass this message on to CAPP, so that worker</p> <p>23 representatives would be involved in the</p> <p>24 discussions on training standards, methods,</p> <p>25 and procedures". Isn't it correct, Mr. Pike,</p>
<p>Page 38</p> <p>1 present, so they were still working through</p> <p>2 the piece as to what it was they were going to</p> <p>3 introduce, that's the first step. The second</p> <p>4 step is what training is going to take place.</p> <p>5 So they needed to complete that piece of work</p> <p>6 in order to communicate. You have to have</p> <p>7 something to communicate before you initiate</p> <p>8 that piece. We certainly weren't necessarily</p> <p>9 satisfied with CAPP's communications with the</p> <p>10 workers at that point, and we -- and I'd have</p> <p>11 to go back and see exactly what we did after</p> <p>12 this meeting to more formally communicate with</p> <p>13 CAPP that we wanted that communication to take</p> <p>14 forward. Again in order to communicate, you</p> <p>15 have to have information to communicate, and I</p> <p>16 understood that that's what they were putting</p> <p>17 together.</p> <p>18 EARLE, Q.C.:</p> <p>19 Q. I suppose, Mr. Pike, some might think it was a</p> <p>20 cheap shot if I said after seven years, surely</p> <p>21 heavens you should have something to</p> <p>22 communicate, but if we look at the next year,</p> <p>23 that's Exhibit 200, go to page 13, and you'll</p> <p>24 see under HUEBA, "Implementation and Training.</p> <p>25 Action to be taken by C-NLOPB. C-NLOPB will</p>	<p>Page 40</p> <p>1 that changes in these standards are supposed</p> <p>2 to be passed through the Occupational Health</p> <p>3 and Safety Committees for the various</p> <p>4 operators before they're implemented?</p> <p>5 MR. PIKE:</p> <p>6 A. Yes.</p> <p>7 EARLE, Q.C.:</p> <p>8 Q. Does this not indicate again a problem in that</p> <p>9 area?</p> <p>10 MR. PIKE:</p> <p>11 A. Yes.</p> <p>12 EARLE, Q.C.:</p> <p>13 Q. Mr. Pike, in March of 2007, March 13th, 2007,</p> <p>14 and for those who want to look at it, the</p> <p>15 letter is at Document 1.9 of the CAPP Exhibit</p> <p>16 57. In March of 2007, you had your Chief</p> <p>17 Executive Officer write what I would describe</p> <p>18 as a stern letter to the operators saying --</p> <p>19 MR. SCHULTZ:</p> <p>20 Q. Exhibit 53, Part --</p> <p>21 MS. FAGAN:</p> <p>22 Q. It's Exhibit 53.</p> <p>23 REGISTRAR:</p> <p>24 Q. Thank you.</p> <p>25 MS. FAGAN:</p>

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1 Worker safety and environmental protection and
 2 safety are our paramount issues in respect of
 3 considering any issue at the Board or at staff
 4 level, and that is a cultural definition at
 5 the Board, and I think Mr. Pike refers to it,
 6 but there is also a provision of our
 7 legislation that provides where the safety
 8 officer and the conservation officer or the
 9 environmental officer are making decisions
 10 that may encroach upon each other, the
 11 decisions in respect of safety again are
 12 paramount over those of environment or
 13 conservation. So we do see a hierarchy within
 14 these statutory provisions, these areas of the
 15 mandate. Worker safety, you know, as a stated
 16 piece and as a cultural piece is of paramount
 17 importance at the Board.
 18 ROIL, Q.C.:
 19 Q. Okay. The next slide is called objectives.
 20 MR. ANDREWS:
 21 A. The objectives and these three sides are a
 22 suite of information that the Board has
 23 provided to its public that it spend a
 24 considerable amount of time developing. I'm
 25 going to focus, in the objectives piece, on

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1 safety.
 2 ROIL, Q.C.:
 3 Q. Yes.
 4 MR. ANDREWS:
 5 A. Noting that from the previous slide, our role
 6 identifies safety and environment as being of
 7 paramount interest. In this instance, I'm
 8 going to focus on the safety. And again, the
 9 objectives are really the implementation or
 10 the--we are describing here the objects of the
 11 implementation of our role from the previous
 12 slide, the oversight that we saw as part of
 13 our mandate. The key word in respect of our
 14 safety objectives is verification and you will
 15 see that in the language and I will now read
 16 the objectives for safety: to verify that
 17 operators have appropriate safety plans in
 18 place; to verify, through audits and
 19 inspections, that operators follow their
 20 safety plans and applicable statutory
 21 requirements; and to verify, through
 22 compliance actions, that deviations from
 23 approved plans and applicable statutory
 24 requirements are corrected. So we move from
 25 oversight to verification.

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1 In this instance, our objective in
 2 respect of safety is, in the initial instance,
 3 and certainly the safety plans are very
 4 important at the authorization stage to verify
 5 that appropriate safety plans are in place.
 6 These are not the Board's safety plans. These
 7 are the operators' safety plans. We are
 8 verifying that appropriate safety plans are in
 9 place.
 10 ROIL, Q.C.:
 11 Q. And would I take it then that because the
 12 safety plans are generated by the operators
 13 that they would not necessarily all look
 14 exactly the same?
 15 MR. ANDREWS:
 16 A. That's very much the case. One would think
 17 that certain components of any safety plan
 18 would be universal, but certainly the risk
 19 assessment and the risk management provisions
 20 of a safety plan, and Mr. Pike will talk more
 21 about those aspects of it, they would reflect
 22 an operator's corporate culture and
 23 philosophy, something else that, you know, you
 24 will hear more about as this Inquiry goes on.
 25 But the safety plan obviously would be a

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1 document that would be subject of staff review
 2 and analysis.
 3 ROIL, Q.C.:
 4 Q. By staff, you mean the Board's staff?
 5 MR. ANDREWS:
 6 A. The Board's staff. It would be--the safety
 7 plan that's in place would be an approved part
 8 of the authorization that would be granted by
 9 the Board and at the time that the
 10 authorization is granted, we would--the Board
 11 would have verified that an appropriate safety
 12 plan is in place. Whether that's subject of
 13 conditions or whether it has had deficiencies
 14 identified and corrected or whether there were
 15 gaps originally in the safety plan at the time
 16 that the authorization is issued, our
 17 objective would have been to verify that the
 18 operator had an appropriate safety plan in
 19 place. And thereafter during the undertaking
 20 of the activity authorized by the
 21 authorization, we would verify, through audits
 22 and inspections, that the operators follow
 23 their safety plans and the applicable
 24 statutory requirements. So that is an ongoing
 25 role for certainly Mr. Pike's department of

9.5 Contractor shall provide a secure data line connection compatible with the technology standards in use as required to meet Owner's need to access Contractor's POB system.

10.0 Alternate Landing Site

10.1 Contractor shall provide an alternate landing site, approved by the governing civil aviation authority for flights, approaches, and landings to the facility under Instrument Flight Rules. Contractor shall provide all personnel, facilities, equipment, permits and/or authorizations required to operate such a site in a safe and efficient manner. The alternate landing site shall be within close proximity to the operating base and possess a favorable climate such that the utilization would contribute to overall dispatch reliability and payload efficiency.

10.2 Contractor shall provide an asphalt landing area, flood lighting, weather observation and reporting equipment, an instrument approach compatible with Contractor's onboard navigation equipment, and a small service building. Facility should be capable of serving a variety of helicopter types.

11.0 First Response Capability

11.1 Contractor shall provide all personnel, equipment, permits and/or authorizations required to provide First Response to Owner specific incidents on a twenty-four (24) hour, seven (7) day a week basis. During non core hours, wheels up response time shall be, at most, one (1) hour.

11.2 Contractor shall be staffed and equipped to respond to an incident by locating the casualty, assisting with air deployable equipment and recovering personnel through the use of a rescue winch and winch operator. Potential first response missions shall include, but shall not be limited to:

- Platform or other drilling platforms/vessels medevac
- Support vessel medevac
- Tanker medevac
- Helicopter ditching; location and potential recovery of personnel
- Location of lifeboats/fast rescue craft and potential recovery of personnel

11.3 Contractor shall provide First Response training to Owner personnel as required.

11.4 Contractor must be capable of providing operational support to the offshore installation and other Owner contracted assets, through the transfer of personnel and/or equipment via the rescue hoist, if and when required.

11.5 Contractor shall station first response equipment at the operating base and on the offshore installation as determined by Contractor and with the concurrence of Owner.

11.6 First response equipment shall include, but not be limited to:

Page 73	<p>1 and this particular slide, slide 62, I believe</p> <p>2 this comes out of your search and rescue</p> <p>3 brochure.</p> <p>4 MR. BURT:</p> <p>5 A. Yes, it's right out of our standard brochure.</p> <p>6 That's why I had to explain the FLIR in this</p> <p>7 case because it's more of a standard -- part</p> <p>8 of our full kit.</p> <p>9 MS. FAGAN:</p> <p>10 Q. Okay, and so in these, if you advertise it as</p> <p>11 being part of a standard kit, then is it</p> <p>12 installed or is it swapped -- permanently</p> <p>13 installed or is it swapped in and out? I</p> <p>14 mean, if it's going to take more than an hour</p> <p>15 to install, would it be fair to say you would</p> <p>16 not be able to manage the wheels up within an</p> <p>17 hour, if in addition to the winch and seats</p> <p>18 you had to install this device?</p> <p>19 MR. BURT:</p> <p>20 A. The only application of FLIR that we have is</p> <p>21 in dedicated SAR -- dedicated aircraft that</p> <p>22 are preconfigured for SAR.</p> <p>23 MS. FAGAN:</p> <p>24 Q. Okay.</p> <p>25 MR. BURT:</p>	Page 75	<p>1 that are especially built that open in a very</p> <p>2 quick fashion, a specialized mega-door. So we</p> <p>3 get very specific about how we handle a</p> <p>4 dedicated SAR service.</p> <p>5 COMMISSIONER:</p> <p>6 Q. So that's why in the North Sea, for instance,</p> <p>7 they can have wheels up in fifteen minutes?</p> <p>8 MR. BURT:</p> <p>9 A. Absolutely.</p> <p>10 COMMISSIONER:</p> <p>11 Q. They're ready to go.</p> <p>12 MR. BURT:</p> <p>13 A. You literally have to be ready to press</p> <p>14 starters. When you talk about fifteen</p> <p>15 minutes, you got to start an aircraft up,</p> <p>16 that's three minutes, and to be wheels</p> <p>17 airborne, effectively that once you push that</p> <p>18 button somebody is hitting the door and</p> <p>19 opening the door within ten or fifteen</p> <p>20 seconds. We're drilled on that, and to be</p> <p>21 honest with you, when we first started, it was</p> <p>22 like a -- I think we had to go through an</p> <p>23 education process that it's a challenge to</p> <p>24 meet those 20 minute dispatch times every</p> <p>25 single time. We found that even having our</p>
Page 74	<p>1 A. And this pamphlet here speaks of our gross</p> <p>2 capabilities, this is what we're capable of,</p> <p>3 full capability.</p> <p>4 COMMISSIONER:</p> <p>5 Q. That's what I assumed, that this would be a</p> <p>6 plane or an aircraft that would do SAR?</p> <p>7 MR. BURT:</p> <p>8 A. Correct, correct.</p> <p>9 MS. FAGAN:</p> <p>10 Q. Now you had mentioned a dedicated service</p> <p>11 earlier, that what you provide here is a</p> <p>12 dedicated service. Is there a difference</p> <p>13 between a dedicated service and a dedicated</p> <p>14 aircraft?</p> <p>15 MR. BURT:</p> <p>16 A. Yes, and, of course, that's how you effect the</p> <p>17 difference in the response times. We have</p> <p>18 dedicated services in the Gulf of Mexico, as</p> <p>19 we talked about, in Alaska, and in the North</p> <p>20 West Territories. So we're quite familiar</p> <p>21 with what it takes to do that. These aircraft</p> <p>22 are pre-configured, pre-fuelled, pre-flight</p> <p>23 planned, and even staged in a manner with a</p> <p>24 tug, a towing unit attached and ready to go.</p> <p>25 In some places, we even have our hangar doors</p>	Page 76	<p>1 crew across the airfield at their</p> <p>2 accommodations unit sometimes can be a</p> <p>3 challenge, so we had to make some</p> <p>4 accommodations to have some of our crew at the</p> <p>5 hangar. So it was a learning experience we've</p> <p>6 gone through in the last three years.</p> <p>7 COMMISSIONER:</p> <p>8 Q. If I may, I'm obviously interested in this.</p> <p>9 What about weather, let's say there's a</p> <p>10 dedicated and fitted out helicopter ready to</p> <p>11 go and all things being equal, in fifteen or</p> <p>12 twenty minutes - what about weather?</p> <p>13 Supposing it's freezing rain, you can't --</p> <p>14 MR. BURT:</p> <p>15 A. That's correct.</p> <p>16 COMMISSIONER:</p> <p>17 Q. You can't fly.</p> <p>18 MR. BURT:</p> <p>19 A. There are limits.</p> <p>20 COMMISSIONER:</p> <p>21 Q. Yeah, what happens, does it build up on the</p> <p>22 fuselage, or on the rotors?</p> <p>23 MR. BURT:</p> <p>24 A. Well, freezing rain, number one, I'll just say</p> <p>25 it because it's the proper thing to say, we</p>

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<p>1 A. I'll back that one up.</p> <p>2 EARLE, Q.C.:</p> <p>3 Q. I've seen a promotion for one of your</p> <p>4 helicopter competitors who provides search and</p> <p>5 rescue services in Ireland, so you know who</p> <p>6 that is.</p> <p>7 MR. BURT:</p> <p>8 A. Yes.</p> <p>9 EARLE, Q.C.:</p> <p>10 Q. And claiming to have, and have had for a</p> <p>11 number of years now --</p> <p>12 MR. BURT:</p> <p>13 A. Yes.</p> <p>14 EARLE, Q.C.:</p> <p>15 Q. Four aircraft with auto hover.</p> <p>16 MR. BURT:</p> <p>17 A. This is the 61s?</p> <p>18 EARLE, Q.C.:</p> <p>19 Q. Yeah.</p> <p>20 MR. BURT:</p> <p>21 A. Yeah, and they've been there a lot longer than</p> <p>22 four years. They've had auto hover -- auto</p> <p>23 hover has been in Sikorsky products in the</p> <p>24 Hong Kong Police Force since the 80s.</p> <p>25 EARLE, Q.C.:</p>	<p>1 EARLE, Q.C.:</p> <p>2 Q. Okay, that's the ones here?</p> <p>3 MR. BURT:</p> <p>4 A. Correct.</p> <p>5 EARLE, Q.C.:</p> <p>6 Q. But you actually bought them for Nova Scotia</p> <p>7 as well?</p> <p>8 MR. BURT:</p> <p>9 A. We have an aircraft in Nova Scotia, that's</p> <p>10 correct, and that implemented last year.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. The PR from Sikorsky said you ordered five?</p> <p>13 MR. BURT:</p> <p>14 A. Yes. We have another aircraft, S-92, in the</p> <p>15 Gulf of Mexico.</p> <p>16 EARLE, Q.C.:</p> <p>17 Q. Yeah, okay. So was the one that came here in</p> <p>18 2005 your first acquisition?</p> <p>19 MR. BURT:</p> <p>20 A. That's correct.</p> <p>21 EARLE, Q.C.:</p> <p>22 Q. At least then -- I take it then, your 2006 was</p> <p>23 one that was fully ready for auto hover?</p> <p>24 MR. BURT:</p> <p>25 A. It was all but ready. Again with the radar</p>
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<p>1 Q. So the predecessor -- not quite the</p> <p>2 predecessor because I know there's 76s and</p> <p>3 different things, but it does seem to be that</p> <p>4 the 61, the Sikorsky 61, was almost the 737 of</p> <p>5 helicopters.</p> <p>6 MR. BURT:</p> <p>7 A. That's a fair assessment, yeah.</p> <p>8 EARLE, Q.C.:</p> <p>9 Q. It's a 1960s model helicopter which still has</p> <p>10 very large numbers operating in the world</p> <p>11 today, and it -- so it was equipped with auto</p> <p>12 hover?</p> <p>13 MR. BURT:</p> <p>14 A. Correct.</p> <p>15 EARLE, Q.C.:</p> <p>16 Q. Now the S-92, you had them come in service in</p> <p>17 2005?</p> <p>18 MR. BURT:</p> <p>19 A. Right.</p> <p>20 EARLE, Q.C.:</p> <p>21 Q. I think your second one came in in 2005,</p> <p>22 actually?</p> <p>23 MR. BURT:</p> <p>24 A. The first one is 2005, 2006, and 2007</p> <p>25 respectively.</p>	<p>1 altimeter and some wiring, yes, it was all but</p> <p>2 ready.</p> <p>3 EARLE, Q.C.:</p> <p>4 Q. Tell me what drives the certification process?</p> <p>5 I mean, is the reason that there is now a</p> <p>6 certification application to the FAA in the US</p> <p>7 for this auto hover software because Cougar</p> <p>8 has said we want that option, and so it's got</p> <p>9 to be certified?</p> <p>10 MR. BURT:</p> <p>11 A. Yes.</p> <p>12 EARLE, Q.C.:</p> <p>13 Q. Or has it been hanging in the works since</p> <p>14 2005?</p> <p>15 MR. BURT:</p> <p>16 A. No, the first aircraft that we ordered, a</p> <p>17 completion on the auto hover was our serial</p> <p>18 number 61, and that aircraft was some two</p> <p>19 years ago that we had made that request and</p> <p>20 the certification is still pending.</p> <p>21 EARLE, Q.C.:</p> <p>22 Q. It's taken two years?</p> <p>23 MR. BURT:</p> <p>24 A. Yes.</p> <p>25 EARLE, Q.C.:</p>

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1 recommendations?

2 MR. PIKE:

3 A. Yes.

4 EARLE, Q.C.:

5 Q. And, in particular, you would be aware of

6 Recommendation 56, which is that there be

7 required a full time search and rescue

8 dedicated helicopter provided by either

9 government or industry, fully equipped to

10 search and rescue standards, and then there

11 are a few other words not relevant for our

12 consideration, and that it be readily

13 available?

14 MR. PIKE:

15 A. Yes.

16 EARLE, Q.C.:

17 Q. And I take it in your job as a regulator, you,

18 in fact, and this is more for the record, I

19 guess, you do regulate the provision of search

20 and rescue support or facilities by the

21 operators?

22 MR. PIKE:

23 A. Yes.

24 EARLE, Q.C.:

25 Q. So I take it then you would be familiar with

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1 the sorts of search and rescue supports that

2 are otherwise available here, Coast Guard, and

3 103 Squadron in Gander?

4 MR. PIKE:

5 A. Yes.

6 EARLE, Q.C.:

7 Q. Is that correct?

8 MR. PIKE:

9 A. Yes.

10 EARLE, Q.C.:

11 Q. So you would have known, for instance, the

12 wheels up time that 103 has day time?

13 MR. PIKE:

14 A. Yes.

15 EARLE, Q.C.:

16 Q. And again for the record, you would have been

17 aware that in the North Sea a search and

18 rescue is provided by operators -- under

19 contract from operators, and that in the North

20 Sea a wheels up time of 15 minutes is the

21 standard?

22 MR. PIKE:

23 A. Something in that order, yes, sir.

24 EARLE, Q.C.:

25 Q. Pardon?

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1 MR. PIKE:

2 A. Something in that order, yes, sir.

3 EARLE, Q.C.:

4 Q. Yeah. So that's, if you will, the landscape

5 which you operate in, part of it?

6 MR. PIKE:

7 A. Yes.

8 EARLE, Q.C.:

9 Q. And you've talked about audit of search and

10 rescue.

11 MR. PIKE:

12 A. I'm sorry, I didn't hear --

13 EARLE, Q.C.:

14 Q. You've talked about audit of search and rescue

15 capacity.

16 MR. PIKE:

17 A. Yes.

18 EARLE, Q.C.:

19 Q. And you brought us some exhibits. What is the

20 standard that you audit against?

21 MR. PIKE:

22 A. When we have audited Cougar with regard to

23 search and rescue, we have audited that they

24 do indeed have a procedure in place, that they

25 do indeed provide the training for their SAR

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1 technicians, and we've verified those pieces.

2 We take a look at the equipment that they've

3 provided. In the bigger picture, they would

4 have identified what they need to perform, and

5 that would have been by the operator's safety

6 plan. So we would be verifying in this case

7 what had been presented in a safety plan and

8 what had been provided by the operator in the

9 way of their procedures and processes for

10 training. Those things did exist.

11 EARLE, Q.C.:

12 Q. You tell me what you look at, but I'm

13 interested in the standard that you compare

14 them to. For instance, when an auditor, a

15 financial auditor, an accountant comes in and

16 does an audit, he or she will compare what has

17 been done in terms of the financial records in

18 accordance with what's known as GAAP,

19 Generally Accepted Accounting Principles, and

20 they have handbooks and standards as to how

21 books should be kept, disclosure, and all this

22 sort of stuff. So when you go to Cougar and

23 check what they have, what are you measuring

24 it against?

25 MR. PIKE:

Page 61	<p>1 recommendations?</p> <p>2 MR. PIKE:</p> <p>3 A. Yes.</p> <p>4 EARLE, Q.C.:</p> <p>5 Q. And, in particular, you would be aware of</p> <p>6 Recommendation 56, which is that there be</p> <p>7 required a full time search and rescue</p> <p>8 dedicated helicopter provided by either</p> <p>9 government or industry, fully equipped to</p> <p>10 search and rescue standards, and then there</p> <p>11 are a few other words not relevant for our</p> <p>12 consideration, and that it be readily</p> <p>13 available?</p> <p>14 MR. PIKE:</p> <p>15 A. Yes.</p> <p>16 EARLE, Q.C.:</p> <p>17 Q. And I take it in your job as a regulator, you,</p> <p>18 in fact, and this is more for the record, I</p> <p>19 guess, you do regulate the provision of search</p> <p>20 and rescue support or facilities by the</p> <p>21 operators?</p> <p>22 MR. PIKE:</p> <p>23 A. Yes.</p> <p>24 EARLE, Q.C.:</p> <p>25 Q. So I take it then you would be familiar with</p>	Page 63	<p>1 MR. PIKE:</p> <p>2 A. Something in that order, yes, sir.</p> <p>3 EARLE, Q.C.:</p> <p>4 Q. Yeah. So that's, if you will, the landscape</p> <p>5 which you operate in, part of it?</p> <p>6 MR. PIKE:</p> <p>7 A. Yes.</p> <p>8 EARLE, Q.C.:</p> <p>9 Q. And you've talked about audit of search and</p> <p>10 rescue.</p> <p>11 MR. PIKE:</p> <p>12 A. I'm sorry, I didn't hear --</p> <p>13 EARLE, Q.C.:</p> <p>14 Q. You've talked about audit of search and rescue</p> <p>15 capacity.</p> <p>16 MR. PIKE:</p> <p>17 A. Yes.</p> <p>18 EARLE, Q.C.:</p> <p>19 Q. And you brought us some exhibits. What is the</p> <p>20 standard that you audit against?</p> <p>21 MR. PIKE:</p> <p>22 A. When we have audited Cougar with regard to</p> <p>23 search and rescue, we have audited that they</p> <p>24 do indeed have a procedure in place, that they</p> <p>25 do indeed provide the training for their SAR</p>
Page 62	<p>1 the sorts of search and rescue supports that</p> <p>2 are otherwise available here, Coast Guard, and</p> <p>3 103 Squadron in Gander?</p> <p>4 MR. PIKE:</p> <p>5 A. Yes.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. Is that correct?</p> <p>8 MR. PIKE:</p> <p>9 A. Yes.</p> <p>10 EARLE, Q.C.:</p> <p>11 Q. So you would have known, for instance, the</p> <p>12 wheels up time that 103 has day time?</p> <p>13 MR. PIKE:</p> <p>14 A. Yes.</p> <p>15 EARLE, Q.C.:</p> <p>16 Q. And again for the record, you would have been</p> <p>17 aware that in the North Sea a search and</p> <p>18 rescue is provided by operators -- under</p> <p>19 contract from operators, and that in the North</p> <p>20 Sea a wheels up time of 15 minutes is the</p> <p>21 standard?</p> <p>22 MR. PIKE:</p> <p>23 A. Something in that order, yes, sir.</p> <p>24 EARLE, Q.C.:</p> <p>25 Q. Pardon?</p>	Page 64	<p>1 technicians, and we've verified those pieces.</p> <p>2 We take a look at the equipment that they've</p> <p>3 provided. In the bigger picture, they would</p> <p>4 have identified what they need to perform, and</p> <p>5 that would have been by the operator's safety</p> <p>6 plan. So we would be verifying in this case</p> <p>7 what had been presented in a safety plan and</p> <p>8 what had been provided by the operator in the</p> <p>9 way of their procedures and processes for</p> <p>10 training. Those things did exist.</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. You tell me what you look at, but I'm</p> <p>13 interested in the standard that you compare</p> <p>14 them to. For instance, when an auditor, a</p> <p>15 financial auditor, an accountant comes in and</p> <p>16 does an audit, he or she will compare what has</p> <p>17 been done in terms of the financial records in</p> <p>18 accordance with what's known as GAAP,</p> <p>19 Generally Accepted Accounting Principles, and</p> <p>20 they have handbooks and standards as to how</p> <p>21 books should be kept, disclosure, and all this</p> <p>22 sort of stuff. So when you go to Cougar and</p> <p>23 check what they have, what are you measuring</p> <p>24 it against?</p> <p>25 MR. PIKE:</p>

Page 69	<p>1 your Exhibit 194, page 15 of the exhibit.</p> <p>2 These are -- these are the sorts of questions</p> <p>3 that you ask?</p> <p>4 MR. PIKE:</p> <p>5 A. These are the questions that were put together</p> <p>6 by the safety officer when they went to</p> <p>7 Cougar's facilities, yes.</p> <p>8 EARLE, Q.C.:</p> <p>9 Q. And do you do any more than ask the questions?</p> <p>10 MR. PIKE:</p> <p>11 A. The norm for a safety officer and the</p> <p>12 expectation is they know the answer before the</p> <p>13 ask the question, so -- in this case, I'm not</p> <p>14 exactly sure what they would have used as the</p> <p>15 expectation to answer that question, but they</p> <p>16 certainly have identified where those</p> <p>17 questions came from, vis a vis the regulations</p> <p>18 and some of the guidance. They would have</p> <p>19 copied -- when asking the question of Cougar,</p> <p>20 they would have been identifying how readily</p> <p>21 Cougar was answering those questions. They</p> <p>22 would have some idea of what the appropriate</p> <p>23 answers are to those questions.</p> <p>24 EARLE, Q.C.:</p> <p>25 Q. Well, it's interesting, you'll notice there</p>	Page 71	<p>1 full time search and rescue dedicated</p> <p>2 helicopter?</p> <p>3 MR. PIKE:</p> <p>4 A. The standard that that one was meeting was a</p> <p>5 one hour wheels up for SAR. We were given</p> <p>6 assurance that with that half hour, they would</p> <p>7 still meet the one hour wheels up time.</p> <p>8 EARLE, Q.C.:</p> <p>9 Q. Yeah, did not meet the Ocean Ranger standard?</p> <p>10 MR. PIKE:</p> <p>11 A. The Ocean Ranger had a different standard,</p> <p>12 yes, sir.</p> <p>13 EARLE, Q.C.:</p> <p>14 Q. And I suggest to you that when we look at the</p> <p>15 aircraft here, we have the S-92, and the next</p> <p>16 question down, number 2 there, as best I can</p> <p>17 read it, "Chevron S-92, no wench; S-61, no</p> <p>18 wench", and then opposite this you have,</p> <p>19 "Wenches left on. Working on being able to</p> <p>20 leave on S-92. One wench for the Super Puma".</p> <p>21 Certainly the notion that what you have</p> <p>22 standing by is a helicopter with the equipment</p> <p>23 able to be put on it in the event of an</p> <p>24 emergency, a helicopter that is able to be</p> <p>25 adapted to a search and rescue mode within</p>
Page 70	<p>1 are references to the contract and the answers</p> <p>2 given. So would you have not looked at the</p> <p>3 contract?</p> <p>4 MR. PIKE:</p> <p>5 A. They may have indeed, sir, looked at the</p> <p>6 contract. I have not. I believe the answer</p> <p>7 there is saying from Cougar, yes, they provide</p> <p>8 it and it's within the contract. Whether they</p> <p>9 actually had the contract, I can't answer.</p> <p>10 They may very well have, but I have not seen</p> <p>11 the contract and I'm not aware that we've</p> <p>12 actually requested the contract. It may have</p> <p>13 been shown to them when they asked that</p> <p>14 particular question.</p> <p>15 EARLE, Q.C.:</p> <p>16 Q. Where these questions were answered, you'll</p> <p>17 see that the answers that came back indicated</p> <p>18 that one of the four SAR compliant helicopters</p> <p>19 was always within 30 minutes of St. John's?</p> <p>20 MR. PIKE:</p> <p>21 A. Yes.</p> <p>22 EARLE, Q.C.:</p> <p>23 Q. I take it you would agree with me that that</p> <p>24 could not be said to meet the standard</p> <p>25 recommended by the Ocean Ranger Inquiry of a</p>	Page 72	<p>1 that one hour wheels up time?</p> <p>2 MR. PIKE:</p> <p>3 A. Yes.</p> <p>4 EARLE, Q.C.:</p> <p>5 Q. That's what we have here, and at page 18, the</p> <p>6 same thing. On the issue of training, Ten</p> <p>7 hours per month in contract for SAR training</p> <p>8 in operator contract, based on 90 day cycle.</p> <p>9 SAR tech will have to participate in</p> <p>10 training", and I think that would be "EXER",</p> <p>11 short for exercise, "depending on</p> <p>12 qualification, dual qualifications". How</p> <p>13 would you have measured the adequacy of the</p> <p>14 training?</p> <p>15 MR. PIKE:</p> <p>16 A. That would have been -- it would be difficult</p> <p>17 for me to actually respond to how the safety</p> <p>18 officer in this question would have judged it.</p> <p>19 EARLE, Q.C.:</p> <p>20 Q. Is there a standard?</p> <p>21 MR. PIKE:</p> <p>22 A. A minimum standard of a number of hours? Not</p> <p>23 that I'm aware of.</p> <p>24 EARLE, Q.C.:</p> <p>25 Q. So how do we know that ten hours is adequate,</p>

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 2 summary notes from the safety officer from
 3 those discussions. What this note does tell
 4 me is that this was indeed discussed. I mean,
 5 you asked before why he didn't tick, but I
 6 believe there may have been a tick next to
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 8 particular note, that piece was discussed with
 9 Cougar as to how they were able to meet the
 10 one hour wheels up time. So again the focus
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 12 was working and what wasn't working, which is
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 14 to address. Clearly in these notes that
 15 question was asked. You were wondering
 16 whether it was or wasn't. Clearly by this
 17 response, it was asked. I can't tell you what
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 19 file, what that full discussion was.
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 21 were satisfied with the discussion and the
 22 response from Cougar as to whether they would
 23 meet the one hour wheels up. We still had
 24 some concern with that, but they seem to be
 25 able to demonstrate that they were able to

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 3 Q. Mr. Pike, this also seems to identify the
 4 issue of the capacity for search and rescue at
 5 night, an issue which has come up in this
 6 Inquiry and this issue that we're happy that
 7 the Commissioner has seemed to address in an
 8 immediate fashion. Were steps taken by C-
 9 NLOPB to address the night flying issue?
 10 MR. PIKE:
 11 A. Not at that time.
 12 EARLE, Q.C.:
 13 Q. Look, I suppose it comes down to this, I mean,
 14 the information that we've heard here about
 15 response times, about the ability to ditch a
 16 helicopter at night, the ability to rescue at
 17 night, and with the greatest of respect to
 18 everybody in this room, it seems to me that
 19 you people, as safety experts, ought to be
 20 able to beat hands down a room full of lawyers
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 21 plan, which is what the safety plan is
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 23 up 24 hours a day, seven days a week, 52 weeks
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 25 pieces that has become of greater concern for

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 2 approached my international colleagues about
 3 questions on the protection that flight suits
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1 we're doing is applying the legislation and
 2 the regulation to the activities of the
 3 operators. That is the focus, and in the
 4 respective and approved authorization, our
 5 role is then to oversee the operator's
 6 compliance with the authorization and with the
 7 statutory and regulatory provisions. That is
 8 the role of the Board as a regulatory
 9 administrative agency.

10 ROIL, Q.C.:

11 Q. So if I want to undertake an activity, I have
 12 to have an authorization from the Board and
 13 then the Board would oversee my activity to
 14 make sure I did it in a way that was
 15 consistent with what I said?

16 MR. ANDREWS:

17 A. You would go through a process to have your
 18 application for an authorization approved,
 19 whereby it would become an authorization and
 20 likely have conditions incorporated or imposed
 21 upon it, and then the role of the Board is to
 22 oversee compliance with that authorization and
 23 with the regulations.

24 ROIL, Q.C.:

25 Q. And with the conditions, if any.

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1 MR. ANDREWS:

2 A. So you know, to the extent that an
 3 authorization for a drilling program includes
 4 a description of transportation of employees
 5 to their work site, the helicopter operations
 6 part of the authorization would, in an
 7 approved authorization, then be overseen by
 8 the Board to ensure that the operator, i.e.
 9 the party doing the drilling program, is
 10 complying with its representations in respect
 11 to the helicopter operations.

12 ROIL, Q.C.:

13 Q. Okay, I think that's--it's clear to me.

14 MR. ANDREWS:

15 A. Okay. Oversight really defines the activities
 16 of the operational departments of the Board.
 17 That's really what we do.

18 ROIL, Q.C.:

19 Q. And I think Mr. Pike and his more detailed
 20 evidence of the safety regime will talk a lot
 21 about oversight.

22 MR. ANDREWS:

23 A. Yes. The role of the Board, and again, this
 24 is--the mandate was to implement the
 25 legislation. The role is to implement the

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1 mandate. So we are to be the facilitators of
 2 exploration for and development of the
 3 hydrocarbons, hydrocarbon resources in the
 4 Newfoundland and Labrador offshore area in a
 5 manner that conforms to the statutory
 6 provisions. Again, you would note that our
 7 role is in fact operator driven. We
 8 facilitate the exploration for and development
 9 of the resources. We do not direct that it be
 10 undertaken. We do not, in the ordinary
 11 instance, order that somebody drill a well.
 12 What we are doing is implementing our mandate
 13 in respect of the legislation to the plans of
 14 a party who comes forward to us wanting to
 15 explore and develop the hydrocarbon resources
 16 of the Newfoundland and Labrador offshore
 17 area. So our role, the implementation of the
 18 mandate, is to be responsive to the plans, the
 19 applications of parties who want to explore
 20 and develop those resources. Particularly,
 21 and in the statement of our role, we focus on
 22 what our five pillars of the legislative
 23 jurisdiction, primarily worker safety,
 24 environmental protection and safety, effective
 25 management of land tenure, maximum hydrocarbon

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1 recovery and value, and Canada Newfoundland
 2 and Labrador benefits, the industrial benefits
 3 part.

4 ROIL, Q.C.:

5 Q. Now are those listed in a particular order, or
 6 can they be reorganized in another
 7 presentation?

8 MR. ANDREWS:

9 A. The concluding statement of our role is that
 10 while the legislation does not prioritize
 11 these mandates, worker safety and
 12 environmental protection would be paramount in
 13 all Board decisions, and that is a statement
 14 within our statement of our role.

15 ROIL, Q.C.:

16 Q. Yeah, so the entire slide is the entire role
 17 as defined by the Board itself?

18 MR. ANDREWS:

19 A. Yes, it is. So you see there, our role as a
 20 facilitator, the five key components that we
 21 consider to be the statutory provisions with
 22 which an operator must comply and you see
 23 paramountcy that I think can be seen to
 24 somewhat define a culture at the Board, and I
 25 think you'll see that further from Mr. Pike.

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1 Board and then approved when its in an
 2 appropriate fashion. So our view remains that
 3 worker safety is the responsibility of the
 4 operator, the party who holds the
 5 authorization.
 6 ROIL, Q.C.:
 7 Q. And when you use the expression or when the
 8 Board uses the expression "does not have the
 9 responsibility for safety of workers," I take
 10 it that that word "responsibility" does not
 11 mean that it does not have an interest in the
 12 safety of workers?
 13 MR. ANDREWS:
 14 A. I don't know if I can go back on my slides,
 15 but the words that I focused on is the
 16 oversight and the verification. Clearly we
 17 have an interest in all matters in respect to
 18 safety, risk assessment, risk management.
 19 But, the primary responsibility for worker
 20 safety is the operator of the facility on
 21 which the worker is to be found.
 22 Moving on to the next one. The C-NLOPB
 23 does not manage reservoirs or production.
 24 That's the role of the operator within the
 25 context of an approved development plan.

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1 Again, I've spoken to this. When a program of
 2 work in the offshore area is to be undertaken,
 3 it's not at the direction of the Board. We've
 4 become the facilitators. It is at the request
 5 of the operator, the party who's going to get
 6 the operation--the authorization that he wants
 7 to manage reservoirs and production. So
 8 again, our role is one of oversight and
 9 verification back to operators' authorization
 10 plans.
 11 The next one deals with industrial
 12 benefits. The C-NLOPB does not guarantee the
 13 participation of Canadian and Newfoundland and
 14 Labrador workers or businesses, but our
 15 legislation does provide that there is to be,
 16 in a competitive situation, a fair opportunity
 17 for Canadians and Newfoundland workers and
 18 businesses to be involved in this industry.
 19 And then again, we do not have any role beyond
 20 the provision of required data and information
 21 to governments in the establishment or
 22 administrative of fiscal regime, royalties and
 23 taxes for the activity, and again, that's
 24 reflected in the sections of the Act that I
 25 have indicated we should be focusing on, parts

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1 one, two and three of the legislation. These
 2 are matters that are, in many respects,
 3 addressed, I think in part six and seven of
 4 the Federal legislation.
 5 But again, I think the top statement is
 6 something that needs to be made very clear,
 7 that the Board does not have the
 8 responsibility for safety. It has an interest
 9 in safety of workers, by way of its oversight
 10 role and its verification role, but worker
 11 safety is the responsibility of operators.
 12 ROIL, Q.C.:
 13 Q. Thank you, I think that position is quite
 14 clear. Again, just by comparison, would other
 15 regulators have similar statements with
 16 respect to their level or is the engagement in
 17 different areas to a different level of
 18 responsibility, engagement, oversight,
 19 interest, chose whichever word is the right
 20 way to answer the question.
 21 MR. ANDREWS:
 22 A. I wouldn't want to speak to characterizing
 23 another jurisdiction's role. I can tell you
 24 that the Norwegian Petroleum Directorate, for
 25 example, are familiar with these documents and

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1 have told us that they endorse the way that we
 2 have stated our role in respect to our
 3 legislation, but I think you would have to
 4 appreciate that the mandate role objectives
 5 and do not do list, are prescribed by the
 6 legislation. They are our--the Board's
 7 interpretation of what this legislation is
 8 telling us about our mandate, about our role,
 9 about our objectives and about what we are not
 10 responsible for.
 11 ROIL, Q.C.:
 12 Q. So it makes its own decisions based on its own
 13 assessment of the documentation, rather than
 14 seeking to do what other people do?
 15 MR. ANDREWS:
 16 A. We are very much driven by our legislative
 17 mandate.
 18 ROIL, Q.C.:
 19 Q. Okay.
 20 MR. ANDREWS:
 21 A. And that includes the regulatory mandate,
 22 yeah.
 23 ROIL, Q.C.:
 24 Q. Okay, your next slide is entitled "Board's
 25 Activities" and I take it now when you talk

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1 Worker safety and environmental protection and
 2 safety are our paramount issues in respect of
 3 considering any issue at the Board or at staff
 4 level, and that is a cultural definition at
 5 the Board, and I think Mr. Pike refers to it,
 6 but there is also a provision of our
 7 legislation that provides where the safety
 8 officer and the conservation officer or the
 9 environmental officer are making decisions
 10 that may encroach upon each other, the
 11 decisions in respect of safety again are
 12 paramount over those of environment or
 13 conservation. So we do see a hierarchy within
 14 these statutory provisions, these areas of the
 15 mandate. Worker safety, you know, as a stated
 16 piece and as a cultural piece is of paramount
 17 importance at the Board.
 18 ROIL, Q.C.:
 19 Q. Okay. The next slide is called objectives.
 20 MR. ANDREWS:
 21 A. The objectives and these three sides are a
 22 suite of information that the Board has
 23 provided to its public that it spend a
 24 considerable amount of time developing. I'm
 25 going to focus, in the objectives piece, on

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1 safety.
 2 ROIL, Q.C.:
 3 Q. Yes.
 4 MR. ANDREWS:
 5 A. Noting that from the previous slide, our role
 6 identifies safety and environment as being of
 7 paramount interest. In this instance, I'm
 8 going to focus on the safety. And again, the
 9 objectives are really the implementation or
 10 the--we are describing here the objects of the
 11 implementation of our role from the previous
 12 slide, the oversight that we saw as part of
 13 our mandate. The key word in respect of our
 14 safety objectives is verification and you will
 15 see that in the language and I will now read
 16 the objectives for safety: to verify that
 17 operators have appropriate safety plans in
 18 place; to verify, through audits and
 19 inspections, that operators follow their
 20 safety plans and applicable statutory
 21 requirements; and to verify, through
 22 compliance actions, that deviations from
 23 approved plans and applicable statutory
 24 requirements are corrected. So we move from
 25 oversight to verification.

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1 In this instance, our objective in
 2 respect of safety is, in the initial instance,
 3 and certainly the safety plans are very
 4 important at the authorization stage to verify
 5 that appropriate safety plans are in place.
 6 These are not the Board's safety plans. These
 7 are the operators' safety plans. We are
 8 verifying that appropriate safety plans are in
 9 place.
 10 ROIL, Q.C.:
 11 Q. And would I take it then that because the
 12 safety plans are generated by the operators
 13 that they would not necessarily all look
 14 exactly the same?
 15 MR. ANDREWS:
 16 A. That's very much the case. One would think
 17 that certain components of any safety plan
 18 would be universal, but certainly the risk
 19 assessment and the risk management provisions
 20 of a safety plan, and Mr. Pike will talk more
 21 about those aspects of it, they would reflect
 22 an operator's corporate culture and
 23 philosophy, something else that, you know, you
 24 will hear more about as this Inquiry goes on.
 25 But the safety plan obviously would be a

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1 document that would be subject of staff review
 2 and analysis.
 3 ROIL, Q.C.:
 4 Q. By staff, you mean the Board's staff?
 5 MR. ANDREWS:
 6 A. The Board's staff. It would be--the safety
 7 plan that's in place would be an approved part
 8 of the authorization that would be granted by
 9 the Board and at the time that the
 10 authorization is granted, we would--the Board
 11 would have verified that an appropriate safety
 12 plan is in place. Whether that's subject of
 13 conditions or whether it has had deficiencies
 14 identified and corrected or whether there were
 15 gaps originally in the safety plan at the time
 16 that the authorization is issued, our
 17 objective would have been to verify that the
 18 operator had an appropriate safety plan in
 19 place. And thereafter during the undertaking
 20 of the activity authorized by the
 21 authorization, we would verify, through audits
 22 and inspections, that the operators follow
 23 their safety plans and the applicable
 24 statutory requirements. So that is an ongoing
 25 role for certainly Mr. Pike's department of

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1 an exploration license. The Board has
 2 determined that certain terms and conditions
 3 ought to be placed on a license before it's
 4 issued. Decisions of that nature have been
 5 forwarded to governments and in some instances
 6 a ratification, there was no ratification
 7 decision and the decision therefore, while it
 8 remains a decision of the Board, cannot be
 9 implemented.

10 ROIL, Q.C.:

11 Q. So that an authorization cannot be
 12 subsequently issued, no work can proceed in
 13 terms of that development?

14 MR. ANDREWS:

15 A. In terms of that development.

16 ROIL, Q.C.:

17 Q. Okay, thank you. That's just a last item
 18 dealing with the slide that we had been
 19 dealing with. I think we now move to the
 20 slide number 13, where you begin to introduce
 21 and speak a little bit about your colleague,
 22 Mr. Pike.

23 MR. ANDREWS:

24 A. I do. Section 188 and again, I'm speaking of
 25 the Federal legislation, provides that safety

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1 officers and conservation officers necessary
 2 for the administration and enforcement of this
 3 part, being part three, and the regulations
 4 shall be appointed by the Board. Conservation
 5 officers in our language include those who are
 6 concerned with reservoir management, as well
 7 as those who are concerned with environmental
 8 protection. But the safety officers are those
 9 officers that are appointed by the Board, and
 10 as well, one of the officers is appointed as
 11 chief safety officer and Mr. Pike is the chief
 12 safety officer at the Newfoundland Board.

13 Just move on, I've put this under
 14 decision making because in the hierarchy of
 15 decisions, we've gone through decisions that
 16 the Board make by themselves, decisions that
 17 need to be ratified by other parties and
 18 decisions that must be made because they're
 19 directed to be made by other parties. Within
 20 the Board context, there is then a separate
 21 category of decisions which can be made by the
 22 chief safety officer without authorization of
 23 the Board. That speaks to the paramountcy
 24 with which we consider safety matters to be
 25 within the industry that we work. The chief

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1 safety officer and other officers at the
 2 Board, just for example, by Section 189, have
 3 considerable powers to enter facilities, take
 4 away evidence, require production of books and
 5 records, take samples and require persons to
 6 provide evidence, information, either orally,
 7 in writing or in a form requested. The chief
 8 safety officer position is one that is very
 9 important at the Board and is very much a
 10 reflection and defines the culture at the
 11 Board dealing with safety issues.

12 ROIL, Q.C.:

13 Q. By comparison, you, as the manager of legal
 14 and lands, would not have similar powers, I
 15 take it?

16 MR. ANDREWS:

17 A. I would not, no. I would consider mine to be
 18 an advisory position, whereas Mr. Pike's is a
 19 decision making position, and just to move on
 20 a little bit, in Section 193.1, "where a
 21 safety officer or the chief safety officer, on
 22 reasonable grounds, is of the opinion that
 23 continuation of an operation in relation to
 24 the exploration or drilling for or the
 25 production, conservation, processing or

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1 transportation of petroleum in any portion of
 2 the offshore area is likely to result in
 3 serious bodily injury, that officer, as the
 4 case may be, may order that the operation
 5 cease or be continued only in accordance with
 6 the terms of the order." Again, this is very
 7 significant power that resides with the chief
 8 safety officer, not with the Board.

9 ROIL, Q.C.:

10 Q. And the safety officer would not require any
 11 prior approval from the Board to take this
 12 step?

13 MR. ANDREWS:

14 A. No, that would not--that would be a decision
 15 that the chief safety officer could take in
 16 his own behalf. I will say, of course, that
 17 the culture in our office determines that we
 18 cooperate at all times.

19 ROIL, Q.C.:

20 Q. Of course.

21 MR. ANDREWS:

22 A. And decisions likely taken by the chief safety
 23 officer would be in consultation with other
 24 technical experts at the Board and perhaps at
 25 the executive level, but one could conceive of

to be certain whether it had been realised that management systems were an important element in the CIMAH Safety Case. He admitted that he had not kept up with the development of the Safety Case under the CIMAH Regulations.

22.17 The proposition that the offshore provisions were "far in advance" is at odds with the DEN's discussion document on FSA, work on which began in 1987. This stated, *inter alia*: "For some time the Safety Directorate has been concerned that reliance on good engineering practice, the application of approved standards and the certification and inspection regimes do not of themselves comprehensively identify and highlight the hazards and sequences of events that can lead to a major accident."; and referred to FSA as embracing "the whole spectrum of safety analysis techniques that can be brought together in a structured framework to make a major step forward in enhancing the overall safety of offshore installations." As I have already observed at para 17.26, the document makes no reference to the CIMAH Regulations.

22.18 The evidence demonstrates, in my view, a serious failure on the part of the DEN to address the regulatory requirements for dealing with the major hazards, whether they arose from collisions or from a failure in pressure systems or in some other way. The result, as I said in para 21.54, has been to set back the development of the offshore safety regime by many years. The DEN's attitude appears to have been based in part on a failure to realise that the existing offshore provisions were not enough; and in part on a failure to understand the CIMAH Regulations and the Safety Case - a failure which, at least in the case of Mr Petrie, persisted throughout his evidence.

22.19 In about 1985 the DEN advised against the offshore application of the COSHH Regulations on the basis that the provisions of the Operational Safety, Health and Welfare Regulations were adequate. The COSHH Regulations represented a major change onshore, described by Mr Rimington as the most important reform for 13 years. Their basic aim was to ensure that where employees might be exposed to toxic substances there should be formal procedures to ensure that their exposure was minimised and was in any case kept below the maximum exposure level. Mr Petrie said that probably the main offshore provision which was relevant was Reg 4 of the Operational Safety, Health and Welfare Regulations, but it is clear that there is no true similarity between them. There was no evidence that the COSHH Regulations were unsuitable for offshore application; and indeed Mr McKee gave evidence that Conoco (UK) Ltd had unilaterally applied them to their installations.

22.20 The approach of the DEN seemed to me to tend towards over-conservatism, insularity and a lack of ability to look at the regime and themselves in a critical way. From this certain practical results have followed; the introduction of improvements in safety has been hampered; and the development of legislation on the basis of the HSWA has been kept back.

22.21 It does not appear to be perceived by the DEN that a radical change of approach is already due. Nothing appears to have been learnt from the experience of the NPD with which the DEN were in regular contact. Despite arrangements which should have enabled the DEN to obtain a wider view of modern approaches to the regulation of industrial safety, such as their relationship with the HSC, their work on the OIAC and their opportunities for exchange of ideas and personnel with the HSE, the offshore approach to the management of safety seems to me to be a number of years behind the approach onshore.

The DEN's approach to enforcement of regulatory control

22.22 I have already commented in Chapters 15 and 21 on the type of inspection practised by the DEN; and the absence of any systematic approach to the scrutiny of systems for the management of safety. Their approach appeared to me to be at least

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1 John's, accompanied by my father. When I
 2 arrived at the airport, I was expecting to be
 3 escorted to the Health Sciences Centre where I
 4 would meet my husband. I thought that he
 5 would have to be assessed and maybe have to
 6 stay in for a few days of observation. This
 7 was not to be. I was met at the airport by
 8 AOMS employees and brought to the Comfort Inn
 9 and then to the Capital Hotel. Even with news
 10 that the lifeboats were empty, I believed with
 11 all my heart, given John's determination, that
 12 he was still alive.

13 I spent two days expecting my husband to
 14 be found alive. The devastation that followed
 15 is indescribable. To call it a nightmare is
 16 an understatement. You wake up from a
 17 nightmare. My whole world as I knew it was
 18 decimated.

19 To compound this terrible loss is the
 20 considerable publicity that the families have
 21 been subjected to. John and I lived a very
 22 private and low-key lifestyle. The past 11
 23 months, our families have continuously been
 24 reminded of our tragedy on a daily basis
 25 because it is newsworthy. I understand this,

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1 but it is very difficult to deal with on a
 2 personal level.

3 Our families appreciate the support and
 4 condolences of those people in our hometown of
 5 Deer Lake and from the Province and beyond.
 6 Our family would also like to thank those who
 7 helped bring John home, especially the staff
 8 on the Osprey, Dr. Simon Avis, Air Labrador,
 9 Caults, as well as Parsons Funeral Homes.

10 Safety in the workplace was a very
 11 important component to my husband's position
 12 as offshore medic. I, myself, am not a
 13 medical professional, engineer or technical
 14 person, but believe that priority must be
 15 given to offshore helicopter safety. Our
 16 province is reaping great financial benefit
 17 from offshore resources and because of this,
 18 the men and women who work in the industry
 19 rightly deserve, as Commissioner Wells has
 20 stated, first class safety insurance. For the
 21 workers to arrive safely to their offshore
 22 destinations, as Mr. Decker so eloquently put
 23 it, the helicopters need to stay in the air.

24 Like Ms. Fagan has said, I have attended
 25 many of the sessions since October and would

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1 like to thank those people whom I've met
 2 during the Inquiry and for making me feel
 3 welcome. I would also like to thank, to
 4 personally thank Mr. Robert Decker for sharing
 5 his story. His courage and humility are to be
 6 commended. His compelling account of March
 7 12th, 2009 and his perspective on helicopter
 8 safety speaks volumes and must be heard. I
 9 wish Mr. Decker a happy and healthy life, God
 10 speed.

11 I have learned so much from the detailed
 12 and comprehensive presentations. I trust that
 13 this Inquiry will bring improvements in
 14 helicopter safety. Yes, the helicopters need
 15 to stay in the air, but other safety measures
 16 that have been noted such as immersion suits,
 17 breathing apparatus and search and rescue are
 18 also vital to the workers' safety. I also
 19 believe that communication between the
 20 stakeholders involved in the offshore industry
 21 is also key. As Ms. Lorraine Michael stated,
 22 there needs to be a proactive approach, not a
 23 reactive one. In my opinion, the decision to
 24 fly the helicopters before waiting to replace
 25 the studs was a reactive tactic, not a

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1 proactive stance. I'm sure we are all aware
 2 that with knowledge comes responsibility.

3 I have also heard phrases such as risk
 4 assessment and safety culture used throughout
 5 the Inquiry. I have to question though why
 6 aren't the passengers flying offshore not
 7 provided with alert service bulletins
 8 pertaining to the helicopters that transport
 9 workers to the offshore. I believe that
 10 workers have the right to be provided with
 11 pertinent information so they themselves can
 12 assess the risk and make informed decisions on
 13 managing their own risk.

14 Given John's aversion for flying, I
 15 strongly feel that if he was provided with the
 16 information regarding the problems with the
 17 helicopter studs, he would have opted not to
 18 fly on Flight 491 on March 12th 2009.

19 Today is Wednesday, February 10th.
 20 John's schedule would have him flying out
 21 tomorrow which meant he would have left our
 22 home in Deer Lake today, just like he did on
 23 Wednesday, March 11th, 2009, the last time I
 24 saw my husband.

25 John and I had many hopes and dreams that