

**Hebron Public Review Commission**  
Hebron Development Application

**Record of Proceedings**

Public Review Sessions, Day 7:  
Human Safety Session

30 November 2011

Holiday Inn  
St. John's, Newfoundland

# **Hebron Public Review Commission**

Commissioner: Mr. Miller Ayre

Official Clerk: Ed Foran

## **Proponent:** **ExxonMobil Canada Properties**

Senior Project Manager for Hebron Project &  
Vice-President of ExxonMobil Canada Ltd.: Geoff Parker

Hebron Project Technical Manager: Dave McCurdy

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## COMMISSIONER'S OPENING REMARKS

**COMMISSIONER (Miller Ayre):** Good morning, everybody. My name is Miller Ayre, and on June 24th I was appointed as Commissioner of the Hebron Public Review. By way of introduction, I have a business background in publishing and retail predominantly, and, among other things, have served as Chair of the Canadian Chamber of Commerce, as a Member of the Institute for Research and Public Policy, and I'm currently Vice-Chair of the Canadian Forces Liaison Council.

This is the seventh session of the Hebron Public Review, and it is good to see that we have an interest in a new topic today; in particular, a focus on safety. Many of the presenters will be touching on that.

### Process

I have been appointed by the Canada-Newfoundland and Labrador Petroleum Board, pursuant to Section 44 of the Accords Act, to conduct a comprehensive review of the following items related to the Hebron Development Project Application: human safety and environmental protection incorporated into the proposed design and operation of the project; the general approach to the proposed and potential development and exploitation of the petroleum resources within the Hebron Significant Discovery Area; resulting benefits that are expected to accrue to the Province of Newfoundland and Labrador, and to Canada, having particular regard to the requirements for a Canada-Newfoundland and Labrador Benefits Plan; and, a consideration of matters within the Development Plan Guidelines and the Benefits Plan Guidelines.

I have 180 days from August the 25th till the time my final report must be written and submitted to the Board.

On October the 21st, I gave notice that the Public Review Sessions to review the merits of the Hebron Development Application would commence on November the 21st.

These Public Sessions are designed to hear directly what you, members of the public, are you're interested in, and for you to interact with ExxonMobil, the Operators. The sessions also give ExxonMobil the opportunity to explain the project to the public. Individuals and groups will present their views at the sessions. All the questions will be directed through me. As Commissioner, I can also ask questions as issues arise.

The atmosphere for these sessions is much less formal than the courtroom-type atmosphere. So we expect the intercourses to be cordial and there will be limited formality. We are following the process laid down in our Operational Procedures which are based on Chapter 6 of the C-NLOPB Development Plan and my Terms of Reference and mandate.

To give you an overview of the daily routine for these sessions, I will open each day with some brief remarks on Procedure and Process. That's what I am doing now. ExxonMobil will then be given 30 minutes to discuss their project, in keeping with the themes of the day. There will be an opportunity after the presentation for any outstanding questions that might have arisen from the previous day's session.

Then, after coffee break, we'll return to hear from the scheduled presenters. Each presentation should normally take 15 minutes but many speakers have asked for extra time in advance, and, where possible, we've tried to grant them that time. Each presentation will be followed by a Question and Answer period. I would ask that all speakers respect the time allotted to you. My intent is to keep to the public schedule. There will be a box with three lights on the speaker's podium: green to speak, yellow giving you five minutes' warning, and a flashing red light telling you it's time to conclude your remarks.

During the session, members of the media may be present. I would ask that the media using audio and video equipment limit themselves to taping to the designated areas. The objective is to make sure that speakers who are not used to public comment in public presentations will feel comfortable in the room.

Each session is being taped and the transcriptions of each session will be prepared. Speakers are reminded to please identify themselves by name and organization for the transcriptionist when they first speak, and subsequent times when speaking; unless it is likely the transcriptionist may know their voice.

Transcripts will be posted within 72 hours, but they will be unofficial transcripts. We are trying out best to get the information up as quickly as possible. Official transcripts, in which any obvious errors have been corrected, will be provided at a later date.

Before starting the session I would like to introduce the Commission team: Mr. Ed Foran, our Project Manager, is with me at this table, and he also acts as the Official Clerk for the presentations.

Shannon Lewis-Simpson is sitting at the desk, raising her hand now. Good, thank you. She liaises with all the presenters, and I am sure many of you have spoken to her in the process of getting ready for this particular session.

At the same table is Claudine Murray, our Office Manager, who looks after all of our documents. If you have documents to submit, you can provide them to her.

Sitting between these two ladies is Luc Chabot who has been providing us with engineering advice.

And in the main body, the clerk down there, raising his hand is Pat Stamp who has been providing us guidance on matters related to the Benefits Plan.

Also, as is our practice, we will take our safety moment and point out, the two exits are in the room with the exits at the far end. Loud clanging noises or the sight of me running through the door or some such item may lead you to want to do the same. You'll know where the exits are and you know, in particular this one, you're familiar with, gets you to the outside quickly.

So, if there no questions at this point, I would call on Geoff Parker to provide the presentation from ExxonMobil. Thank you.

### **PROPONENT'S PRESENTATION**

**GEOFF PARKER:** Thank you, Commissioner, and good morning. First, on behalf of the entire Hebron team, I would like to thank you for the opportunity today, and in the coming days, to talk about the Hebron Project. We are very proud of the project and the work that has been done on it to date.

During the sessions we'll talk about our fundamental commitment to safety and protecting the environment, as well as our general approach to the proposed and potential development of the petroleum resources within the Hebron Significant Discovery Area. We will outline the framework that ExxonMobil has created to put these commitments into action. That framework is called the Operations Integrity Management System, or OIMS for short. OIMS is a structured and rigorous approach to identifying hazards and managing risks. We'll also cover the tremendous benefits that the Hebron Project represents for the people of this province and the entire country, and we'll explain how the project will meet the requirements of the Benefits Plan.

But before we get into all of that, I'd like to give you a little background on myself and my colleague joining me today at the table, Mike Ryan. I'm Geoff Parker, and I'm the Senior Project Manager for the Hebron Project and Vice-President of ExxonMobil Canada Limited. I'm an engineering graduate from the University of Western Australia, and I've been with ExxonMobil for more than 20 years. During that time, I've worked on gravity-based structure projects in Australia, Western Europe and Russia.

Mike Ryan is the Operations Manager for the Hebron Project. He's a Memorial University graduate in mechanical engineering and has completed a postgraduate diploma in Occupational Safety and Risk Management. He has 20 years of oil and gas industry experience with ExxonMobil, having worked in a number of management positions in Montreal, St. John's, Houston, as well as six years offshore Newfoundland, including three years as the Offshore Installation Manager. Mike joined the Hebron team in July 2010 and returned to

Newfoundland with his family.

A lot of work has been undertaken and substantial progress made since the Hebron Agreements were signed by the province and the Hebron co-venturers three years ago.

You can see the names of our co-venturers on the slide. They are Chevron, Suncor, Statoil and Nalcor. And we're very pleased to be working with these companies who share our commitment to responsible development.

Our Development Application, which we submitted earlier this year, lays out our plans for the life of the project. We are confident that we have a strong project. Our plans for engineering, construction and operations are being developed to ensure the safety of everyone involved in the project. We've conducted a detailed Environmental Impact Assessment which included significant interaction with external stakeholders through the Comprehensive Study Report process. We have worked diligently to ensure that our project is having a positive socio-economic impact.

The Hebron Project Development Application has been assessed by the Board and deemed to be complete for the purposes of this Review. That scrutiny will continue during the Review Process and throughout the remaining Regulatory Process.

The Project Application has been shaped to a significant degree by the input received from a number of parties. The project team consulted with the supply community, postsecondary institutions, municipalities, provincial and federal government officials, the Offshore Petroleum Board, as well as local organizations and other interested parties during the extensive public consultation that led to the filing of the Development Application.

The Hebron Project has a number of direct benefits for the people of the province. First and foremost, it will provide meaningful jobs and careers for Newfoundlanders and Labradorians; diverse jobs for a diverse workforce.

Furthermore, our investments, combined with the Province's equity in the project, plus the royalties and taxes generated from the operations, will help fund provincial infrastructure, social programs, research and development, education and training and services for decades to come. And it is very important to recognize that the Hebron Project will offset projected declines in oil production offshore Newfoundland and Labrador, and will help meet global energy demand for many years into the future.

During this Review Process, we should keep in mind that the Hebron Project is in the defining stage that occurs prior to the detailed engineering and detailed execution planning. While all details have not been developed at this stage, we can confirm that the engineering and execution plans will be consistent with the Regulations, Development Application and Benefits

Agreement.

Commissioner, I'm here today with members of the project team to walk through our plans and answer your questions, as well as the questions from other interested parties. This project is an important one for everyone in the room. If the Development Application is approved and the co-venturers sanction the project, it will benefit virtually everyone in the province.

Now, I will provide a summary of our Development Application starting by outlining the commitments that underpin our plans for development of this world-scale resource.

### **Summary of the Development Plan**

We summarize the commitments of the Hebron Project team in terms of successfully delivering the Hebron Project, and while doing that, achieving world-class levels of safety, security, health and environmental performance. We will be providing substantial benefits to Newfoundland and Labrador, building and strengthening relationships with the Newfoundland and Labrador community, designing and an offshore platform that will operate safely and reliably.

Today I'm going to focus this presentation on the left-hand side of that slide, successfully delivering the project while achieving world-class levels of safety, security, health and environmental performance; other sessions of the review, where we've covered some of these others. So today, special focus being safety.

But, first, the overall summary of the Development Application consisting of two primary documents: the Development Plan and the Benefits Plan. Some of the supporting documents for the Development Application include the Concept Safety Analysis, the Socio-Economic Impact Statement, the Comprehensive Study Report and the Development Application Summary, which is like an executive summary for those who don't want to read all the details.

The Development Application also defines the petroleum resource and the offshore platform facility. Firstly, the petroleum resource, and then further exploration, in 1999, discovered Pool 1, the largest of the five pools. Pool 1 consists of a heavy crude oil which does make it different to the lighter crude oil on a platform like Hibernia. Between the five major pools, we estimate recovery of between 660 million barrels of oil and over a billion barrels of oil.

The concept we have for the Offshore Platform Facility consists of what we call a GBS and a topsides. The GBS is the gravity-based structure; the concrete structure predominantly under the water; and then the topsides is the drilling and production facilities, predominantly above the waterline. The single shaft GBS has 52 well slots through which the wells are drilled. The base contains 1.2 million barrels of oil storage.



The topsides are sized for a production rate of 150,000 barrels of oil a day. You can also see that it contains a significant amount of water injection. That water injection is required to maintain the pressure in the reservoir so that we can produce the heavy oil that I mentioned on the left-hand side of the slide.

This slide provides an overview of the construction plan for the offshore platform. The left-hand side shows the various topsides modules which include the Utilities Process Module, the Living Quarters Module, the Drilling Support Module, the Drilling Equipment Module, and the Flare Boom Module. So those pieces are all fabricated and then they come together at the Bull Arm integration site to form the complete integrated deck, as we call it.

At the same time as this construction of the topsides is going on, we are building the gravity-based structure. So we have the base of the GBS built in the dry dock at Bull Arm, it then floats out around the corner to Mosquito Cove, what we call the deepwater site, where the GBS concreting is finished while the platform is in the floating phase, and then, the integrated deck, which we completed over here at the integration pier, is floated over on top of the GBS to form the complete platform. So that complete floating platform is then towed out to the Hebron field where it's set down on the seabed where it sits under his own weight; hence, it's called a gravity-based structure. It is connected via pipelines to the offshore loading system from where the oil can be exported.

So it looks very simple on a slide like that, but, believe me, this is a world-scale complex project.

This slide shows the overall time line for the project. As you can see, in 2010 we commence what we call FEED, front-end engineering and design, and then in 2011 we submitted the Development Application, which is under review now. Earlier this year we also commenced the preparation work at the Bull Arm construction site and that work is being done so that that site will be ready to start construction of the GBS later next year.

Later this year we would expect approval of the Comprehensive Study Report which is the Environmental Impact Statement, and then next year we would be commencing detail design. We'd expect Development Application approval next year, followed by project sanction, and then, as I said, construction of the GBS would commence. And then topsides fabrication would commence in 2013, and then for several years the construction is going on of both the topsides and the GBS before they come back together to do what we call the hookup and commissioning at Bull Arm, and then that complete platform is targeting to produce first oil in 2017.

So as I mentioned, today's focus of the session is around safety, and as we've said in every session, safety is a core value for ExxonMobil and the Hebron co-venturers. We are already

applying programs to have a safe project during the engineering and construction phases. Some of the examples are that some safety forums we've been holding with local contractors where we've been bringing in contractors from all over the province, and, in fact, all over the world for people who want to do work here on the project, and we've been sharing some of our safety expectations, some out of our safety tools and also learning from the local supply community about some of the challenges of executing work safely in the province. So very pleased with the partnership that we've already begun with the local businesses in terms of setting us up for a successful and safe project. It really is important to us that everyone who works on the project gets to go home at the end of the day in the same healthy condition they were in at the beginning of the day.

And as I mentioned in my opening remarks, we have a framework that puts our safety commitments into action and covers all aspects of safety, and that framework is called the Operations Integrity Management System. This system is really designed to identify hazards and manage risks throughout the life of the project. It consists of 11 main elements, and those elements begin, very importantly, with management leadership, commitment and accountability. That really provides the foundation for all of our operations integrity initiatives.

The individual elements that you can see there include risk assessment and management, facilities design and construction, personnel and training, operations and maintenance, incident investigation analysis. There is several elements there that, altogether, form the suite of programs to perform our safe operations. And then, very importantly, to make sure that we're measuring, managing and continuously improving, we have an element around assessment and improvement that feeds back in the entire system so that we're in this constant improvement cycle in our relentless pursuit of a safe worksite.

So OIMS, as we call it, OIMS really guides the activities of every member of the Hebron Project team and our third party contractors. Element two, as you saw, was about Risk Assessment and Management. And that ties in with the Concept Safety Analysis which forms part of our Development Application. That Concept Safety Analysis, at the original conceptual part of the project engineering, is to identify major hazards associated with the facility; and then, taking into account the basic design concepts, layout, and intended operations, to identify those hazards and then assess the risks to personnel and the environment resulting from those hazards. And then those risks are assessed during the detail design phase. So you can think about the Concept Safety Analysis as being the first step in a structured process for risk management that will continue throughout the engineering, construction and operations phase of the project.

Element two is around -- sorry, element three is around Facilities Design and Construction. And what you can see on the right-hand side is part of the engineering effort towards designing a safe platform. There you can see a scale model of the GBS in the wave basin here

in St. John's where it's evaluating the wave loads on the platform so that they can be used in the design to resist those loads.

Safety in design continues in terms of the topsides facilities where the design processes start with us developing the key philosophies and the design basis. Those key philosophies and design basis are then passed to our engineering contractor, so that they can further develop the design. And throughout the engineering process, there is a series of structured reviews and hazard identification processes. Some of the early safety features incorporated in the platform include hazard detection and emergency shutdown systems, active and passive fire protection, dedicated emergency power, emergency evacuation systems and the GBS being designed to withstand iceberg impact.

So, a lot of the design efforts are around designing for safety, and then, of course, we need to operate safely. And so this, several of the OIMS elements, including element five, Personnel and Training, and element six, Operations and Maintenance, lead us to our goal of operational excellence. And operational excellence is something in terms of operating the platform safely but also reliably because our experience around the world has shown that a reliable operation is a safe operation. When the operations are stable we really, we see less upsets and so less activities that could be happening that would need to be managed outside of the normal way of operating.

We have, out of the OIMS process, we have many procedures that we share in our worldwide operations to make sure that we are using the best processes, and then we have structured inspection and maintenance programs to make sure that the facilities are capable of continuing to operate safely.

And on the training side and the recruitment side, we're focused on building a team of qualified personnel to consistently execute the procedures and practices. So, our overall goal is to achieve a sustainable culture of safety, and that would apply both at the construction sites during the project period but then also during the operations phase of the platform. And our guiding principle is around working together in relentless pursuit of outstanding safety, security, health and environmental performance.

Some of the safety programs, you can see on the right, one of the Eastern Canada initiatives around what we call "Actively Caring" and we see that safety programs based on caring about individuals can be very successful. And so this is meant to indicate the care that we show to individuals, the time that we would take to go and talk to somebody if we saw them doing an unsafe work, or the time that we might take to go and congratulate them on doing something safely. So we see the interaction between individuals working on our projects or working on our offshore programs as really helping to build the safety culture that we want to build.

In the bottom right, you can see a photograph of a safety meeting at the Bull Arm construction

site quite recently where we get the entire workforce together to talk about the efforts and improvements that we're trying to see every day in terms of building a safe worksite.

So, you can see that our safety efforts really begin in the design phase and carry all the way through construction, integration and commissioning and then into the offshore operations. Now, in an industry such as ours, the need to manage risks never ends, and we cannot relax our commitment to continuous improvement in safety.

Thank you, Commissioner.

**COMMISSIONER (Miller Ayre):** Thank you, Mr. Parker, for presenting us with that and adding some information with regard to safety programs and so on.

Now, we don't have any additional requests for information or issues arising from yesterday at the Commission end. I don't believe that there are any outstanding issues that you have to bring up either at this stage. So, we will take the, in order to try to keep the timing in some kind of order here, we will take our break now but we may start a little bit earlier. I think we're scheduled 10:15 for Brian and CEP, so we'll probably start that around 10ish. So that gives us a 15-minute break now and gives us time to get close to the reported times for presentation and so that's what we'll do. Thank you.

#### **(Nutrition Break)**

**COMMISSIONER (Miller Ayre):** Okay. I think we are ready to go, and I would ask our clerk to introduce the first presenter of the morning.

**ED FORAN:** Thank you, Mr. Commissioner. Today we have from CEP Local 2121, Brian Murphy, and we've received his presentation. We have copies in the back of the room. They are also on our website. And so, Brian, thank you being here and please proceed with your presentation.

#### **ORAL PRESENTATIONS**

**BRIAN MURPHY:** I'm certainly going to need this. I'm going to ask you all, first of all, to bear with me if I stammer and stutter. I'm not a public speaker as some people, I'm sure, in this room are.

My name is Brian Murphy and I guess it would be appropriate to give a brief introduction at this time. Yes.

I'm not an electric technician with the Maintenance Department on the Terra Nova FPSO, and I've been in this position for the past eight years. I also hold a position of President for CEP

Local 2121 which currently represents the Hibernia and the Terra Nova production installations.

I have worked in the oil and gas industry since I started my apprenticeship, working at the Come by Chance Oil Refinery. Dating it here now, we're going way back to the early '70s. After I achieved my Interprovincial Journeyman's ticket, I traveled to Alberta to work, as so many of us do, and I have been working on oil and gas projects out west in Atlantic Canada off and on ever since.

As a bit of background as well, I have presented at the Wells Inquiry as well as the Standing Committee for DND Response Times, and, just recently, at the C-NLOPB Safety Forum regarding Helicopter Safety.

I would like to say here, as I have stated at these other venues, the concerns that I present here are the concerns of workers, all workers, who travel to and work on the offshore installations, not just the unionized workers.

No matter which installation we work on, we have many things in common: our working conditions on these installations, our work rotations, our commonality in dealing with work/life balance, as well as our travel to and from our work on helicopters.

We would like to make presentation on the following topics here. I am going to touch on each topic briefly just to let you know that there are concerns there. It will be helicopter safety; worker involvement in safety committees; quality of life; and women in the offshore workforce.

As is so often the case, these topics will meld together, one into the other as they are so closely related in regards to our offshore environment.

Let me say here, that this is not going to be a long, drawn out, technical presentation. That will be for greater minds than mine to present. But I would be remiss in my duties as a representative of the workers if I did not relay some of the concerns that we have in regards to safety and equality in the upcoming project.

### **Helicopter Safety**

One of the concerns that we have now, which we feel will be affected by the upcoming Hebron Project, is the size of the fleet which provides transportation for offshore workers.

It is felt, even at this time, that the size of the fleet should be augmented with more aircraft.

Recommendation No. 9 of the Wells Inquiry, that has to do with flying conditions and sea

states. In the Phase I Report of the Inquiry has been validated by the findings of the Transportation Safety Board. Compliance with these recommendations from the Transportation Safety Board and from the Inquiry itself will limit, and has limited, the opportunities for flights. There is no doubt that this has, and will continue, to lead to increased pressure for flights when sea states permit.

We refer to this as "backlog". So, to clean up the backlog is a priority objective once sea states, or other conditions, improve to allow flights.

It is our fear that there will be a tendency to "push the limits", whereas an augmented fleet will help alleviate this.

When the Commission made its interim recommendation on SAR response times, Cougar Helicopters was able to augment its helicopter fleet. Augmenting the helicopter fleet provides an opportunity to undertake flights to the installation at a higher rate, in windows of opportunity, when operational limitations on the ability to fly prevail.

Pressure to fly is a safety consideration. We submit that the installation operators require, as part of their safety plan, that the Helicopter Transportation Operator be able to augment its fleet during periods of the year when operational restrictions limit flight time availability.

Also regarding Inquiry recommendations, and something which we would like to see as a goal for the Hebron Project:

We, CEP Local 2121, submitted to the Inquiry Commission to make recommendations to the Regulator whereby the Regulator will be advised to alter the content of the contractual relationship between helicopter operators and offshore installation operators so as to make the helicopter transportation of workers in the Newfoundland and Labrador offshore safer than that which would arise from compliance with "minimum standards" set by Transportation Canada.

We who work in the offshore feel that the term "over and above" should be the theme of all safety-related decisions that are made, that pertain to the offshore.

The quality of the aircraft and run dry time: There has been much talk of this 30-minute run dry time for these helicopters. For the S92 Cougar helicopters, Sikorsky helicopters.

The FAA has said it will not require the existing fleet of S92s to be refitted with gearboxes that have this feature. On a personal note, I found this decision to be disappointing, and when economics was cited as a consideration, I felt that this was personally, I felt this was personally offensive.

That being said, there have been ongoing modifications by Sikorsky on the mechanical issues with this aircraft, and we would like to see aircraft that augment the offshore fleet to be the most technologically advanced that are in the market today. If there is a 30-minute run dry technology, then put it in it.

We feel that at all times the question must be: What are the appropriate steps to ensure worker safety in helicopter transportation in the Newfoundland and Labrador Offshore?

There is no logical reason why workers in the Newfoundland and Labrador Offshore should have less than the best available safety capacity in helicopters in which they must ride to work. It is simply about preserving life in a life-threatening situation.

I can say here, and I will say here, with all honesty, that the improvements that have been made, and that are ongoing as a result of the Inquiry and as a result of the actions taken by the C-NLOPB and the operators are huge.

The improvements are large and they are ongoing. You can all hear a "but" coming here, can't you?

Looking back on it, it is a little startling that there was that much work to be done. We must be ever vigilante in our strive for zero, and when I say "zero", one of the terms that we use in the offshore with the operators, on different installations, they have different catch phrases, a zero harm. It is to strive for zero harm. And I say from the slides that we saw earlier this morning, that "nobody gets hurt" is your catch phrase, and a great one it is, too. To achieve this, we must all work together.

#### **Worker involvement in the safety committees:**

The main focus of this portion of my presentation is worker representation is to be elected and/or appointed by workers; worker representation on all aspects of decision-making regarding safety.

#### **Worker Representation:**

It was evident from submissions by the various parties at the Wells Inquiry, and the subsequent forming of implementation teams, that the placement of workers on the various safety committees was a little less than adequate.

It is respectfully submitted that any organization that thinks that worker representatives are appointed by the employer simply has it all wrong. Worker representatives ought to be selected by the employees, and, where there is a certified bargaining agent in place, that bargaining agent should manage the mechanism by which such worker representatives are chosen.

And when I say manage it, perhaps a better word would be to co-manage it with the operators. There needs to be input.

The JOHS and the OHS committees, the JOHS and the OHS committees, on different installations there is different terms. There is Joint Occupational Health & Safety, Occupational Health & Safety. I notice again from the slides that you guys have OIMS, Operations Integrity Management System. They are basically the same things. They work towards the same goals.

These committees that are formed on the installations must be given the training and the encouragement, which will permit them to effectively carry out their mandate. And their mandate is to bring forth the safety concerns of workers and to have them addressed in a satisfactory manner.

It should be noted here that after the 491 tragedy the entire workforce was asked to submit any questions on safety. Over 350 separate questions were raised, and I would like to clarify this here, a little bit here. The entire workforce, that means everybody who was working in the offshore at that time who were talking about whatever drill platforms were there; everybody who was working offshore, not just unionized platforms, everybody. And the 350 separate questions is a culmination of many more than that, but the redundancy and the duplicates were taken out. There was quite a few concerns that all the workers offshore raised at that time.

And taking into account that many of these separate questions were the culmination of groups of workers, then the participation in this exercise was phenomenal. Many of these concerns were incorporated in Wells' recommendations resulting from the Inquiry.

Unfettered worker input and feedback is invaluable and must be encouraged to the highest degree.

Speaking of that, some workers have approached me and asked me to put into my presentation here a query, and it has to do with the lifeboats. As many of you probably know now, our lifeboats have been, I guess you could say, derated. It has been found through research that we are getting to be bigger people, and an 80-person lifeboat that was designed for these installations, Hibernia and Terra Nova and the drill rigs, an 80-person lifeboat was based on 80 persons of such and such a weight, including their suits. Suits have changed, have gotten heavier. So now these boats cannot take 80 people. They are derated.

Are we to assume that on the Hebron Project the lifeboats have now been designed and manufactured for an 80-person as they are stated? I see nods over there. Perhaps you can elaborate on that further, later on, but I was asked to bring that forward by the workers.



I am going to move on to quality of life. And I just noticed on Geoff's slides there on commitments that it kind of relates to quality of life there.

The production platforms that are currently working on have been operating offshore for 14, 9 years and 5 years. That's Hibernia, Terra Nova and White Rose respectively; give or take some months there, probably.

That being said, this industry is a burgeoning industry, which basically means a young and quickly growing industry. If anyone is skeptical of this statement, they need just look at the number of Significant Discovery Licences that C-NLOPB has issued to date. Fifty-two Significant Discovery Licences issued. There are ten production licences issued.

Our offshore industry will be ongoing well into the future. For those of us who have been offshore for a long time now, it is becoming more and more apparent that our choice of career can extract, and has extracted, a toll on our work/life balance. The toll this current system has taken on family life is huge. This is not only seen by those of us who have been in the offshore for a long time, but it quickly becomes apparent to the younger workers now coming offshore; both single workers and those with new families, and especially those with young families. It is tough.

And I made a little note here during your presentation "actively caring. Nobody gets hurt", the badge that you have. I think it fits in right here.

As we are a young industry, we have to look elsewhere for guidance to improve in this area. We have to learn from places where this work/life balance has been ongoing longer than ours has, somewhere where the workforce has been through this and has found ways to deal with it; a change from the current equal rota. Rota is just short for rotation. Now, three on and three off rotation. Of the three -- a change from the current equal rota of three weeks on and three weeks off, to a rota with more time off, than on, has been adopted in the North Sea.

In recent years, in the British sector of the North Sea, a work rotation of two on and three off has been adopted.

A significant number of operators in the UK have moved to what they term as "a rota which provides an improved work/life balance". They see this system as a great motivator, as it reduces sickness absence. It has improved recruitment and retention of staff. It provides greater flexibility as workers are more likely to commit to work during busy periods, such as shutdowns, which also saves on using contract staff who are not familiar with the installation and this makes it safer and reduces costs. Morale is significantly improved, which has the benefit of improved all round employment relations. Overall, the enthusiasm and commitment to work improves, delivering a safer and more productive operation.

In Norway, things are different again. They actually look after their greatest assets - their people. They have had a rota of two weeks offshore followed by four weeks onshore, and that's for every worker on the Norwegian continental shelf. And that has been ongoing there from the early days of their oil and gas industry.

There is much to be said about the benefits for the people and Province of Newfoundland and Labrador with a more-time-off-than-on rota.

And Geoff mentioned some of these things that are going to happen anyway with the Hebron Project in regards to benefits. More people will be working in the offshore. With a change in rotation like this, there would be more people working in the offshore workforce which will lead to an increase in the tax case. It is better family life, very important. It is better for family life. It is also an incentive for women to join the workforce; which leads me to my next step here, the women in the offshore workforce.

I came across some interesting information while I was preparing for this presentation. In 1996, Women in Trades and Technology conducted a study of women's experiences in the Hibernia Construction Project. This study was designed to examine various aspects of women's involvement in Hibernia-related training programs and employment, and to evaluate how far women have been able to become full and equal partners of the project's labour force.

There were a number of interesting and, in some cases, discouraging findings from this study, but one that jumped out at me was inadequate training. Of the 3,127 seats that HRDC funded for Hibernia-related training, only 4% of them went to women. And that seems to be carried on into the workforce because the percentage of women as apposed to men on the Terra Nova is low by any standard. It is less than 5%. On the Hibernia platform, although there are more women than on Terra Nova, as the POB, the persons on board is greater, the percentage is similar.

Of that five/six percent there is, on our installation on the Terra Nova there was one female tradesperson. There was one female technical person (an engineering background), working in the offshore on an equal rotation.

Until recently, there was one female medic. And this position is now held by a male as that female person took a job onshore. The rest of the female workforce is in the accommodation or what we refer to as the housing.

There is something wrong with this equation. What is it? Why is it so far out of balance? I am sure there is a combination of things that work together to discourage women from choosing the offshore as a career and it needs to be addressed.

Another interesting find was the Hebron Benefits Agreement, which on August 20th, 2008 the province reached an agreement to develop Hebron, the province's fourth offshore oil project.

One of the objectives of the Benefits Agreement is set long-term goals to employ women in occupational areas where women are historically underrepresented. And I think from those statistics there on the percentages, they are underrepresented.

There is an article from Health Canada which is titled "Creating the Right Work Environment". With many more women in the workforce than ever before, it is increasingly difficult for them to balance their career and their personal lives. Many women have various important responsibilities that can impact on their work immensely; for example, childcare or elder care. It is very important that employers realize this challenge and work toward helping them to better balance their personal and work responsibilities.

As I stated at the beginning of this presentation, these topics relate to one another, as the arguments I have made on quality of life would undoubtedly have an effect on a woman's decision to choose a career in the offshore. A rotation of more time off, than on, would certainly make a career in the offshore more attractive.

In closing my presentation here, I would like to emphasize that this is a relatively new industry, especially when compared to the likes of the North Sea oil and gas industry. This is our resource and it will not last forever. This resource must be used for the benefit of all workers in Newfoundland and Labrador. We, as workers in this industry, will continue to point out ways that this resource can, and should, be used to provide the utmost in safety and the utmost in quality of life for all of the workers who are involved in harvesting this resource for the companies involved.

I would also like to state here that as offshore workers who realize the value of these projects, we welcome the upcoming Hebron Project. We know that it's continuation, it is a next step in the development of our offshore resources. We who work offshore are proud to do so. We are proud to be part of these projects. We're proud to work offshore, and the contribution that we make to the province, to the people are well-known and we are proud to do it. And I just like to make that clear to everybody here, Mr. Commissioner, at this review. And I thank you for your time.

**COMMISSIONER (Miller Ayre):** Thank you, Brian. You have no worries about your presentation and the passion you feel. All of the community or province is very aware of safety issues and we're aware of them because we have experienced, in a small community such as this, direct involvement with two very horrendous accidents offshore since production has occurred in the past, and that experience is one that we all remember and will continue to remember, and matters of safety are matters of passion, matters of remembrance, and a

matter of honoring those who perished from preventable accidents, and they were accidents in which all the investigations have shown could have been prevented. Knowledge was there, something happened in terms of procedures or occurrences in judgment, all of which have played a role in members of our community being taken from us.

So I think in a morning when we're dealing with safety it is important to remember why we consider it important. There is absolutely no academic component of the discussions we would have around safety.

Brian, just to get to some information with regard to the presentation you just made. What changes have you actually noticed that result from the implementation of changes coming from the helicopter inquiry. I mean, just personally, moving in and out of the rig, flying activity. I mean, what have you actually experienced as someone who works right on the forefront of the industry itself?

**BRIAN MURPHY:** Numerous, as I mentioned. Some of them most of immediate and large changes was our suit design, the implementation of the breathing apparatus, the HUEBA devices. The sea state flying, that was large. That was a big concern, and I must say that Commissioner Wells did a good job of recognizing that early on in the Inquiry. The night flying, there was startling statistic on night flying on ditching in the nighttime and it is just the darkness does it. It is just harder to do things in the dark than it is in the daylight, and the statistics show that the loss of life was greater in the nighttime. The Inquiry noticed that immediately and curtailed late night flying and that's an ongoing concern of ours. Those types of things were immediate and very visible.

**COMMISSIONER (Miller Ayre):** And they continues to be in place and so on?

**BRIAN MURPHY:** Yes, at this time. At this current time.

**COMMISSIONER (Miller Ayre):** But, however, as you pointed out, the crucial concern with regard to the run dry time line is still an issue and naturally has to be an issue still.

**BRIAN MURPHY:** That is, that is ongoing. We always feel, I feel and offshore workers there is always that what if/if only. What's going to happen the next time. It just would make so much more difference to give whoever is in control of these aircraft more time.

**COMMISSIONER (Miller Ayre):** Yes.

**BRIAN MURPHY:** Decisions, drastic decisions have to be made.

**COMMISSIONER (Miller Ayre):** It seems fundamental doesn't it? Yes.

**BRIAN MURPHY:** Yes

**COMMISSIONER (Miller Ayre):** So, and you've made the comment that more .... Obviously you see helicopters as the main mode of transportation at the moment, and that you made the comment that if there were more helicopters there would be more opportunity to hit the right windows. That relates to shift changes and all sorts of other issues. Are there some comments there you can make?

**BRIAN MURPHY:** What happens, and it is just not sea states. We have a sea state higher than six meters, then the helicopters don't fly over. If they cannot use their flotation devices then they don't fly. Very sound, very sound safety practice. But there is also the fog. Sea state should be great but if you cannot see, you cannot land. So that curtails flights. And this could get backed up, and, yes, it is all crew changes that are happening. The reason why we fly is to change crews, for the most part.

So, when a window opens up and, as often happens, you could very well, if there was four in the fleet, you could have one or even two down for whatever reason; maintenance or a technical glitch or something like that. So, now, to catch up you have half the fleet to try to clear the backlog.

I think something needs to be done along those lines and now with the more traffic coming in, the more traffic from the Hebron Project, there is just obviously going to be more flights. The augmented fleet is, I would assume, a given.

**COMMISSIONER (Miller Ayre):** Yes. Geoff, I wonder if you could comment on a number of points and perhaps we could hear a little bit more. How does the operator community forecast and plan for fleet capacity, the kind of issue we're looking at now, both for helicopters and supply vessels, I guess, to the extent they might be used for crew movement? I mean, how does the capacity issue, is that something you as a group look after? How does that work?

**GEOFF PARKER:** In general, each individual project looks at what they need but then the other piece is to look at synergies across the fleet in both supply vessels and helicopters. I'll let Mike add a bit more on that one.

**MIKE RYAN:** All right. For example, for Hebron we're planning in our Development Application 220 personnel on board POB. And so we'll use that as our basis and maximum POB. So when we are at the stage we'll be looking for helicopter services, we'll use that base information. We'll also use weather information forecasting. We'll look at the availability of aircrafts to fly, and then we'll work with the other operators to apply that synergy and base our needs.

**COMMISSIONER (Miller Ayre):** Would you have an opportunity to lead the process and get run dry issue into place? If there is a new helicopter contract involved, is there an opportunity to get this issue resolved?

**GEOFF PARKER:** Firstly, as I think you picked up, that Hebron is not yet awarded a helicopter contract.

**COMMISSIONER (Miller Ayre):** Correct, yes.

**GEOFF PARKER:** We would be seeking proposals next year. And for potential work, the actual helicopter services for Hebron wouldn't be needed until 2016. So we'll be seeking proposals that do meet all of the applicable regulations and all the applicable standards as well as any specific requirements that we have based on whatever the latest is we've learned about ourselves and from industry.

**COMMISSIONER (Miller Ayre):** So, I mean, I know, it is surprising to some extent the decision that was referred to by Brian was made by the present helicopter operators. But I think that on their own, within the process of new production, they are going to overcome the run dry issue, that's my understanding, in some of their newer fleet. So there may be opportunities even with the same operator, but at present they don't seem to have moved very fast to change, or stated they can't change the existing ones.

As Hebron begins its operations, would you see that there would be an activity in which the percentage increase in the production platform personnel for all of these fields would allow you to be, you refer to this a moment ago, but can you be more aggressive in the ability to change the members of, the people who are being moved back and forth on the shifts? In other words, with helicopters or possibly, even, I suspect we could get into the area where it may be possible to have some kind of a vessel itself which moves people back and forth. Presumably you can overcome some of the issues surrounding the movement of people from the actual platforms onto a purpose-built kind of vessel.

I mean, these are used in some places. I know our distance is a bit more, but is that something which you look at in the process of how to run the whole area outside of Hebron, I mean, as a joint effort amongst the various platforms? I mean, is that kind of thing possible?

**GEOFF PARKER:** I think it would be possible. I'm not aware that that, having a specific transportation vessel and landing system has been looked at. As you said, the transfers to and from vessels are a hazard that does have to be addressed, and in any operations that's always a complicated operation. Mike, did you have anything to add on that?

**MIKE RYAN:** Yes, as we stated before, helicopters, we anticipate would be our primary means of transport. With vessels, there are other hazards and issues. It is a long vessel ride to the

field, about 18 hours. But then you have the challenge of getting the folks off the vessel and onto the platforms or the FPSO or the rig, and that's utilizing the platform cranes and a transfer basket, and so there is risks associated with that as well. So helicopters are their primary means of transport.

**COMMISSIONER (Miller Ayre):** Well, what would be the percentage in personnel when you're in production in terms of the offshore period? I mean, what is your crew? What would the crew size on the Hebron platform when it's out there?

**GEOFF PARKER:** The crew size varies almost on a daily basis; for instance, if there is drilling activities or some extra completion activities. The maximum crew size that we're looking at is between 200 and 220, but on many days it could be less than that.

**COMMISSIONER (Miller Ayre):** So it could be that many people moving, being added to the present number. All right. So, I mean, that's obviously a fairly significant percentage increase in flights and people and so on. That's all I'm trying to get at.

Do you think that in terms of the offshore activities that the helicopter contract that we talked about a minute ago, that do you think it's an opportunity that really allows you to deal with? Is there an optimum size issues? Are there speed? Are there other issues besides the 30-minute run dry issue that people are concerned with at the moment? Are there other activities that you think in terms of if you're primary is always going to be helicopters? Are we really at the forefront here in our harsh conditions in terms of what you see? And Geoff, you've had a lot of experience in other places and in relation to offshore activities. Are we really at the forefront here with the way we handle helicopter movement and safety and so on, to the best of your knowledge? I mean, we know the run dry issue but.

**GEOFF PARKER:** Yes, I think in the operations here, all of the operators bringing their experience from elsewhere in the world, some equally challenging environments such as offshore Sakhalin Island where I was working previously. And so when a helicopter is chosen, it has to consider many issues; such as deicing capability, carrying capacity, comfort and then meeting all of the latest manufacturing requirements.

**COMMISSIONER (Miller Ayre):** Yes. So, we can be assured that we are operating under sort of procedures, activities and approaches that are on the forefront of safety concerns and of high level technological ability?

**GEOFF PARKER:** Yes, most definitely.

**COMMISSIONER (Miller Ayre):** I was wondering, just personally, what have been your experiences with work delays, I mean, either getting on and off the rigs? What is your sort of your personal experience with delays?

**BRIAN MURPHY:** One thing is that when you're coming home you hate them.

**COMMISSIONER (Miller Ayre):** Well, that's a good honest answer anyway. But what they are, they are substantial in. This year, in the spring and summer of this year, it seemed to be, I don't know the statistics, because maybe the companies might be able to help you out there, but it sure seemed like there was an awful lot more delays this year than previous years. But it's seasonal and it's haphazard. If a fog bank comes in, that's it, you're not flying. And it could be there a day, a week.

**COMMISSIONER (Miller Ayre):** So this, then, is just .... Presumably at that point there is people who are coming out who don't get there, right?

**BRIAN MURPHY:** Absolutely.

**COMMISSIONER (Miller Ayre):** In most cases. So it is a two-way thing happening.

**BRIAN MURPHY:** We work on a back-to-back system. In other words, when I go in somebody takes my spot. Takes my bed, takes my job.

**COMMISSIONER (Miller Ayre):** So you just carry on if they're not there? How does that work out?

**BRIAN MURPHY:** Yes, you just carry on.

**COMMISSIONER (Miller Ayre):** Carry on, okay. Well I guess most businesses would be overtime or something would there, I don't know?

**BRIAN MURPHY:** You're financially compensated for it, yes.

**COMMISSIONER (Miller Ayre):** Yes.

**BRIAN MURPHY:** Not enough, but.

**COMMISSIONER (Miller Ayre):** That's for the record.

**BRIAN MURPHY:** Put that down there. Something that I'd just like to say about the delays and about when you're out there and waiting to come home. Some of the limitations that are there have to be put in place by the operators. It can't be left to the choice of the workers, and I'll give you an example of it. I was on the deck one day working and a chopper was landing and it was rough conditions. It was to the limits of the sea state and wind conditions in which they are allowed to fly. And I watched that helicopter land on our helideck and I said to



myself I would not want to be on that chopper right now. But you know something, if I was in heli admin waiting to get on it, not a problem. I would get on that chopper and fly home.

**COMMISSIONER (Miller Ayre):** Yes. So I think that the human nature thing going on has to be guarded against is your point, I think.

**BRIAN MURPHY:** Exactly, yes. Yeah.

**COMMISSIONER (Miller Ayre):** Yes. Geoff, on the weather forecasting issue, it was mentioned about the height of the waves and this is measured more or less at the platform and when you are in the take-off areas. But do we have sufficient forecasting or is there additional weather forecasting going to be made available so that you know what the state of the sea is that you're flying over, never mind what it is at the rigs or in the take-off area? I mean, at the moment I'm not sure if we know that. I understand we don't really know what we're flying over, particularly.

**GEOFF PARKER:** I do know that there is forecasting in place to predict the height of the sea states to determine ability to fly. What I'm not aware of is if there are any initiatives underway to improve on that. Mike, are you aware of anything there?

**MIKE RYAN:** I'm not aware of any initiatives but what we would use is the supply vessels, standby vessels going back and forth all the time.

**COMMISSIONER (Miller Ayre):** You use that information.

**MIKE RYAN:** So if the vessel captain sees anything that's different from the conditions that they saw offshore they'd pass that on.

**COMMISSIONER (Miller Ayre):** I see.

**MIKE RYAN:** But we primarily rely on the platform information.

**COMMISSIONER (Miller Ayre):** I mean, I just assume that with so many remote, as we know in this province, remote weather casting being done now that some simple fixation with buoys, or whatever particular weather, whatever you call weather system machine that you'd have in place there might, I don't know, I assume that's a possibility.

We did mention that safety, the supply vessels are sometimes used for transporting people and I gather that that that may be as high as 10 or 15 percent of the occurrences of traveling back and forth. Would that be, would you say 10 or 15? One in 10 you may be faced with moving on the vessel?

**BRIAN MURPHY:** I could not give the percentage of how often, vessel transfers is what we refer to it, of how often we have vessel transfer. The vessel transfer depends on a couple of things. Not only, first of all you're not getting flights in for whatever reason, but if it's because the sea state you cannot vessel transfer either, because we have the vessel transfer, we are lifted by a crane from the deck of our facilities down onto a supply boat, and if everything is moving to a certain degree then you just don't do it. It is not a safe practice.

**COMMISSIONER (Miller Ayre):** Yes. So there are difficulties with that as well.

**BRIAN MURPHY:** There are difficulties with that as well. And personally, I'd rather fly.

**COMMISSIONER (Miller Ayre):** All right.

**BRIAN MURPHY:** Fourteen hours on one of those supply boats in any kind of even moderate seas and I'm not a sailor that way.

**COMMISSIONER (Miller Ayre):** Just on that issue, in fact, I guess you call the offloading component frogs, is that right? So, and I understand there are larger ones now, Frog 6 or something. I guess that was used in Sakhalin too) and other places where it was around. Would we look at increasing the size of that or is that an issue or not a consideration?

**MIKE RYAN:** Yes. The regulations require that you have emergency transfer baskets and then we'd also want to have to do it for operations and maintenance sometimes on the supply vessels. So right now I believe most of the offshore installations have a four-person transfer Frog. Obviously, if there is evolution of that, and then you can be more efficient, then we'd look at that. We haven't done any details around our transfer baskets at this time.

**COMMISSIONER (Miller Ayre):** But these are a vast improvement over the first process, I gather? It's a much safer process.

**MIKE RYAN:** With anything that we're doing, we're going to apply continuous improvement all the way through. But the basket itself would still be fully certified as a lifting device. So whether you have four people in it or six people, it is just a matter of how many people you need to transfer. So, we'll make that decision.

**COMMISSIONER (Miller Ayre):** Yes, okay. That's fine. Brian, perhaps you could, if I could ask you a little bit about the committees and the representatives on the committees. In your presentation, you raised the issue of appointment to the committees by the employer. And you wanted to know whether, even in cases where, I gather, the employer still make the appointment in a unionized situation that exists in some places now? Would that be the case?

**BRIAN MURPHY:** Yes. You have to understand that these committees are basically operator

generated. The OHS committee on our installation is a co-committee of leadership and workers. That particular committee, it is fairly well represented by the workers who are put there by workers. It's a very reasonable mix there. What I was referring to is something like the implementation team from the inquiry, C-NLOPB implementation team who sat with the operators and all the different parties with standing to implement the recommendations from the Wells Inquiry. On our installation a worker was put on the committee by the operator. And on the Hibernia platform was the same thing, a worker was named and put there for whatever reasons; although, I won't go into it.

We didn't necessarily disagree with those workers because they are active workers. They are active people in the OH&S committees and the JOHS committees. They are union members. So we don't necessarily agree with those, that choice. What we disagreed with, and what we had an issue with, and we brought forth as well, is that it is just not the right way to do it. For a company to say you go on that committee to represent the workers.

**COMMISSIONER (Miller Ayre):** So, but on regular safety committees on the rig, just the regular committees on the rigs that occur at various levels, you weren't referring to that at all?

**BRIAN MURPHY:** Yes, to a point.

**COMMISSIONER (Miller Ayre):** Both, yes, okay.

**BRIAN MURPHY:** But there is a better mix there. There is a better representation because there is so many of them. There is many of half a dozen guys.

**COMMISSIONER (Miller Ayre):** I see.

**BRIAN MURPHY:** And they change out. So you do get ....

**COMMISSIONER (Miller Ayre):** So in that kind of situation it probably works out whichever way it's done.

**BRIAN MURPHY:** We do get a bit better representation from the workforce, we'll say.

**COMMISSIONER (Miller Ayre):** Also in Brian's presentation, Geoff, there were references to the number of females involved in the offshore, at the offshore point. And I was wondering if you were considering any proactive? I mean, we learned of all the activity that's taking place with the various committees that presented yesterday, but I wondered if you had any particular program that was aggressively trying to improve the offshore representation.

**GEOFF PARKER:** The programs follow the same pillars of diversity that we talked about yesterday. But for the offshore in particular, we have been doing some additional things,

particularly around the living quarters and creating a supportive work environment. Back even in the front-end engineering design stage, we have members from the operations team involved, but we also have, actually, a dedicated diversity adviser to the project also to review some of the plans. And so if we look, for example, in the living quarters there will be both male and female saunas). There'll be smaller, sort of, common areas throughout the living quarters, as opposed to one large area that can be a bit more intimidating. Some other feedback from the consultations in terms of what's sort of supportive work environment would people like would have some of the dining areas with some smaller private areas so you don't just have one big area where everybody has to walk through and be stared at as they come through. So, some of that layout is there. Separate male and female locker rooms, and then security and safety initiatives or walls throughout the platform itself. So, the offshore platform is really designed so that it will create a supportive work environment for women as well as men.

**COMMISSIONER (Miller Ayre):** But sometimes you have a number that you are working towards. Do you target a particular level?

**GEOFF PARKER:** The concept of quotas, so it gets mixed reviews in terms of trying to create an inclusive workforce, we have goals and those goals are based around the current representation of women in the workforce.

**COMMISSIONER (Miller Ayre):** All right.

**GEOFF PARKER:** And then we would look, if that representation changes we would be looking for continuous improvement throughout the life of the facility.

**COMMISSIONER (Miller Ayre):** Well, I noticed in the yesterday in the presentations from some of the committees and agencies that exist working on this problem in the province, that, I mean, the issue of quotas and so on is not an actual way that people like to talk about this issue. It is really talked about by targeting a longer run process. So I understand that it is not always possible to have a specific number but more of a growing and an improving on a constant basis.

I think that we have no more questions. There are other presentations regarding safety coming up, and we have questions, of course, that we can continue dealing with the same issues as well. And so, Brian, I thank you for your presentation and, yes, go ahead.

**GEOFF PARKER:** Sorry, Commissioner. Brian did also raise a question on the lifeboats which we can answer for the record, if you would like.

**COMMISSIONER (Miller Ayre):** Oh, that'd good. Yes. You asked that directly, didn't you?

**BRIAN MURPHY:** I did so, yes.

**MIKE RYAN:** So our lifeboat design will include the new information for 100 kilogram persons and so we'll meet the current regulations of 200 percent lifeboat capacity.

**BRIAN MURPHY:** Excellent. Good.

**MIKE RYAN:** I also wanted to say, Brian, we share your passion. Very good speech. And I personally share my passion from the work I did offshore and here in Newfoundland, and ExxonMobil shares that passion that "nobody gets hurt", so I would like to thank you.

**BRIAN MURPHY:** Thank you. Thank you for the opportunity to put forth some concerns that we have as a workforce offshore.

**COMMISSIONER (Miller Ayre):** Okay. So, well, thank you, Brian. We'll take a few minutes just to shuffle around a bit before the next presentation.

**(Nutrition Break)**

**COMMISSIONER (Miller Ayre):** We will take our places. I will have our clerk, Mr. Foran, introduce our presenters. There is an awfully unruly crowd here today. (Laughter). Okay, Ed, if you want to introduce the next presenter. Give everyone a chance to sit down.

**ED FORAN:** Okay. So now following on from the previous presentation, now we have the New Democratic Party, and Dale Kirby who's recently elected to the legislature and he is the MHA for St. John's North will make their presentation. Thank you, Dale.

**DALE KIRBY:** Thank you. Good morning to you. Good morning, Mr. Commissioner and other participants. I would like to thank you for the opportunity to give this presentation. I am honored to be a part of what I hope will be a turning point in the history of this province's oil and gas development. The Hebron Project will be of tremendous benefit to the people of Newfoundland and Labrador and the people of Canada. Open public dialogue of this project can only lead to improvements on how the project is developed. The report of the Commissioner will be an important document which I am sure will get serious consideration from all participants and partners.

I am here today, as you said, in my role as the labour critic for the New Democratic Party of Newfoundland and Labrador. My purpose here today is to ensure that the people who work on this project do so in the safest manner possible. Safety must always been the highest consideration in any decision in the offshore oil industry of this province. We will never completely eliminate risk but we can work constantly and vigilantly to mitigate the ever present dangers. Safety must be our first consideration.

Let me start by offering my condolences to the families and friends of those who were lost in the tragic crash of Cougar Flight 491 on March 12, 2009. Like others from the NDP who have addressed this subject, I dedicate my work in this area to their memory.

Mr. Commissioner, this review must do everything it can to ensure the future safety of offshore workers. I hope you will see the reason in my presentation and promote the recommendations I make here today in your report. I hope we can, through our collective efforts here and elsewhere, ensure that men and women who travel to and from the offshore to work, do so knowing that everything possible is being done to ensure their safety. I am concerned that this not currently the case in the industry. We must ensure this is the case going forward into the future which includes Hebron Project.

Today I would like to bring to the Commissioner's attention a number of concerns about present and future safety issues. I hope these concerns will be taken into account as the Hebron Project becomes the world-class project we all hope it will be, in scale, in profitability, and especially with regard to the safety of the people who will do the work.

The North Atlantic is a dangerous place. Those who work in offshores regularly face risks that the vast majority of us cannot imagine dealing with as part of our every day work life. The history of the exploration for and exploitation of oil off the coast of this province has been a history of tragedy and near misses. I am sure all of us would be happiest if offshore tragedy were to become purely the stuff of history and never again emerge as present day reality.

What we are doing here today is important. Open public debate of this project can only lead to improvements on how the project is developed.

It is inconceivable to me that cost should ever be a consideration in evaluation worker safety for any economic endeavor anywhere at any time. If we cannot afford to do something as safely as possible, we should not be doing it at all.

There are few thousand offshore workers serving the oil industry in this province. Their work provides billions in revenue for the people of this province, the people of Canada, and, of course, the companies that exploit the natural resources out there. As Hebron comes on stream, this number will increase. So much wealth is being generated by so few, relatively so few workers. It offends me to think that cost would ever be a factor in determining how much we mitigate the risk these workers face. Our offshore workers deserve the very best safety practices currently employed in the world. Government has stated as much many, many times.

And I agree with government. It is my belief that the people of Newfoundland and Labrador owe every worker our absolute unwavering commitment to their personal safety.

For the purposes of this presentation I have selected four areas related to offshore safety on which I believe we need clear and immediate action. Action in these areas will not only address existing serious safety issues in the offshore industry today, but will ensure that the men and women who work on the upcoming Hebron Project do so in the safest work environment we can provide for them.

So the four issues I will address today are: 1) the offshore work rotation; 2) the need for an independent offshore safety authority; 3) the problematic work culture in the industry; and 4) the replacement of the S-92A helicopter.

First let me address the issue of changing the work rotation schedule. It is time for us to consider the current offshore work rotation and change it from the current three weeks on and three weeks off to a two weeks on/four off which has become the industry standard in Norway. There has been a lot of talk during these hearings of ensuring the Hebron Project is world class and of adapting world class practices. New democrats agree with this goal and we want to ensure that this philosophy extends to labour practices. Our offshore industry is still a relatively young one. So we must look to other jurisdictions to see how we can improve our industry in this province.

In jurisdictions like Norway, there is an industry trend towards a work rotation with a longer rest period for offshore workers. Studies indicate that much of the stress, mistakes and personal difficulties in the offshore work environment occur in the third week. As I said earlier, the men and women who work offshore face challenges in their work lives that most of us cannot really imagine. Their job sites are remote locations in the North Atlantic where they work in hostile conditions, isolated from their family and friends for extended periods of time.

In recognition of this reality, European jurisdictions, which have more mature and better established offshore industries, have moved to a work rotation which includes more rest time. Norwegian workers work two weeks on and four weeks off as the standard shift rotation. Norway has decided that this is the best rotation format to ensure a wealthy work/life balance for people who work in such hostile conditions.

In the early days of that country's oil industry, Norwegian trade unions fought hard to win these rights, along with other favorable work conditions. We should not have to repeat this labour struggle here in Newfoundland and Labrador.

In the United Kingdom, North Sea offshore oil sectors, where I note Exxon is a major operator, there is an increasing tendency for companies to change from a two and two schedule to a two- and three-week schedule. This is a reflection of the understanding that this work schedule provides better work/life balance. All parties participating in this review have made a public commitment to adopting best practice, world class practices. Clearly, this improved

work rotation schedule represents industry best practice.

Mr. Commissioner, New Democrats want to see government and the Proponents work quickly with the union to adopt these rotations now and entrench them into the future. This will ensure that the Hebron Project is truly a world class project. It is well run, efficient and safe as Norway's.

My presentation today doesn't provide enough time for a lengthy discussion of how these measures should be implemented. In the best of all possible worlds, offshore operators would move to this practice voluntarily living up to their stated desire for projects to be world class which follow industry's best practices.

Perhaps government, which has said time and time again in the House of Assembly that our offshore should be the best in the world, should produce labour legislation which would ensure that this more human, favorable rotation benefits our offshore industry workers. The benefits of this initiative are many, more people employed in the offshore, an increase in the tax base of the province, a better work/life balance for families with loved ones working in the industry, and indications that this work rotation would be an enticement to attracting more women to work in the offshore.

My next issue is one my political Party has promoted for years: The creation of a truly independent offshore safety authority with jurisdiction over both worker safety and environmental safety.

Mr. Commissioner, on March 12th, 2009, over two-and-a-half years ago, the oil industry in this province changed forever. I do not have to remind anyone here today of the details of that tragedy.

The subsequent inquiry into offshore helicopter safety produced a detailed report written by the commissioner, retired Judge Robert Wells.

At the end of his report, written after extensive public input, Wells issued 29 recommendations intended to improve the safety of all people who have to travel by helicopter to and from our offshore oil facilities.

One of his key recommendations was the creation of a truly independent offshore safety authority with a mandate and the tools to strongly enforce safety regulations without any actual or perceived interference.

In short, Wells recommended a strong independent authority with teeth, similar to Norway's Petroleum Safety Authority.



The fact that we are here participating in this review today shows the vibrancy and growth in our oil industry. An independent safety authority is a natural result of our growing industry. Its implementation can only ensure that the Hebron Project develops properly - safely.

We need this authority to be created as soon as it is humanly possible to do so.

Justice Wells issued his report just over a year ago. And, despite calls from many different groups, to date nothing has been done.

Last spring, we were told over and over by government in the House of Assembly, in response to our questions on the implementation of this recommendation, that they were engaged in discussions with the federal government, who share responsibility.

I wish I could provide a more accurate update, but government will not open the House of Assembly, and, thus, I cannot ask them any questions on this issue in a venue where they would be obliged to provide an answer to me.

Mr. Commissioner, today we are discussing the Hebron project. I would like to think that an independent safety authority that includes jurisdiction over environmental issues would be in place long before first oil from Hebron comes ashore. But, a year after the Wells recommendation we see no movement by either the federal or provincial government to act. As time passes by, I become more and more concerned about this.

Mr. Commissioner, the issue of healthy work culture in the offshore oil industry is also one my Party has raised at times in the past. We continue - we continue - to receive anonymous e-mails from workers offshore on a host of issues that concerns them. These are people who work in the industry but are afraid to use formal channels to air safety and work-related concerns because they believe - whether that belief is founded or not - that they would face some form of punishment, retribution, or some form of negative consequences from their employers in response to them speaking up. This is not a healthy workplace.

My party has heard many concerns raised regarding safety issues in all areas of the offshore, including helicopter safety. Many of these concerns were raised anonymously, by people who said they do not trust in their employers, or in some cases, the regulator (the C-NLOPB).

I understand it can be interpreted as unfair, maybe it is unfair, for a group such as the political caucus I represent to level allegations against oil companies, or helicopter companies, or even the regulator by referring to anonymous complaints as our source. After all, any organization accused in public has the right to question and cross-examine its accuser.

Nonetheless, our caucus has received, and continues to receive, many anonymous concerns from people afraid that if their names are revealed they would face repercussions. Whatever

the issues they are raising, this situation is unhealthy, and dangerous, and springs directly from the workers' reluctance to use official channels supposedly available to them. It is a symptom of an unhealthy work culture.

As another example, the practice offshore has been for the employer to appoint the employee representative to certain committees, as mentioned by the previous presenter from the CEP. This is unacceptable.

Workers' representatives on issues as important as safety must be elected by workers themselves. After all, who better would represent their issues, concerns, and experiences?

I myself was not appointed by government to speak for people in the District of St. John's north. People must have the right to decide, democratically, in a secret ballot process, who they would like to speak on their behalf.

Is this red light supposed to tell me something here? Okay.

**COMMISSIONER (Miller Ayre):** (Inaudible - mic not on).

**DALE KIRBY:** Okay. Just very little left in my presentation, if you just bear with me, please.

So this indicates to me that there needs to be a change. With the development of an entirely new project, like the Hebron Project, we should ensure that the work culture in our offshore is productive, open, and transparent from the start, with open dialogue from all participants.

There must be a complete overhaul of the offshore work culture from an industry, labour, and government perspective, so that any worker, anywhere, can feel at anytime that he or she can speak openly, without fear of reprisal, about safety or other concerns.

In order for people to feel safe, they need to feel that they are a valued part of an industry-wide, ongoing, proactive safety culture. Referring back to my previous point, I suggest an independent offshore safety agency that listened to and respected worker input would be an excellent first step.

Developing a more open safety culture would be a difficult goal to achieve, but it is essential if safety is to become an ongoing, proactive issue. Safety must be **everyone's** issue and **everyone's** responsibility.

Now onto the issue of replacing the S-92A helicopters. Last week we saw the lone survivor of the Cougar Flight 491 crash speaking out on behalf of himself and the families of the men and women who died in that accident. They are frustrated with the federal government's continuing refusal to respond to enquiries into the certification of the Sikorsky S-92A

helicopter as airworthy to service the Newfoundland and Labrador offshore oil industry.

These citizens want to know how the helicopter was certified to fly when it did not - **did not** - meet the basic requirement that it be able to run for 30 minutes after losing oil pressure in its main gearbox.

The fact of the matter is, while some helicopters are truly "30-minute run dry capacity," the Sikorsky S-92A was not, and is not. The continuing use of this helicopter in our offshore industry is troubling. More than troubling, I would call it reckless. And despite the best efforts by many who have workers' best interests at heart to get to the bottom of this problem, the federal government maintains a deafening silence.

People - our people - still fly every day on the S-92A helicopter. The S-92A helicopter still does not meet the 30-minute run dry time requirement. People working offshore deserve to have the risks associated with getting to and from their jobs kept as low as possible.

While it is true that a helicopter with a real 30-minute run dry capacity would not eliminate all of the risks, it would greatly reduce risk and make helicopter travel more safe.

There are better helicopters which would be better suited for the job here in our offshore. Knowing that, I hope that all parties will agree that the S-92A should be immediately replaced.

That concludes my remarks here today. Mr. Commissioner, thank you for your time, and I look forward to any questions regarding what I have had to say here. And sorry for running over. I have a tendency to do that.

**COMMISSIONER (Miller Ayre):** Well, look, I just want you to know we set it in advance. We don't wait till halfway through and then .... There is no one here pushing a red button. It is not like a quality control thing or something. Sometimes people think that all of a sudden someone has been listening and says, no, let's push the red button. It is all part of some bigger things happens by magic. Are you down there? There's the guy down there, right.

Dale, we will probably focus a little bit on some of your comments that are different from and some aspects of your presentation that was similar to Brian's, but where we didn't have an extensive questioning because we were obviously trying to split things around a little bit because everyone was sharing, was dealing with the same general topics. And we are being very concerned about one major topic which two presenters in a row are dealing with. It gives us an opportunity to spend a bit more time on the full range of these issues.

If I could just ask you a little bit. I know that you're concerned with bringing up anonymous issues in the sense of reliability and so on. But I wondered if you were also asking or suggesting that there needs to be in place a process such as is now common in many large

organizations, where there are means for all employees to provide information without any appellation with regard to names or who's saying, so on, anonymous information, whistle blowing kind of things. It could be financial information that's going on that someone has noticed in the corporation or inappropriate behavior or. You're dwelling on safety but there are some pretty advance systems in which anonymity is certainly in place and where there is an exact procedure, and presumably there is a culture in which there is nothing wrong to do this. In other words, just more institutionalized and it doesn't bear the same, the same kind of concern you have about why are you getting this information and other than your thinking if I hear something often enough there's got to be something going on. But if there is a regular derived process in which everybody is encouraged if they see issues of concern to call it. So it doesn't exist like a rumor mill or it doesn't exist in the concept of is this just a typical complaining-type person whose culture is that way? Everyone is encouraged to play a role.

I didn't know if you were suggesting that there should be some proactive thing going on. And I don't know, it may be there, because I can ask Geoff, but maybe you don't know. Brian, I mean is this common to have this kind of culture, even within ExxonMobil for all I know, or within, just in the offshore in general. Perhaps you could just comment a little bit on that. Is that satisfactory if we let, if we find out a bit more? Yes, okay.

**GEOFF PARKER:** Yes. From ExxonMobil's point of view we would encourage everybody to stop work that was happening if it was felt that work was being conducted unsafely. And, in fact, I've seen many occasions where people at all levels of our organization have done that, and then, in fact, have been rewarded for that behavior because that sort of safety behavior is what we've been talking about in terms of caring for your fellow workers. So if you see them doing something that you think is unsafe, then you not only have to right to stop that work, you actually have the obligation to stop that work.

**COMMISSIONER (Miller Ayre):** So, but would you also have, is there a route for people to put comments in a box so it's not, unsigned comments or make phone calls to particular levels within the corporation?

**GEOFF PARKER:** Yes. There would be many avenues both informal and formal for doing that. For example, we would have what we would call observation and intervention cards where somebody if they see a situation that they feel is unsafe, there are specific cards that they can fill out and put them into like a suggestion box. There is no obligation to sign those forms. So, that would be one mechanism for somebody identifying a hazard to report that hazard.

We also have, we talked earlier about the Joint Occupational Health & Safety committees which has worker representatives on those committees, and so that's another more institutionalized way of people being able to go to their own elected representative on that committee, pass on their concerns and then those concerns can be raised through that JOHS committee.

**COMMISSIONER (Miller Ayre):** I was interested in some of the issues that we've heard about relate to safety and some of them could relate to any other issues, I suppose. That's fair enough to say. I don't know, Dale. That was sort of pretty good deflection by you. I was sort of asking you and then we got it over there.

Have you noticed or have people that you talk to, have you noticed an increase in tension around the work schedule and family lifestyle issues growing in the last six or seven years? Is that something which your sense just being in the community is that there's, I don't mean dissatisfaction, as much as people find the lifestyle is a strange, is that something that you've noticed yourself? I mean, everyone in this room have people who work offshore, know people who work offshore.

**DALE KIRBY:** I will just address the earlier point, if I may. I believe that in any functioning, open transparent healthy democracy we will probably always have individuals who will seek out other means to air their complaints.

I just want to, some of the things that have come to us: terrifying near misses while attempting to land in fog at the rigs; stressful sudden returns to St. John's by helicopter, no real information given to passengers on what was wrong, only to be told to board another helicopter to fly out of the workplace or to the workplace; we've been told of spills; a malfunctioning equipment; other work practices workers thought troublesome or dangerous. We believe that if we had an independent safety authority that would provide yet another venue for individuals to air such concerns.

On the issue of the work rotation, which was discussed by both presentations here this morning, I mean, we believe, based on research, that the research that we have seen that there's some benefit to changing this work schedule to provide better work/life balance. We're certainly limited. Anecdotal information is one thing. I mean, I have known personally people who have left the industry and gone to work elsewhere in the country because that isn't suitable to them.

I think there is a great opportunity here that we have a shortage or not a sufficient number of longitudinal-type studies of this. We have a great university here at Memorial University of Newfoundland with sociologists and other folks who work in related areas who would be more than happy to conduct world-class research in this area. So I think that's something that really ought to be considered by the partners here because it's research that needs to be continued, and where better place than to do that right here and get the answers once and for all.

**COMMISSIONER (Miller Ayre):** Geoff, perhaps you could comment because, I mean, you have worked around the world and I suspect ExxonMobil has had experience with different shift patterns and so on. Perhaps you have a perspective on this or on the present kind of schedule

that we have here.

**GEOFF PARKER:** Yes. There is no standard rotation around the world. I have worked in places that have a four weeks on/four weeks off. I have worked in places that have one week on/one week off. So I think, as Dale was saying, there is not really any consensus around what is the best rotation, so actually the suggestion of doing some research in that we could certainly consider that as one of our research initiatives.

Work/life balance is very important to us as we've talked about over the last few days in terms of attracting and retaining the best qualified workforce that we can. But that means a different thing to each individual person and so it is always difficult to come up with one particular rotation that suits everybody. Some people would not want a different rotation such as that gave more time off because they would be learning less money, and so they would factor that into their work/life balance and say, well, I'd rather work longer an more money.

Other issues to consider would include, the piece we're talking about in terms of transportation because a different rotation like this would recreate the need for more transportation and more exposure hours in terms of commuting to and from the platforms. So it is not just about a simple, well, if we get more time off, it is a better work/life balance. It is a lot of pieces to be considered in that decision. And as I say, there is no standard rotation around the world, and there is certainly no consensus on what the best rotation is.

**COMMISSIONER (Miller Ayre):** I think Dale raises an interesting point about the availability of the university and others here to look into this. And perhaps we've had other occasions in here in which issues are of concern that look as though the kind of studies you talked about, that the university could be involved in, sociological issues and social issues and so on, which don't fit as neatly into the research envelope as a technical engineering type of research, but nevertheless, can move a lot of things forward and provide some big changes in the way things happen.

So I would certainly, we've been encouraging a broader definition of research in socio-economic issues as part of what we've heard. We've been trying to find out more about the ability to make that happen. So, go ahead.

**DALE KIRBY:** Sure. So, I mean, we do know, however, that Norway's two and four and we're calling that a best practice or they're calling that a best practice. Their safety authority is calling it that. North Sea is two and three. We do not want to see any reduction in pay and that was not the case in the North Sea when they changed.

But I just want to say that there is significant number of operators in the UK. There are many: Shell, Talisman, Exxon, et cetera have all moved to two and three and they say it provides for

an improved work/life balance. Some of the motivators here reduces what's referred to as sickness absence, helps to prevent grief around holidays, vacation, improved recruitment, retention of staff, greater flexibility because workers are more likely to commit to working during busy periods, and also saves on using contract staff who are often not familiar with the installation, significantly improves morale which has the benefit improved all around employment or better employment relationships. Overall, improves enthusiasm and commitment to work and delivers, helps to deliver a safer, more productive operation. So that's some of the things that are being said about moving to a two and three.

**COMMISSIONER (Miller Ayre):** Okay. I just wanted to comment on the independent safety commission. Obviously this is still part of an ongoing activity following the Wells Inquiry. So, while we may comment at some point, it is not a discussion that we really want to get into at the moment. We do know that there has been an independent safety person inside the C-NLOPB. I mean, inside their structure it used to be combined and now it's been isolated out and given as a direct responsibility. And we know that other activities that Brian related to, changes have been made coming out of the Wells Inquiry. So I know you're focused on that issue at the moment but we know some things have happened. That's probably an issue which is going to be an ongoing concern to you when you do get in the house and so on, I'm sure. I mean it's not something we're not concerned about as well and we may have a comment but it's not something we're really that comfortable talking about because of the close relationship with the commission, which is really still in a process of getting things in place. Not the commission actively but the process that follows it.

I don't know if there are any other issues, Geoff, that you can comment on with regard to your cultural safety activities. I know you've indicated some of them in your presentation earlier this morning. But there are always two or three kinds of safety that get mentioned. I mean, there is individual safety and individual awareness that workers themselves need to have and that has to be part of everybody's life. And whether you're a worker as a general manager or worker in another position, you're all part of a team in which every individual is exposed and the concern at an individual level is important. But process, I think, is as well. And we've often heard that mentioned with regard to what may well have happened in the Macondo incident and that wasn't one in which the reporting system that could have stopped this, not because there was some individual misbehavior as it were or miscalculation, but because the process that everyone is involved in failed.

I wonder while we're here and having a safety discussion this wouldn't be a good time for you just to comment on that blowout and so on. Partly because we all think about it here and wonder, well, could the same thing happen here. So, this is kind of a big issue but it would be interesting if you could comment on it for the benefit of the public and it's not a question directly that Dale brought up. But I think this is a good time to get into that because it was a form of safety that didn't happen.

**GEOFF PARKER:** You make a very good point in that safety is more than just managing the personal safety and being worried about an individual worker slipping or falling or injuring themselves in a particular activity. We also need to consider the overall process safety, and that was definitely one of the reminders that we did get from the Macondo incident, as you said. So, really, that was a reminder of the need, as Brian talked about earlier, to be ever vigilant in our striving for zero harm on our facilities.

And to me that incident does highlight the need for a culture of safety and incident prevention which ties back to some of the core principles of our Operations Integrity Management System and its focus on prevention of incidents. And by being the 11 elements that I talked about earlier, it does make sure that we are getting all aspects of safety in a very holistic sense, not just some particular safety incident. We're really worrying about design of safe facilities, about having an ongoing program to assess the risks and mitigate the risks, to ensure that we have the right training of personnel, to ensure that we have the leadership to empower people as we talked about earlier to stop work if they think that that work is not being done safely. So I think all of those elements in the Operations Integrity Management System do lead to this overall culture of safety that really does help prevent incidents such as Macondo.

**COMMISSIONER (Miller Ayre):** Is there a difference in the kind .... Do we have a situation where you could have blowouts of that kind of here, or are we operating in different depths? Are there differences in the situation here vis-a-vis the waters in which that occurred, and at the stage of the development or that it you occurred? I mean, just on the technical side.

**GEOFF PARKER:** Sure. On the technical side there are some key differences, if you are thinking about the deep water Gulf of Mexico where the wells are being drilled from a floating rig out in the extremely deep water. For the Hebron Project, the wells from the platform are being drilled from a drilling rig that's founded on a gravity-based structure. So it actually sits on the seabed. And so those wells are all drilled through the shaft of the GBS. And the water is a lot shallow, less than 100 meters compared to the thousands in the Gulf of Mexico.

**COMMISSIONER (Miller Ayre):** Would that mean that if it happened you could prevent it? You could do something about it more quickly? Is that what happened? Or is cold water dispersal of oil, is that a problem that is not as critical in a sense of how fast it disperses or how fast it, you know, how slowly it moves? Are there any issues of that kind that are .... Is there a difference between warmer water and colder water? I mean, these are issues that people talk about but I don't know the actual technical issues involved.

**GEOFF PARKER:** And I'm not an expert on dispersants but what I can do is come back with an answer on the differences in the use of dispersants in our particular situation compared to, say, a deepwater situation.

**COMMISSIONER (Miller Ayre):** Yes, because where it was raised, as you know, first of all, for



us when a member of the fishing industry was speaking to us in Clarendville it was raised, and concern was expressed, but we are certainly interested in finding out why and how it could be prevented here, but why there may be different realities to the kind of blowout that occurred. So if you could follow-up on that issue, it would be useful.

**GEOFF PARKER:** I will, because I do know that the use of dispersants was very successful in the Macondo incident and so I will follow up about any differences for the Hebron (inaudible).

**COMMISSIONER (Miller Ayre):** Yes, I think that we need some .... We know that trying harder not to make it happen is one thing, but the technical differences would also be useful in us knowing.

I think we're pretty much getting to the end. I don't know, Dale, if you have any other questions of your own? Any further explanation at this point?

**DALE KIRBY:** No. Thank you for having us.

**COMMISSIONER (Miller Ayre):** Okay, that's good. Thank you very much. Are there any other questions that we would have from the audience? No, no. We're okay. All right. Geoff, and you're fine now? Okay. So, thank you very much, folks. We'll come back. I think we're scheduled at one o'clock for the next presenter. And thank all the presenters from this morning.

**(Lunch Break)**

**COMMISSIONER (Miller Ayre):** Okay. We can get going. I will hand the proceedings over to our Clerk, Ed Foran, to introduce our first presenter.

**ED FORAN:** Thank you, Mr. Commissioner. So this afternoon we have Merv Wiseman. Merv is the Maritime Search and Rescue, he is the Maritime Search and Rescue Coordinator here in St. John's, and is the chief shop steward for the Union of Canadian Transport Employees. Almost got all that right. So, Merv, if you could proceed, please. Thank you.

**MERV WISEMAN:** Yes, thank you very much, Mr. Commissioner and other members of the Review Commission and ladies and gentlemen. I appreciate you accommodating me here today, especially on short notice, and I do apologize for not being as timely as I would have liked to have been in getting my presentations in before today. But hopefully, my presentation here will give you the clarity you need when you get a chance to read the report.

Just a little bit of background on myself. I'm, as you said, a Maritime Search and Rescue Coordinator at the Marine Rescue Sub Center in St. John's. I have 35 years' experience with the Canadian Coast Guard, of course. The first part of my career was working with what they

called MCTS, or in these days it was VTS, vessel traffic services.

I will try not to confuse you with acronyms but MCTS, or marine communications and traffic systems, has been a subject of late in discussion around the scope of some of the work that we do in search and rescue, and I will mention it in my presentation just a little bit.

So in 1992, of course, I switched careers from the MCTS to the Marine Rescue Sub Center and I have been a Marine Rescue Coordinator ever since. I have served in areas around the province and in the Arctic with my background in MCTS. And I have a study, of course, in Nautical Science, ship's officer. I also have some study in Political Science, which I'm not sure, at least I wasn't sure, until lately, that Political Science had much relevance. I'm beginning to doubt that these days but there you go.

And I want to present to you as objectively as I can as a professional rescue coordinator, and I want to give you some factual information as well. To give you a context I think to the final statement I would like to make, and I would like to not only touch on the organization and the work that we do as rescue coordinators within the scope of what the expectations would be on human safety with the offshore, but I want to touch on the debate that's currently underway, a very much of a public debate, I guess, on the Marine Rescue Sub Center, its role and the fact that it's set up for closure and consolidation with the JRCC or Joint Rescue Coordination Center in Halifax.

So to begin, I have just given some background. I won't read all this. I will just paraphrase most of it to make sure I hit on the pertinent points and I talk about connecting the dots on safety. I guess connecting the dots on all of the Hebron Project. Of course, I'm concentrating today on the offshore component, the human safety component. I listened to a couple of presentations this morning, Mr. Murphy and Mr. Kirby, and they talked about certain safety issues that's obviously very important. And, of course, what I'm talking about today is Maritime Search and Rescue and one that, of course, is one of the dots but certainly the focal point of a lot of safety, especially when it comes to emergency, emergency preparedness and emergency operations.

While the safety mantra of the Hebron team will be, and should be, one of prevention, accidents will nevertheless occur. And I guess that's where we come in. The emergency preparedness, and what we have to do and the role that we fulfill in that equation I think is extremely important in the discussion of human safety on the offshore. And I think for the most part, the issues that can happen offshore in terms of safety and coordination pretty much defines that particular component of emergencies.

Emergency preparedness infrastructure in a marine environment has its own very unique characteristics, and in large part, the Hebron Project has technical and financial capacity to effect its own emergency obligations. However, circumstances and other dictates require a

coordinating function that entails not only the Hebron Project team but also the resources of government and the public at large. To this end, the role of the Maritime Search and Rescue Coordinating Centre becomes one of the most important operatives, I believe, and others believe, I'm sure, in the execution of effective emergency response involving human life.

I just want to talk about the organization very quickly, just to give you some background, as I said. Following the adoption of the 1979 SAR Convention, the IMO, the International Maritime Organization divided the world, of course, into 13 different ocean areas. And search and rescue areas, I should say. And Canada, of course, would be a big part of that and has been delineated certain areas of this responsibility, which includes areas offshore with the Hebron Project and other oil industry-related projects.

In Canada, it is divided up into what we call three SRRs or three search and rescue regions, and it deals with maritime and aeronautical search and rescue co-ordination.

These three centres that administers in terms of coordination is that the Joint Rescue Coordination Centre in Halifax, another one in Trenton, Ontario, and the other one would be in Victoria, British Columbia.

In addition to that, of course, we have two Maritime Rescue Sub Centres or MRSCs, as we call it; one in Halifax -- sorry, one in Quebec, the Quebec MRSC and the other one in St. John's, of course, the Newfoundland and Labrador Marine Rescue Sub Centre.

The Marine Rescue Sub Centre in St. John's was established in 1976. I'm sorry, it was presented and rationalized within cabinet in 1976, and formally became a center operationally in 1978. And I happened to be in that room when we turned the lights on, and seems like a long time ago but in other ways not so long.

I just want to deal with the idea of sub and what a sub center means. And to some I think the connotations of a sub center is that we're a center that is somewhat insubordinate, I suppose, if you should say, or subordinate to a larger center. That's not really the case. It is an autonomous center and, of course, works very collaboratively very much with the JRCC in Halifax.

Search and Rescue in Canada, of course, is shared between Department of National Defence and the Canadian Coast Guard, or DFO, Canadian Coast Guard, which falls under DFO. And, of course, the marine expertise would come from the Coast Guard portion of it.

Over 80 percent of the cases, search and rescue cases in Canada would be marine related. The area, the search and rescue area of the Marine Rescue Sub Center generally includes waters adjacent to the coast of Newfoundland and Labrador as far as the 200-mile limit, as far north as Cape Chidley, mid-way in the Gulf of St Lawrence and the Cabot Strait, and includes some of

the major fishing grounds around the St. Pierre Bank, and, of course, the Grand Banks of Newfoundland.

The Maritime Rescue Sub Centre, in terms of its rationalization, it was established for the purpose of coordinating and overseeing responses to maritime search and rescue incidents within local areas. It was essentially to provide local knowledge and expertise against the backdrop of language, of dialect, geography, culture, cultural habits, meteorological and environmental characteristics, and other variables that we consider unique to different regions of the country; this region, in particular, when we talk about the MRC St. John's.

There is other additional applications that's really come into play, a lot more since the establishment than at the time. One of them is managing search and rescue workload within diverse and unique region of Canada. I know we looked at, very informally looked at workload not that long ago, and there times at peak periods in the summer, where, between the Marine Rescue Sub Center in St. John's, and the Marine Rescue Sub Center in Quebec, and the JRCC Halifax, we've had as many as 55 search and rescue cases ongoing during the day. That would be subdivided among three centers, like I said, and eight rescue coordinators among all the centers that would be managing that. And at times it seems that even that's a difficult thing to do.

Managing the command and control component of rescue coordination is another big part of what we do. And I think being around at the time of the Ocean Ranger sinking and the Russian container ship, that I will speak about after, that sank concurrently with 36 people on board, all but five perished, managing the command and control is really a task in and of itself that we need to discuss a little bit and I will farther on. Integrating and collaborating with maritime stakeholders within a community context is certainly a big thing that we do; especially, and if I could give it some context within the scope of emergency preparedness, if you will, with the oil industry.

One of the things that we do as rescue coordinators is to frame up and to administer a course, an offshore safety seminar for the oil companies. And that's by and large mostly done by one of our rescue coordinators. I deal myself with the fishing vessel safety file and I've kind of specialized in that, if you will, aside from the rescue coordination at the very front end. I have been dealing with the fishing vessel safety since 1999, and with the help of my expertise and what I've been able to glean from the system with a lot of education, training, and prevention.

Customizing the search and rescue coordination in response to what we do at our center, in other words in the scope of a regional operational center. It is not just maritime search and rescue and the center that I'm located, we're co-located with the fleet, we're co-located with the Coast Guard radio station or MCTS, the ice operations, notices to shipping. All this is within the confines of our center and helps greatly with the efficiency and quality of the work that we do in coordinating. And, of course, at all times we provide a center or a state of

readiness for forward deployment of human and physical resources to localized area when necessary in the event of a major marine disaster. And I think that has significant relevance in the offshore.

I would just like to talk about the operating environment. The St. John's MRSC carries out the search and rescue missions in, like I said, a very unique environment, we believe. Eighty-five percent of the population, of course, exists on the island portion of the province; 78 communities are located on tidal waters. So obviously the focus of what we do by its very nature would be around island and the adjacent waters.

The St. John's Marine Rescue Sub Center is responsible for 900,000 square nautical miles of ocean.; one of the largest in the world; just about 30,000 kilometers of coastline. The center responds on average to approximately 500 maritime search and rescue incidents a year. It has the highest rate of the stress incidents of any rescue center in Canada. Nearly 70 percent of all our cases are related to the fishing industry, which is considered one of the most dangerous occupations in the world. Over 90 percent of the Canadian small boat fishing fleets operate in waters adjacent to Newfoundland and Labrador. And since the cod moratorium, in 1992, over 80 fishermen have lost their lives in the fishing industry. Many of these incidents have been coordinated, of course, out of the rescue center in St. John's.

The Marine Rescue Sub Centre also administers an ocean area that is comprised of the majority of offshore oil industry exploration and production activities in Canada. There is significant transatlantic shipping activity in close proximity, with vessels en route to and from Europe, the European ports and North American. And of course, a recreational activity on a seasonal basis is a big thing as well.

Certainly, this area is referred to, and quite reasonably, as the harshest, some of the harshest environments in the world. Mariners execute their diverse trade against the odds of ice-infested waters, volatile sea conditions driven by some of the worst meteorological variation known.

Effective Search and Rescue Incident Coordination in a distinctive environment, like this, relies heavily on the coordinators' local knowledge. Experienced coordinators who have lived and sailed off the coast of Newfoundland and Labrador are intimately familiar with the fishery, the migratory fishery, the seasonal fishery, the weather patterns and, of course, some of the recreational pursuits that we see in this province.

I would just like to talk about the marine rescue coordinators and the credentials and our background, just to let you know of the kind of people and background that we have in dealing with rescue cases. The duties and responsibilities, of course, of maritime rescue coordinators is international. It's done according to in accordance with the IMO protocols, coordinators at the rescue center in Halifax and the sub center in St. John's responsible to national defense of

course, the SRR Commander for the conduct of specific maritime search and rescue operations. They have a background study in Nautical Science and certification as ships officers. They are certified search and rescue coordinators by the Department of National Defence, specialized training in search planning. Search Mission certification and ongoing Search Master training and very stringent on-the-job checkout are also required and updating of that checkout as well.

Now, with this training, rescue coordinators have extensive knowledge and certification in ship construction and stability. They also have extensive seagoing experience. Coordinators have very in-depth knowledge of the global, national and local geographical, environmental and meteorological characteristics and would understand very much the commerce characteristics.

The primary duties of a search and rescue coordinator in terms of their empowerment to do things, it is very far reaching, empowerment under the Canada Shipping Act, authority to requisition vessels (government and private) for search and rescue purposes for vessels and aircraft in distress. Coordinators have legislative authority to order vessels to assist in search and rescue duties and appoint vessel on-scene commanders when we see fit and when it's necessary.

Maritimes search and rescue coordinators are continuously making life and death decisions. They are continually maintaining command and control of maritime distress situations, including incidents related to oil offshore platform installations; the oil rigs, for example. This could, any time, include major marine disasters. Multi-tasking maritime resources along with police, governments, all kinds of agencies like that. It is all part of the scope of what we do. We develop search planning, manage communications. And while saving lives is really is the mantra of what we do, very often the frontline duties of maritime rescue coordinators in Canada is to manage tragedies and to manage casualties and to manage fatalities, unfortunately.

The relationship with the Maritime Rescue Sub Centre that Hebron would have, the Hebron relationship is predicated on the thread of emergency response in a maritime environment.

In this respect, there are two main components:

The first part, of course, includes the planning, the education, the training and exercise of plans that's needed to conduct a smooth and efficient operation when an emergency occurs;

Secondly, the execution of a well-coordinated search and rescue operation in the face of uncertainty and the unique human and environmental elements that are always at play in emergency situations at sea.

The Hebron emergency preparedness and the role of the Marine Rescue Sub Center, as with

other oil industries installations, of course, and projects, a lot of what Hebron will do with its own contingencies, safety contingencies will be developed in-house, and of course, that framework is there, as it is with, as I say, other projects that's out there.

And the role of the MRSC within the Hebron contingency plan, or will be with the contingency plan for offshore safety, is significant. There is an operational component, of course, and we, at the Maritime Rescue Sub Center, would be a very key player in exercising it. Over the years, rescue coordinators at the MRSC St. John's have integrated themselves in through this particular process and coordinators have developed a very effective Oil and Gas Seminar, as I have related to before. And that seminar is primarily to educate offshore oil industry workers at all levels, including management, and has been considered by the oil companies as a "must do" exercise.

Rescue Coordinators at the MRSC have been integrated into the contingency plan of all offshore industry players and have developed emergency scenarios - role playing, for example - observing and providing advice and have reciprocal arrangements that has served to educate both the rescue coordinator and the offshore oil industry workers in the process of emergency preparedness.

The rescue coordination part of it, and the relationship with Hebron, there are many variations, of course, of offshore emergencies. Emergencies involving workers within the confines of platforms are much more of a controlled situation. Current oil industry protocols for dealing with these types of incidents have demonstrated excellent capacity for the various companies to respond to.

Accidents involving the integrity of vessels, aircraft or oil rigs, and production platforms entails an entirely different response. Ostensibly this requires the full scope of involvement of search and rescue system, where the role of the Marine Rescue Sub Center becomes very, very important.

Such maritime emergencies often have the potential to escalate into a major marine disaster. It often means mass evacuation of numbers of personnel under very difficult circumstances. It often results in subsequent search and rescue operations where prolonged and complex searches can prevail in large open ocean areas. It would invariably involve multiple air, sea and land resources, and would include company and private (vessels of opportunity) and government sources.

This kind of situation essentially serves to give definition to search and rescue coordination. By its very nature, the command and control of the situation would quickly default to the search and rescue system and the search mission coordinator on duty at the Marine Rescue Sub Center in St. John's and the JRCC in Halifax. Resources would be engaged, coordinated and an On-Scene Commander appointed by the search mission coordinator. Contingency

plans and lessons learned during this exercise, during the past exercise will quickly have relevance when we see this kind of an emergency taking place. The engagement of highly trained search and rescue coordinators who have extensive experience gained from the coordination of many incidents within its area of jurisdiction, gives very distinct advantages to having successful result against this kind of a setting.

The internal procedures that take place during these types of operations at the rescue center, of course, is very much a seamless, very efficient and a very transparent process. In most cases, if it were to be a major marine disaster, especially it would require forward deployment of human and physical resources to the local area. And, I guess, against that kind of a backdrop there would already exist local coordinating operatives, which, of course, would be the Marine Rescue Sub Center and all the rescue coordinators that's trained in all the facility that we have to bring to that with the comfort levels of very efficient collaborations which are measured against previous training, contingency exercises, search and rescue coordination should achieve the maximum objective possible in the protection of human lives during a maritime emergency occurrence offshore within the scope of what Hebron has to offer.

And I know the red light is bleeping but I will summarize.

**ED FORAN:** Yes, and again, Merv, we want to make sure we have sufficient time to have a dialogue with you and questions. So, okay.

**MERV WISEMAN:** Okay, fine. So just let me summarize and I want to read here because I think I want to capture, really, the essence of the debate that's happening now about the value out of the Marine Rescue Sub Center in particular.

The Hebron Project is an ambitious undertaking with an offshore component that is infinitely operative to its overall success. Its production location puts it well out into the eastern extremities of the Grand Banks of Newfoundland and Labrador. Workers in significant numbers have to live, work, transit and sail in a maritime environment that will challenge the best laid plans in the world. Ships, production platforms, and aircraft used in this project will have to endure and stand the test of all that the North Atlantic has to throw at it. If any of these facilities fail the test, the Maritime Search and Rescue System, in partnership with the Hebron team, will be the final lifeline.

There is currently a very public debate regarding the announced closure of the Marine Rescue Sub Center in St. John's. This action is being taken in the face of a very dynamic and very diverse maritime activity, which includes ever increasing development of mega oil and gas projects like Hebron. With the closure of the Marine Rescue Sub Center in St. John's, there still exist a framework, of course, for Maritime Search and Rescue out of the JRCC in Halifax. The question is will it be effective or as effective.



Rationalization for the closure of the Marine Rescue Sub Center St. John's is that modern technology has deemed it redundant and obsolete. These are my words but I've paraphrased. Apparently, it is assessed to be a duplication of service, which is already provided by the Maritime Communications and Traffic Systems in the province. Nothing can be further from the truth.

The action has been considered a cost-saving measure of approximately one million dollars annually. And we've since neutered that particular argument, by the way. The declaration by the minister responsible that the Marine Rescue Sub Center constitutes nothing more than a "Call Centre" may provide a clue to the serious misunderstanding of the important role it plays in Maritime Search and Rescue.

It is very important to understand the evolution and the initial rationalization of the Marine Rescue Sub Center. It came after many maritime tragedies and subsequent inquiries into them. It was NEVER established to fill a technological or communications gap and nothing has happened since to change that reality. It was established to apply the principles of local knowledge and local expertise. Its main function is one of life and death decision making through the application of search planning and expert search and rescue coordination. Managing the command-and-control operatives that a Hebron-type emergency in the offshore can entail is a perfect illustration of the potential utility of the Marine Rescue Sub Center in St. John's.

It must not go unnoticed that a number of other tragedies have occurred since the establishment of the MRSC in St. John's. The Ocean Ranger tragedy in 1984 with the loss of 84 workers, and the concurrent lost of the Russian container ship the Mekhanik Tarasov, a few miles away, with the loss of all but 5 36 (phonetic) crew members, which happened into the second day, of course, of the major search operation with the Ocean Ranger.

Inquiries into these unfortunate incidents and internal search and rescue inquiries and needs analysis have entrenched and validated the need for MRSCs in Canada.

It must also be noted that technological advances have increased the workload and complexity of search and rescue coordination at the MRSC to the extent that the centre had to be elevated from a one-man to a two-man operation, just two years ago. Modern technology has also brought an ever increasing level of communications, number of distress situations directly into the MRSC that didn't happen before.

This presentation has outlined the function of the MRSC and the role of the coordinators who staff it. Proximity to the Hebron operating theatre and other stakeholders give the advantage attributed to the MRSC St. John's legitimacy. Integration of the Marine Rescue Sub Center in St. John's and its rescue coordinators into the safety education of workers and exercising contingencies is an advantage that will not exist under the consolidation with the JRCC in

Halifax. Real-time reciprocal arrangements between industry EOCs, Emergency Operations Centers, of oil companies, and the MRSC during Maritime emergencies will be eliminated. The workload alone, with just three rescue coordinators in Halifax, compared to the present situation that often has many as eight coordinators in three centers, will jeopardize the ability of the centre to effectively carry out the mandate.

And finally, this presentation is provided from the perspective of Maritime Search and Rescue coordinators at the MRSC in St. John's. It is the strong opinion of the Maritime rescue coordinators, which are represented at the MRSC, which I represent, that lives will be lost should the closure of the Marine Rescue Sub Center become a reality; therefore, we would call upon the Hebron Public Review Commission to consider this within the scope of its plan for the protection of human lives offshore. It is further suggested that formulating a response to the planned closure of the Marine Rescue Sub Center in St. John's should be a priority in the objective to obtain the best possible protection for the offshore workers when the Hebron project gets underway.

Thank you very much, and I apologize for being a bit long winded.

**COMMISSIONER (Miller Ayre):** Thank you, Merv. Can I just ask you, as much as we depend on services such as yours here, generally speaking, most of us don't understand how the process works very clearly and you've outlined a lot of implications.

I wonder, how many people do you have? I mean, if someone goes off a cliff is that done by the RCMP, if a rescue is sent out, or do you people act immediately? Or do you have boats ready? Or is it all coordination? Who does it? Who's going around the harbor in the orange boats and so on? Is that all part of your operation?

**MERV WISEMAN:** Yes. If there is a search and rescue that impacts the maritime environment anywhere, if it's in the harbor or offshore or along shore, adjacent to the shores in ocean areas that would then fall under the jurisdiction and purview and the coordination of the Maritime Rescue Sub Center in St. John's if it's in our area or otherwise.

Now we do work collaboratively and quite frequently on what we consider humanitarian cases, for example. Someone fell over the cliff, for example, while they're hiking, just to bring it close to home, at Signal Hill, because that would be police jurisdiction, but they would immediately, as they've often done in the past, contact us as part of their effort. It is just that they would be the lead people within that because it was a shore-based operation.

The roles are very much defined and delineated and a very quickly understood once we get involved. If it's a aircraft that's involved on land, for example, we, as a rescue sub center, we wouldn't normally be involved with that unless it impacts to some degree on something that we can do. So we would operate, then, under the lead of, say, the JRCC in Halifax.

**COMMISSIONER (Miller Ayre):** So, but what I'm trying to get clear is, are you doing a coordination role or are there times when it is your team that's going out or on the water, for example?

**MERV WISEMAN:** No, we're rescue coordinators. We don't leave the center. We are 24/7, 365 days of the year, and there are two on-duty maritime rescue coordinators at all times. And of course, our team, the Coast Guard team would be the resources, the vessels, fast rescue crafts, interim rescue-based programs, all these. And of course we'd be the ones that would direct/coordinate all that.

**COMMISSIONER (Miller Ayre):** So one of the main points you're making is that your special knowledge of this area, which is granted a complex area given the coastline and even the example you gave, was it Greens Harbor or something, there's how many? There were so many I got .... It was like 30, were there, or something?

**MERV WISEMAN:** Yes. There are actually 13 references in publications to it. Most of us rescue coordinators in the St. John's, of course, because of our vast knowledge and experience around the coast of Newfoundland and Labrador would readily recognize which Green Island we're talking about. In fact, we've, on occasion, have actually matched up dialect with certain areas where, say, a fishermen or someone around the coast might have called in and said, hey, I'm sinking, I'm ten miles off Green Island. Okay. There are 13. Where do we go? And we've gone so far as to even match up dialects and say, yeah, I know where it is. So we'll match that up with the various peripheral sites, the HF peripheral sites that will come in, things like that.

**COMMISSIONER (Miller Ayre):** There is specialized things that go on. Can you give me an example of what would you, with regard to the tragic Cougar incident, how were you involved in that particular one, for instance?

**MERV WISEMAN:** Well, of course, we, the rescue center, we were the first rescue center to receive that call and we were very much involved in the logistics and the coordination. In fact, I talked about the reciprocal arrangements between the EOCs with the various oil companies. That happened, of course. We had someone come into our center to observe and to listen and to be close, but on that component, because it was a air resource that happened in a maritime environment, the JRCC Halifax would take what we call the SNC or search nation coordination, which means that they would be the lead agency because of the aircraft portion of it. But in terms of the expertise and all the information and coordination that would happen on the ground, logistically most of it would default, in terms of tasking various Coast Guard ships, vessels of opportunity, for example, would default right back down to the MRSC again. And again, it is being on the ground being close to the scene, being close to the players that would give us that distinct advantage.

**COMMISSIONER (Miller Ayre):** Yes, okay. Geoff, did your Concept Safety Analysis and so on, those were written before we even knew that this particular substation was going to close. Would you have already looked at the impact it might have on you or do you work around? I mean, it has to affect some of your risk assessment calculations and so on.

**GEOFF PARKER:** Yes. The Concept Safety Analysis is more focused on the input to the design of the facility itself. I think the way we would approach that is .... I appreciate Merv's focus on emergency preparedness and response because that's very much in line with what we will do. And so the offshore petroleum board will require us to have an emergency response plan before we install the platform offshore. And so it's really when we develop that emergency response plan is when we would take into account what other support there may be in the area. For example, the emergency response plan, I like to think of them in terms of equipment, processes and people. So the equipment is around what equipment is available - the standby vessels, helicopters, specialists, oil spill response equipment, for example. And then equipment can also be supplemented through the mutual aid agreements that we have with the other operators in the area. So that sort of forms the equipment part of the emergency response.

Then we talk about the processes part of it which would have the different procedures we would follow depending on the scenario, but also, would cover the procedures around the interfaces and coordination with the external authority. So perhaps that's where this issue would come in as part of the emergency response planning.

And then on the people side of the emergency response, that would be focused on training, where we would be training the individuals for their roles in the event of an emergency situation, but, then, also the drills, we would be conducting drills so we would, for instance, you see how the entire team works together in an emergency response situation. And those drills very often also will include whatever external interfaces we have identified as part of that particular scenario.

**COMMISSIONER (Miller Ayre):** So that's where the substation might be valuable or whatever. And your own, between with your own, within the operators who are in the particular area, they just put resources on to where the problem spot is. Is that what happens? I mean, supply vessels who may be near one would go ....

**GEOFF PARKER:** So we have the, what we call the mutual aid agreements with the other operators wherein the event of an emergency one offshore installation manager may call up one of the others and say we've got an emergency, could we draw on our mutual aid agreement to get your supply vessel, your standby vessel to come over and assist in this particular emergency?

**COMMISSIONER (Miller Ayre):** Merv, there are other issues that you've raised, and, I mean, I

think that all of us who know what you do are particularly concerned with what happens should the substation go. In terms of how you think, if you look at the offshore and look at what you're doing now, would you be saying we need additional assets there if we don't have the coordination or is the coordination separate from the assets?

**MERV WISEMAN:** Well, yes, the coordination is separate from the assets and, I mean, that is a subject in and of itself. There is no question about that. But I think in terms of, and I talked about empowerment of the rescue coordinator, I mean, it is a significant empowerment. I remember about ten years ago tasking the Queen Elizabeth south of Cape Race. I had the authority as a rescue coordinator to do that. I had a fishing vessel that was 350 miles northeast of St. John's. A sword fisherman, diabetic coma, and tasked the Queen Elizabeth II to go with the doctors onboard, take that person onboard, took him to South Hampton, England. I won't tell you what he said when he came to onboard in sick bay on the QE II.

But having that kind of empowerment to do that is very significant. When you talk about the kinds of, the scale of what could happen offshore and the scale of what we've seen offshore and the level of involvement of resources, not only government resources search and rescue resources but of offshore supply vessels, of other vessels, transatlantic, you name it, these are all vessels really at our disposal - probably wouldn't be the right word to use - but are vessels that we can engage. But what that brings, as well, is not only a number of resources but it brings challenges of how to coordinate that. And having the expertise here at the rescue sub center, we do 500 cases a year, that gives you a level of training and expertise, I think, that if you look at the EOC, for example, they couldn't possibly acquire that kind of experience because you don't have that many cases. So that brings a level of expertise that, well, that would disappear. But I think I would like, there is a big debate now, and it has been going on for a long time, about not just the closing of the rescue center, but response time. And I think this factors into response time. The idea that it would .... That number one, three people at the rescue center in Halifax would now have to take over what three centers are doing and seven to eight coordinators. To think that they could do that, and if you weigh that against a Ocean Ranger-type scenario with the container ship, the Russian container ship, it is just it would not be possible for them to manage that kind of a situation. So what do you do if that kind of a situation evolves? Why are we tinkering with the system that works so well and is so close to home that not only just provides the coordination but helps with the contingencies and the training and the exercise. Why would we tinker with that and take the risk of downgrading that response time again?

I mean, there was, when I came into search and rescue we were, in Canada, a world leader in search and rescue. It's been shown and it has been demonstrated now by very credible people that we are second, probably last in the modern world when it comes to response times. And that's very serious against the backdrop of a Hebron-type project that will happen offshore. How could we possibly tinker with a system to try to ... because the Marine Rescue Sub Center in St. John's, for all the things that I've said, is a function of response, and if we reduce that by

seconds. We have pulled, look, we've taken casualties aboard our rescue units that have been almost breathing, and we know that seconds we would have saved their life and they've expired in front of us.

**COMMISSIONER (Miller Ayre):** So, Merv, would any of the expertise migrate from here to there? I mean, are they planning to move any personnel who have Newfoundland knowledge or do we go to zero right away?

**MERV WISEMAN:** Well, yes, we would go to zero right away in terms of local expertise. They said at first, through workforce adjustment that that would be an option, but because the center in Halifax would have to become fully by lingual, bilingual imperative, French imperative, none of us qualifies to go. And, in fact, we have two rescue coordinators, marine rescue coordinators that were put on a list as qualified to come into the rescue center that applied on the recruitment drive a couple of months ago at the JRCC in Halifax. They were rejected. They did not qualify even though they had local expertise.

**COMMISSIONER (Miller Ayre):** So you're saying, you're saying that all local knowledge is gone?

**MERV WISEMAN:** Gone. Absolutely.

**COMMISSIONER (Miller Ayre):** So you're coordinating an event out of a Halifax area with no starting point as to basic knowledge about location and dialects, harbor names, where things are and so on?

**MERV WISEMAN:** Absolutely. The people that put, the learned people and the study people, including judges of inquiries that have put together and pieced together all the rationalization for a marine rescue sub center, this is the essence of the rationalization and their recommendations, which was put on paper and implemented, nothing have changed since except that for some reason we decided, we have decided without any kind of advisement. It is the process is void of any particular analysis.

In fact, I believe we missed an excellent opportunity during Judge Wells' inquiry because we did not include search and rescue operations which would have included the rescue units, the response from rescue units as well as the MRC, which is search and rescue operation. We missed that opportunity and it needs to be looked at, it needs to be studied, and, certainly, this commission needs to take stock of that and do some kind of their own study and make sure that they take a good view of it.

**COMMISSIONER (Miller Ayre):** Well, I thank you for coming here today. Geoff, did you have anything more at this point? No. Well, thank you very much for your presentation and we'll now take a short break.

**MERV WISEMAN:** Thank you. Thank you very much. I appreciate the time.

**(Nutrition Break)**

**COMMISSIONER (Miller Ayre):** We'll start the last session for the day, and we're glad to be able to provide an opportunity towards the end of the session for Phil Towers to provide us with some information on a project he's working on. And if you want to make the formal introduction, Mr. Clerk.

**ED FORAN:** I shall, sir. So, we have Phil Towers, and Phil, in our schedule for today, we had mistakenly indicated that Phil was representing Technip and that's not the case. And Phil is representing Sea-Force Hyperbaric. And so that's the organization he's associated with. So Phil, if you could please.

**PHIL TOWERS:** Thank you. Good afternoon, Commissioner, ladies and gentlemen. I'm going to talk to you today about a Hyperbaric Reception Facility for emergency saturation diver rescue, at this human safety review.

Now, during the Hebron Development, saturation diving will play a major role in the installation phase in 2015 and 16, and it's important to assess the risk in your concept human safety analysis, and ensure there's a solution to provide insurance for the safety of everyone. And we want to bring awareness to an existing offshore diving safety issue and be part of the solution for human safety by working with the operators at the early stage of the Project Development.

Right. Sea-Force Hyperbaric, and who am I, I hear you say. Well, my name is Phil Towers, and I was a military and commercial diver for 20 years, air and saturation mixed gas diving. Whilst in the saturation chambers during decompression and other sort of down time, I studied for many years and obtained a Bachelor of Science Honours Degree in Engineering subjects. And for the past 12 years, I've been working as a diving and subsea installation consultant to international diving contractors and operators. And I have been active in diving within the oil and gas industry here in St. John's for the past three years.

I came to St. John's to assist with the North Amethyst Project for Husky or, actually, for a contractor to Husky and met one of your good Newfoundland girls and, well, she hid my passport, so I'm still here.

Sea-Force Hyperbaric. The other major partner in this venture is Jim Hynes, who sends his apology for not being present today. He's got vast experience in the oil and gas support company business with such companies as Sea-Force Technologies and Sea-Force Diving, who are well known by the operators, contractors and various trade organizations in St. John's.

We've also got contacts with the National Hyperbaric Centre in Aberdeen and the National Underwater Institute in Norway for hyperbaric knowledge sharing.

We'll also be part of an international network of such facilities, and we're putting forth our facility and expertise to be available to ExxonMobil, as part of your solution for human safety assurance for your project. And we've got the expertise here in St. John's to operate such a facility and it will be staffed, maintained and run by Newfoundlanders.

So, what is saturation diving? Well, it's where divers live in sealed chambers on board a DSV, a diving support vessel, for up to 28 days at a time. And the chambers are pressurized by gas to the equivalent seawater pressure at the depth the divers will be working, and they transfer, under pressure, to the diving bell to go to work, being lowered to the seabed.

And why do we use saturation diving? It's because decompression is only needed to be carried out once, at the end of the 28 days. And during the Hebron Development, saturation diving will play a major role in the installation phase, and it's important to assess the risks of this providing the insurance for safety.

A saturation diving system in schematic form here, the chambers will be underneath or within a vessel and divers will move through the chambers and trunking to the bell to be lowered to where the diving bell is there and it's connected to the diving system. In an emergency, the divers will move through the chambers and the trunkings to the hyperbaric lifeboat, which is attached to the diving system.

Whilst the diver is in the chamber or in the water, the diving gas, under pressure, is slowly absorbed into all of their body's tissues during diving until the tissues become saturated. This absorbed gas has to be released slowly, very slowly after diving. So, surfacing quickly would not allow the gas under pressure to diffuse out of the body slowly but will try to release all at once, like a soda bottle, and this causes a barotrauma, commonly known as "the bends." And this is why we need decompression under very strictly controlled conditions.

All diving support vessels carry a sealed, pressurized chamber inside one of their lifeboats which is connected to the diving system. So, in a vessel emergency, this hyperbaric lifeboat will contain the divers still under pressure and will be disconnected before being launched to the sea.

If a disaster were to hit the diving vessel and the hyperbaric lifeboat is launched, the divers still need to be cared for, and once recovered, the divers still need to be decompressed safely, very slowly and under controlled conditions.

So, what are we doing about it at Sea-Force Hyperbaric? We're bringing to St. John's, which is



the Canadian centre of oil and gas engineering excellence, a Hyperbaric Reception Facility that fulfils the need in Newfoundland and Labrador and Eastern Canada.

This Hyperbaric Reception Facility will be available to readily accept the lifeboat to massively increase the chances of survival for the 18 or more occupants.

This facility is highly specialized, It's state-of-the-art piece of equipment. This system has been purchased that meets the needs of St. John's and the offshore diving community. It consists of two 10-man chambers, very large chambers and a central hub. And it's to this central hub that either the hyperbaric lifeboat will connect or a hyperbaric rescue craft. The connection points can be from below or to the side of a variety. At the moment, DSVs that are used around the world, have a variety of connections. Unfortunately, they're not standardized, but that is something that we, in the hyperbaric community, are working towards.

But anyway, our system is going to consist of three major chambers for the reception of a life raft, and the associated control cabins and gases and other ancillary equipment that we need. And this equipment is going to be delivered and installed and commissioned by the spring/summer of 2012, next year.

So, what do we do now in Newfoundland and Labrador, knowing that there is diving happening now? We actually just provide a life-support package ashore, which is essentially just an 8 by 10 container, which, plus a few gas racks, containing a few hoses and a very small basic control panel. And diving contractors produce a procedure for each worksite, which details how the life-support package will be united with the hyperbaric lifeboat to decompress the 18 divers still within the lifeboat.

But it's widely accepted that with so-called life-support packs or fly-away containers, it's unrealistic to actually plan to keep 18 men in a hyperbaric rescue craft or lifeboat for the full duration of a saturation decompression. Because we need to be able to control their pressure throughout the decompression, their carbon dioxide and oxygen levels within the chamber, the environment, the temperature, the humidity, the chamber hygiene, the lighting and communications, food and water, waste disposal, medical needs. And in the hyperbaric lifeboat, this will often be in cramped, unsanitary conditions unable to clean up, potentially injured, after a harrowing emergency. It's currently unrealistic.

It is currently also not possible to provide medical care inside a hyperbaric lifeboat, other than the divers themselves, under the direction from an outside medic. Our Hyperbaric Reception Facility system allows full medical facilities inside the chambers.

Currently, up to 18 divers would have to live in their lifeboat environment, which is about the size of a small RV to complete their decompression.

A missed decompression would take potentially several days just for a standard decompression, but if a therapeutic decompression is needed, this could be weeks that 18 men have to spend in this very small space.

The International Maritime Organization, which was formed after the Titanic disaster, to standardize safety at sea stated, "The best way of improving safety at sea is by developing international regulations that are followed by all," which is what we're trying to be part of here.

What standards are currently there for diving offshore, both Canadian and global? Well, at the moment, all diving operations offshore of Newfoundland and Labrador must comply with a C-NLOPB, Newfoundland Offshore Area Petroleum Diving Regulations.

And I've written many bridging documents for contractor companies to make sure that their diving manuals comply with the C-NLOPB Regulations.

Company contracts state that "Diving contractors shall, as a minimum, meet with respect to diving operations, the recommended practices as identified by IMCA.

International diving contractors comply with these IMCA practices, which are based on industry best practices for safety, and the diving industry best practices are shared globally through IMCA, the International Marine Contractors Association. And the International Marine Contractors Association is the international trade body representing offshore, marine and underwater engineering companies, and it has over 800 members worldwide, including ExxonMobil, and these members share information and promote a common aim of safety within what is still a potentially dangerous industry.

And IMCA promotes improvement in quality, health, safety, environmental and technical standards through the publication of information notes, code of practice and by other appropriate means.

IMCA members are self-regulating through the adoption of guidelines as appropriate. They commit to act as responsible members by following relevant guidelines and being willing to be audited against compliance by their clients.

All international diving contractors comply with IMCA guidance and codes, and all operators insist that their diving contractors are compliant, which gives them a level of comfort in their contractor's level of competency and safety.

I have participated myself in work groups with IMCA in formulating and writing diving guidance and policy and also with the auditing of potential member companies and global standards are formulated from global sharing of information.

So, how ready are we for the next emergency? At the 2009 IMCA Conference in Rio a statement was made that the transfer into a hyperbaric lifeboat without considering all aspects of the emergency evacuation was "just a different place to keep the bodies."

The International Maritime Organization (IMO) requires a 72-hour survival capability for all personnel at sea, but decompression for 150 metres depth takes around 150 hours, and from about 100 metres, about 96 hours. So, is this appropriate for offshore diving these days?

An operators approach: BP issued a policy statement in March of this year, which stated that "It has long been accepted throughout the offshore industry that wherever divers are committed to saturation to perform a work scope, there needs to be in place, a proven method of ensuring their survival in the event of an incident that compromises the Mother Vessel or installation." And BP will not employ a saturation diving contractor anywhere in the world that does not have a Hyperbaric Reception Facility.

So, how ready are we for the next emergency? Well, the sea can be a very hostile and dangerous environment, especially the North Atlantic. You know, 12 metre high waves are not uncommon. In fact, there's a DSV working offshore today in the Grand Banks. The RMS Titanic, the Ocean Ranger, where there was some diver deaths, Piper Alpha in the North Sea, the DSV MacDermott DB29, where divers lost their lives, Deepwater Horizon. Even a couple of months ago, the Koosha 1, a DSV in Iran, turned over in bad weather and six divers lost their lives.

Now, I'm not saying that having a Hyperbaric Reception Facility would have saved any of these lives, but what I think we can all agree on and we know comes out of the investigations into incidents like this is that better safety planning of these work scopes might have helped. So, were ready for any of those? Well, possibly not as well as we could have been.

So, we're striving for better standards, and the International Marine Contractors Association is currently formulating guidance and a code of practice on the issue of diver rescue by way of a hyperbaric rescue facility. And as I said, diving contractors comply with these regulations at the behest of operators. And this has come about because of concerns, many concerns for the safety of divers, should an emergency situation occur.

And IMCA will issue these policy guidelines for review in January and the policy itself by the summer. And once the guidance is agreed by IMCA members and the operators, Sea-Force Hyperbaric will have a compliant Hyperbaric Reception Facility already built and installed, ready to support the Newfoundland and Labrador offshore diving industry and companies such as ExxonMobil.

Currently, there's only four services around the world to support the Hyperbaric Reception

Facility industry. In the UK, there's a national hyperbaric centre. Australia has a few hyperbaric reception facilities close to their offshore diving work sites.

In Norway, the National Underwater Institute have two hyperbaric centres, and in Sweden there's a couple of portable systems and mainly, these are only there because they're a legal requirement rather than being there because they're necessary.

There's plenty of other benefits as well to having a Hyperbaric Reception Facility. It can become part of a network of Canadian hyperbaric centres. It could be used for the "bend watch" of divers which is where divers have to remain within the vicinity of a chamber once they finish their decompression from saturation in case they have a problem for 24 hours.

If their "bend watch" can be done near our facility will allow a DSV to return to sea sooner, saving a contractor potentially a day a month of vessel time. It can be used by local Scuba communities. It can be used for diving trials and training and product trials, medical trials, and it could even be used for the medical treatments for the local community, in conjunction with local physicians. And this system will be the only emergency Hyperbaric Reception Facility in Newfoundland and Labrador and, indeed, in North America.

And, of course, we've got years of offshore activity in the future which will put us further to the forefront of the oil business in Canada, and we'll see St. John's becoming a major centre of excellence.

Canadian and Newfoundland personnel are becoming more experienced with the increased offshore work and the requirement for local content and workers.

And safety is a core value for ExxonMobil and your co-venturers and your own statement that "Everyone has the right to go home at the end of the day as healthy as when they started the day." And that is also the whole focus of Sea-Force Hyperbaric.

And there's plenty of savings for our system, from diving contractors not having to purchase their own systems to the operators not having to purchase the system. They want to focus their attention on their Project without providing systems for their contractors.

So, an independent HRF specialist company like us can provide the service to both the operators and the contractors and it will, of course, be fully compliant with government operator legislation and, of course, the industry best practice. And, of course, the greatest saving of all, of a system such as this, is potentially 18 lives.

So, I'd like to thank you, Commissioner, for the time to introduce this company and this facility. Thank you.

**COMMISSIONER (Miller Ayre):** Thank you, Phil. Just a couple of questions, if you can explain a bit. Where would you be putting this facility? Does it have to be near, presumably near the water? I mean, it's something which you'd have to put down there at St. John's Harbour, or out in Bay Bulls or?

**PHIL TOWERS:** It will actually be, more or less, between the two actually. It's actually going to live in Mount Pearl at Donovan's Industrial Park inside a large warehouse with plenty of head height because we will need a large crane to be able to lift and lifeboats onto the facility to be able to mate them with it.

However, saying that, it is a fully portable system and can be sited anywhere, but for the works of the Grand Banks, we will be siting it at Mount Pearl. And if there were an incident at sea and the lifeboat was to be launched, once it is brought ashore, it will be taken to Mount Pearl, mated with our system so that we can decompress the divers safely and under controlled conditions.

**COMMISSIONER (Miller Ayre):** And as far as the -- I know that Sea-Force does a lot of diving, have you had incidents within Sea-Force where you've had decompression issues or any of this kind, or is this particular product something that has its real value when there's more than one party and more than one diver involved?

**PHIL TOWERS:** Not at all, no. It can be used if there was a medical emergency for divers. It could quite easily support a single diver, but it is large enough to support 18 divers comfortably. And if we were to get one of the larger DSVs that are now operating in the world, for instance, the Skandi Arctic, which has a 24-man saturation system, we could be able to help that as well.

**COMMISSIONER (Miller Ayre):** Now, you are actually going to put this in place, and then you try to rent some, rent space or get operating arrangements with various people, is that what you're trying to do, very much on spec on this particular product. Do you need certain commitments before you would have it in place or?

**PHIL TOWERS:** No. This piece of equipment is being brought in. We signed the deal for it a couple of weeks ago. It's being built in the United Kingdom, and it'll be installed here May and June of next year.

As I said, it is a fully portable system, so during the times when it's not supporting diving works offshore off Newfoundland, it can be sited elsewhere in the world. There's a particular need for it in the Gulf of Mexico at this moment in time, so I can see it probably sharing its time between Canada and the Gulf of Mexico.

**COMMISSIONER (Miller Ayre):** I was wondering, is there much going on, David, for example,

in terms of saturation diving with the process you have in mind or is it done by ROVs? What's the procedure in terms of your plan going forward?

**DAVID McCURDY:** Yeah. Thanks for that information. We're very early in the design phase, but we are looking at the types of connections we'll make, and we are fully aware of the unique hazards that come with diving when you take those things into consideration. So, we'll be looking at that as part of our design factors we take forward with the final design, we take on. In our design, if we need things that have connections that require divers, then the way we look at it as much as was just described as we recognize this is a highly regulated industry, and it's a very specialized industry. So, we look to our providers for that to make sure that they're going to follow the regulations and the guidelines to make sure that they do put together a service proposal that is safe to meet the needs of whatever it is that's in our design. So, we're early in the design, but recognize that there are very unique hazards with this.

**COMMISSIONER (Miller Ayre):** Is it a given that you would have quite a bit of saturation diving? I mean, is that usually the case in this kind of operation now? In many cases, I gathered that the diver was being replaced by various machines, by the ROVs and so on.

**DAVID McCURDY:** In the design of our facility, it has to do with the installation. When you do the installation, the connections, the offshore loading facility has a loop line that requires connection, for example, and there are different ways to approach that connection, and so, that's one of the things that we would take into account. So, you're exactly right in a number of operations in our businesses that they look at it for remote vehicle operations, but ours is in an installation phase, wherein that phase it's a little different and you have to look at things like the type of connection you make and whether it requires divers or not.

**COMMISSIONER (Miller Ayre):** Because, well, we notice that you cover many hazards in many aspects of what you're about to do in the Concepts Safety Analysis Document, but diving doesn't seem to be singled out, but it's clearly a specialized field, is that it?

**DAVID McCURDY:** That's right. In terms of the relative major design kind of considerations of our environment that you look at for the concepts safety analysis, it's not one that rises up into that kind of a level that you look at for that, but it is, early on it was on the radar screen as something that we need to take into account and think about in our design basis.

**COMMISSIONER (Miller Ayre):** Well, I think that's all the questions I have, Phil, and thank you for coming. And do you have anything else, David?

**DAVID McCURDY:** No, but thank you, Phil.

**COMMISSIONER (Miller Ayre):** Okay.

**PHIL TOWERS:** Thank you.

**COMMISSIONER (Miller Ayre):** Thank you very much. So, we've reached the end of today's session, and tomorrow, I think, begins at 10 a.m.

**-END OF DAY 7-**