OFFSHORE HELICOPTER SAFETY INQUIRY
February 3, 2010
Tara Place, Suite 213, 31 Peet Street
St. John's, NL

February 3, 2010

PRESENT:

John F. Roil, Q.C./
Anne Fagan.....Inquiry Counsel

John Andrews/Amy Crosbie. ..... Canada-Newfoundland and Labrador Offshore
..... Petroleum Board (C-NLOPB)

Cecily Strickland/Ian Wallace..... Hibernia Management and
..... Development Company (HMDC)

Denis Mahoney/D. Blair Pritchett.....Suncor (Petro-Canada)

Alexander C. MacDonald, Q.C./
Stephanie Hickman.. .....Husky Oil Operations Ltd.

Laura Brown Laengle .....Government of Newfoundland and Labrador

Norman J. Whalen, Q.C./ Michael Cohen.....Cougar Helicopters Inc.

Jamie Martin.....Families of Deceased Passengers

Kate O'Brien. .....Davis Estate (Pilot) and
..... agent on behalf of Douglas A. Latto for Lanouette Estate (Co-pilot)

V. Randell J. Earle, Q.C. .....Communications, Energy and Paperworkers Union
..... Local 2121

David F. Hurley, Q.C. ..... Offshore Safety and Survival Centre, Marine Institute

Mark Freeman .....Department of Transport Canada

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COMMISSIONER:
Q. Good morning, ladies and gentlemen. Ready, Ms. Fagan?
MS. FAGAN:
Q. Yes, Commissioner. This morning, before we begin, we would like to have one correction made. We're not there yet, but in the PowerPoint, we realize that there's a slight correction should have been made to slide 61. So we would ask that Exhibit 155 be revised to have slide 61 replaced, and it's only one phrase in slide 61. It's a long list of items and an item that should have been on the list just wasn't listed. So we've added that item.
COMMISSIONER:
Q. Would you prefer to tell counsel what it is, so they'll be alerted when it -
MS. FAGAN:
Q. When it comes up, and -
COMMISSIONER:
Q. Because it'll be different from what they have.
MS. FAGAN:
Q. Right, and counsel for Cougar Helicopters has

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already circulated a copy of slide 61 to all the parties so that they have it.
COMMISSIONER:
Q. Oh well, in that case, that's fine then. All right then, the amendment will be inserted.
MS. FAGAN:
Q. Okay, thank you.
COMMISSIONER:
Q. Okay.
MR. RICHARD BANKS, MR. RICHARD BURT AND MR. HANK WILLIAMS, EXAMINATION BY MS. ANNE FAGAN (CONT'D)
MS. FAGAN:
Q. Thank you. Now we're going to have a video played and I would just like -- I believe Mr. Williams is going to just describe what this video is. It's just over 15 minutes. I think it's either 15 or 16 minutes, and it's the pre-flight safety video. It's a little longer than what we would hear if we were on a Air Canada and I'd just like Mr. Williams to explain what we're going to see in this video and why it's 15 or 16 minutes long.
MR. WILLIAMS:
A. Okay. The video you're about to see is a pre-flight briefing video. Of course, many people

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travel on commercial airlines are used to either the flight attendant doing it or it's in a video screen in front of you. This video is, as Ms. Fagan had indicated, is roughly about 12 to 15 minutes long. It's a combination of requirements the video is comprised of. We are regulated and must show, as per CARS, Canadian Aviation Standards, we must show items on the aircraft, emergency exits, any -- where the fire extinguisher is located, first aid kits. That's our regulatory requirement. There's about maybe five, five and a half minutes that's a regulatory requirement from a Transport Canada point of view. The rest of the video is made up of a combination of Board requirements, C-NLOPB, and operator specific items that's there.

So it's a combination of requirements that's packaged into one pre-flight video and that video is shown every time an individual steps on a helicopter and it's shown at the heliport when they leave and it's shown when they return in the heli-admin offshore. So every time an individual steps on a helicopter

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and returns, and I must say, at the heliport, I think passengers pay more attention to that video than most people on commercial airlines. You don't -- you won't see anyone reading a newspaper when they're watching that pre-flight video, and many times I've been on fixed wing aircraft and commercial aircraft and how many people is really watching that video, and I have to give kudos to passengers. They really do watch this video. So Ms. Fagan.
MS. FAGAN:
Q. Okay, thank you. Well, the Registrar had been alerted because this video takes a little while to load, so I think it's ready to go.
(VIDEO STARTED)
Cougar Helicopters is committed to providing all personnel with safe transportation to and from your offshore location. This video will help familiarize you with the features, equipment and safety procedures required for travel on the Sikorsky S-92. Estimated flight time to your destination is approximately one hour and 15 minutes.

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Cougar Helicopters has strict policies concerning the possession of contraband items. Alcohol, firearms, weapons, matches and cigarette lighters are forbidden. Electronic equipment such as cell phones, pagers and cameras are not permitted to be used offshore and therefore will not be allowed on the helicopter. Personal computers may be transported at your own risk if you are within ten kilometres of your personal baggage payload limitation. Cougar has a no smoking policy while travelling on the helicopter. All prescription and non-prescription medications must be declared when you check in. Ball caps are not permitted to be worn and must be stowed in baggage. Newspapers are prohibited on board the helicopter. Only magazines and books are allowed in the passenger cabin. They must be placed inside your suits when walking to and from the aircraft. Earplugs or headsets must be worn before embarking or disembarking the aircraft.

Helly Hansen is proud to supply the Nautilus E452 survival suits. The Nautilus E452 is approved to both Transport Canada

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marine and aviation standards. The suit is designed to meet your thermal protection and floatation needs and is equipped with various lifesaving accessories. Please watch the video carefully for important safety information.

Once you have received your suit, inspect its general condition. Once you have checked the suit, tuck your pants into your socks and safely store any watches, rings and sharp objects. Sitting makes it easier to don the suits. Donning the suit is similar to putting on work overalls. Make sure the wrist seals are adjusted to your size and comfort. Familiarize yourself with the features and accessories of the Nautilus E452 survival suit. Ensure you know the location of each of these features. The suit is equipped with an integrated inflatable life jacket meeting all aviation and marine requirements. The suit may be fitted with a helicopter underwater emergency breathing apparatus or HUEBA and nose clips. The suit is also fitted with a personal locator beacon or PLB. There is also a whistle and water-activated survival light.

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These are accessible by either hand. A buddy line is located on the left chest. When protection is needed for your hands, pull out the gloves located on the forearm pockets. Once the gloves are on, the straps can be adjusted for your comfort and security. The spray shield is located at the back of the neck and can be used for additional protection from rain or spray.

A HUEBA is a helicopter underwater emergency breathing apparatus. It is designed with enough compressed air to assist you in an escape from a partially or totally submerged helicopter. This system is based on the same design as a self-contained underwater breathing apparatus known as SCUBA. You may already know how to operate SCUBA equipment and this safety equipment operates in the same way.

If a HUEBA is used correctly, it will provide its user with additional confidence and time for helicopter egress by supplying air when needed. The main benefit is extra time to escape from a partially or totally submerged helicopter. The endurance of the

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system can vary from person to person due to breathing rate and depth. The number one rule is to breathe normally both in and out on the way to the surface. The reason for this rule is this: if you hold your breath after breathing compressed air, on return to the surface it is possible to damage your lungs and suffer an air embolism due to the pressure decrease and the air volume increase in your lungs, but this is easily prevented by breathing normally while returning to the surface. This type of injury is very rare, but it can be life threatening and it requires specialist treatment.

The pre-flight check is a simple visual inspection and functional test carried out by the helicopter provider or the heli-admin personnel offshore before you receive the HUEBA device. If you suspect that your device has any deficiencies, bring it to the attention of the heli-admin or helicopter provider personnel immediately. Once you receive your HUEBA verify that the valve is on by ensuring that the red indicator is not visible and the pressure gauge is in the green

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zone. The dust cover on the second stage regulator is designed to protect the mouth piece and should only be removed during emergency situations.

To use the HUEBA underwater do the following: First, remove the nose clip from the suit and place it on your nose. Next, grasp the second stage regulator or demand valve on your left shoulder with either one hand or two and pull it clear of its dust cover. Pull the hose clear from the suit velcro. Now, place the demand valve in your mouth and form a seal using your lips on the outside of the mouthpiece. Support the demand valve in your mouth by lightly gripping it with your teeth following the areas on the inside of the mouthpiece which are designed to be gripped by your teeth. Do not bite down hard as this could damage the mouthpiece. When underwater, blow forcefully through the mouthpiece. This will clear the water from the demand valve. If you are unable to clear the water with a forceful breath, you can use the purge button on the front of the demand valve. You can also place your tongue in the

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mouthpiece orifice to make this easier. The use of the purge button should be kept to a minimum because it decreases the endurance of the unit. Once you have cleared the unit, you can inhale air from the system while completing your escape. You must try to control your breathing, remembering to breathe both in and out only through your mouth. Once you begin breathing from a HUEBA it is vitally important that you do not hold your breath. If the unit runs out on the way to the surface, keep the mouthpiece in your mouth. This will remind you to breathe out on the way to the surface and you may also receive additional air as the pressure decreases and residual air in the cylinder may become available.

The helicopter has three emergency exits, two located in the rear of the cabin and one located in the forward section opposite the main cabin entrance. The main cabin door is the standard passenger exits and can also be used in an emergency. In addition to the three emergency exits, there are ten windows that are designated as emergency exits and are

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clearly marked. All cabin and window exits will illuminate in an emergency. Handles for activation of exits will also be illuminated.

An emergency locator transmitter or ELT is located in the front of the cabin. Instructions are provided on the unit. The ELT must be immersed in water to activate.

There are two on board fire extinguishers, one located in the cockpit and the other in the passenger cabin. There is also a first aid kit in the main cabin. In the event of an emergency in the passenger cabin during the flight, leave your seat, go forward and inform the flight crew.

There are two externally mounted life rafts on the Sikorsky S-92 located in the forward section of the sponsons. These will normally be activated remotely by the flight crew from the cockpit. There are three floatation bags located on the helicopter, one on either side of the cockpit and the other under the tail boom. If an emergency landing on water is necessary, the floatation bags will be activated by the flight crew upon landing.

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When your flight is called, carefully follow the boarding instructions of the escort. Always follow your escort and approach the helicopter in single file from the side and in view of the pilots. Exercise caution when walking around the front of the helicopter to avoid contact with the pitot tubes. Avoid the tail rotor at all times. When embarking and disembarking, only one person at a time is permitted on the stairs.

Once inside the helicopter (no audio) fasten your seatbelt. The seatbelts in the S-92 are the four-point harness type. To fasten, secure the strap around your waist. Lock into the buckle, pull down the shoulder straps and lock into place. Adjust the waist straps one side at a time for comfort. To release, turn the knob. Seatbelts and headsets should be worn during the entire flight. You must be able to hear announcements from the flight crew at all times. Please read the safety briefing card located in the seat pocket in front of you or adjacent to you.

In the event of an emergency, the pilot

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will advise you to prepare for ditching. If this occurs, remove your headset and place on your knee. Tighten your seatbelt. Remove your eyeglasses. Don the hood and close the front zipper. Check for your gloves and tighten the wrist seals. Be sure you know where the nearest emergency exit is located. When the pilot issues the command "brace, brace, brace" assume the brace position. Remain in this position until the helicopter has landed.

If the helicopter lands on water, remove the windows immediately and prepare for evacuation. Listen for instructions from the flight crew. To remove an emergency window exit, strike any corner. To open the main cabin door, rotate the upper door handle and slide the door rearward. To jettison the other three cabin emergency exits, rotate the handle. The wire will break free. Push the bottom of the hatch.

If the helicopter has landed on its side, the seats can be used as a ladder to aid in climbing out the nearest emergency exit.

Each individual must decide for

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themselves when to use a HUEBA, but there are a few important considerations. It is vitally important to carry out the ditching procedures that you have been taught. These procedures are designed to minimize the possibility of being injured on impact and they should not be compromised by trying to operate the HUEBA. Remain in the brace position during the impact phase. Make sure you take a breath. If you can place the regulator in your mouth before you go under water, then do so. If you cannot, follow the procedure described previously on how to clear it under water and continue with your egress.

Normally the flight crew will remotely activate the sponson-mounted life rafts from the cockpit. They can also be activated by pulling on the red handle until the life raft begins to inflate. Ensure the rotors have stopped prior to activating the life rafts. The life rafts should be boarded from the aircraft whenever possible. Sometimes, however, it is necessary to board the life raft from the water. In such a situation, make sure your lifejacket inflation toggles

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are accessible.

On entering the water, inflate your lifejackets pull the yellow tab downwards toward your feet. The lifejacket can also be inflated and deflated manually using the integrated oral inflation tube. Do not inflate the lifejacket while in the aircraft. The Sea Marshall PLB will be activated automatically upon contact with the water. When protection is needed for your hands, don the gloves located on the forearm pockets. Note again the locations of your whistle and buddy line. Remember, the spray shield is located at the back of the neck and can be used for additional protection from rain or spray. Board the life raft using the ramps provided. Should an emergency occur, be assured that help is on the way.

In preparation for landing or the air crew advises you to do so, don your hood and close the front zipper. Once the helicopter has landed on the installation, remain seated with your seatbelt fastened until the seatbelt sign has been turned off.

When instructed, disembark the aircraft.

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Cross the helideck with caution. Walk on the netting, not in between the netting. Pick up a piece of baggage nearest you or from the deck crew and proceed directly to heli-admin. Follow your escort. Always ensure that you have the free use of one hand as it is mandatory that you hold the handrail at all times when walking to and from the helideck.

Remember, it is imperative that you follow all helicopter safety instructions. When it is time to board the helicopter, follow the escort's instructions and walk single file. Always approach the helicopter from the side and in view of the pilots. Avoid the tail rotor at all times. Only one person at a time is permitted on the stairs. When offshore, pay close attention when walking on the netting and down the stairs. Wear your seatbelt and headset throughout the flight. Prior to landing and departure, don your hood, close the front zipper and tighten the seals. It is important to remember the emergency procedures for ditching and always follow the pilot's instructions. Remember to ask questions if there is anything you don't

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understand. Once you've reached your destination, remain seated until the seatbelt sign is turned off. Leave the helicopter as instructed by your escort. Please read the safety briefing card. Enjoy your flight.

(VIDEO ENDED)

MS. FAGAN:

Q. You have said that that video is played on the way out and on the way back. We also saw in the video a reference to a passenger briefing card and I understand that the card, as well as the HUEBA instruction card, is on the aircraft. Is that correct?

MR. WILLIAMS:

A. That is correct. There's a copy of each of those available for every passenger that's on board.

MS. FAGAN:

Q. Okay. They have been entered as Exhibit 159 and 160 and I understand Mr. Williams has the actual card, which we're going to have just passed around as the presentation continues, and copies of these cards are in the package of exhibits as well.

Now we noted on the video, there was a

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section there in the middle where the audio -- there was no audio and then there was a message along the bottom and it had to do with the goggles.

MR. WILLIAMS:

A. Correct.

MS. FAGAN:

Q. And I noted in the video that the goggles were strapped, I believe, to the seat, to the seatbelt.

MR. WILLIAMS:

A. Correct, yeah.

MS. FAGAN:

Q. Is that a change? Because I know we questioned why is there no audio and now this message on the bottom. Has there been a change with respect to the placement of the goggles?

MR. WILLIAMS:

A. Yes, there has. If I can recall, one of the recommendations that came out of the HOTF committee, the Helicopter Operations Task Force, was that people were finding it difficult to reach the goggles. The goggles were always located beneath the seats. So

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that's been an ongoing change and I think I have a little bit more information on a slide a little later on.

MS. FAGAN:

Q. Okay.

MR. WILLIAMS:

A. About the goggles being moved, and the video is always changing depending on anything we change in our operation, and that's the immediate fix right there now for the goggles is to put a caption in there, but there is ongoing to get the audio back in in that little slot as well, yes.

MS. FAGAN:

Q. Okay, thank you. You noted that this is what's played when the workers leave the rig or the platform. There was some information provided in other presentations as to the process on the helideck itself and we had heard that Cougar has been involved in either training or dealing with the helideck crew. So has Cougar Helicopters trained or provided any information to the helideck crew? And these are the people that manage the landing and the movement of the passengers on the rig

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or the platform.

MR. WILLIAMS:

A. Yeah. Well, I want to be clear, we do not -- we do not offer helicopter landing officer courses, but as part of the HLO courses that's offered through the Marine Institute, we play a little segment in that and what we are really concerned about is aircraft familiarization. When there's an HLO course being offered, they will end up at our facility for aircraft familiarization. All the HLOs, the helicopter landing officers and the crew need to know specifics of the particular aircraft, how to refuel it, how to properly open the doors, close the doors, and how to load and unload passengers. So basically the HLO team offshore, when a helicopter lands and takes off, becomes our heliport personnel force. So they manage the passengers off and on the helicopter while it's offshore. So yes, we are involved, but specifically on aircraft familiarization. As you've heard, we've changed from Pumas to 92s. We have an S-61 here. So the landing crews need to know specifics on the particular

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aircraft that they will be servicing for us, yes.

MS. FAGAN:

Q. Okay, and it's these crews that look after the passengers and the baggage? Is that correct?

MR. WILLIAMS:

A. That is correct.

MS. FAGAN:

Q. How long does it take to offload passengers' baggage and then refuel and then load passengers and their baggage? What's that process?

MR. WILLIAMS:

A. That will vary, of course, depending on the amount of passengers, amount of refuel requires. We are not always refuelling offshore. Sometimes we are carrying enough fuel to return. So that varies, so an average would be about 20 minutes we spend on the deck offshore.

MS. FAGAN:

Q. Okay. We also heard that the pilots conduct a fuel sample on the helideck.

MR. WILLIAMS:

A. Correct.

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MS. FAGAN:

Q. And I don't know which one of you want to look after that question, but what is that? We heard it, but we haven't had a description of that procedure. Why is that procedure taken and how did that develop or come about?

MR. BURT:

A. Right. I can speak to that. The fuel, first of all, in the helitanks, we call them, offshore, that fuel is actually the -- is Cougar's responsibility and the fuel quality. We do train the staff offshore in the monitoring, what we expect from that, even when the tank arrives. There's samples of that tank that are logged and recorded. When the aircraft -- and actually, before the aircraft comes in, the HLO will run the fuel through the fuelling system and we have an inline fuel sampler that's designed to take a nice clear and bright, we call it, visual look at the fuel, clear and bright, and we say that because you can see a slug of water in the bottom. It's very detectable. And the other one is that it allows for a very secure sample. We use a Shell detection kit. It's a

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kit that we supply. We train the crews how to use that. So they'll take that fuel and they'll take a sample and have it ready. When we come in, as a flight crew, I would go out and meet with the HLO. He would show me the sample, show me the clear and bright fuel and then I would give them the thumbs up to begin refuelling.

So we know what the fuel condition is before we start. We refuel the aircraft and they have their procedures for that. Once we're finished refuelling, again they take another sample. When we're finished, same thing, have a look at the fuel visually. We do the Shell test kit as well, have a look at that visual test kit and again, you can actually see if there's any water particles. It's a very visual inspection, and then once that is viewed as pass, the flight crew will actually sign a document stating that it is acceptable and then that flight then is secured from a refuelling point of view.

MS. FAGAN:

Q. Okay, thank you. Cargo, is cargo transported in the passenger cabin, in the compartment

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with the passengers on the S-92?

MR. BURT:

A. No, the cargo is actually transported in the rear compartment, in the ramp section of the aircraft.

MR. WILLIAMS:

A. A separate area of the aircraft.

MS. FAGAN:

Q. Okay, and is there any reason that that is done? Why don't you put the cargo in with the passengers?

MR. BURT:

A. Well, we don't mix the two. We have no need to and no requirement to. We don't mix those two, passengers and cargo.

MS. FAGAN:

Q. Okay. Has Cougar Helicopters had any communication from the C-NLOPB with respect to the location of the cargo in the S-92?

MR. WILLIAMS:

A. No. You know, our cargo carrying in the cabin is strictly we operate under the Transport Canada rules and I personally, and I don't think our organization has any direct consultation or information from the Board on

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any specifics about cargo.
MS. FAGAN:
Q. Okay. So are you saying you follow the Transport Canada regulations for cargo?
MR. WILLIAMS:
A. Correct.
MS. FAGAN:
Q. Okay. Now the slide, I believe, that's up is slide 57 and that is the helicopter return notification protocol and what I'm looking for here is a description of what happens when a helicopter has to turn around and return to St. John's or an alternate. For whatever reason, the helicopter does not land on the helideck on a rig or a platform as anticipated, and I understand there is a protocol. We've heard information that, you know, the communication to the passengers is very important because this is very stressful to not land as you anticipated and to turn around, and there's a lot of worry and stress. So can you explain what happens?
MR. WILLIAMS:
A. Okay. I'll start off by saying not all turnarounds are as a result of a mechanical

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issue or any concern. We do turn around quite often if the weather -- changes in the weather in route or at our alternates, as was described yesterday, but I'd like to talk about in the event that we would turn around because of any type of a mechanical issue or any of those details.

Of course we all -- when we all travel our self, we're very interested to see what that pilot is going to say to us over the PA system when we do turn around or we deviate from our planned route. So the first thing that would happen on a turnaround is that once the -- of course, priority one, the pilot will put his plan in place and his next step is to brief the passengers via the public address system on the aircraft to a very briefing on why he's turning around and what his plans is. The pilot then will notify our dispatch office and our traffic office of -- again, to the reasons why he's turning around, so they can start preparations for anything they need to do.

Once the aircraft gets back -- I should say prior to the aircraft getting back, we do

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have -- I mentioned each of our individual operators have what we call a single point of contact, the logistics personnel, so our operations guy that day will definitely be -- you know, most times before the aircraft gets back on the ground, there's communication that the aircraft is turning around, this is what it's turning around for.

So we've had communications with the passengers at this point. We've communicated to the logistics group from the operators via phone, and more importantly, when the aircraft lands back on the ground, and what you'll see when the aircraft lands back on the ground, you will see an operations individual go and speak to the pilots to get a further briefing, a further update on why he turned around and you will see a briefing conducted, usually in our briefing theatre, on a little bit more detail than the pilot gave them in flight onto reasons why they turned around. A lot of times the pilot will come in with us and do that, if it's in the event that we think we need more detail from him.

Subsequent to that, of course, the base

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operations manager or his delegate will provide a brief summary to the operators via e-mail of the details, why they turned around, and the biggest challenge here is most of the time people want the information exactly, the term we use is timely and accurate. To get accurate information, sometimes you need some time. So, you know, we work on that and a lot of times, the passengers will be probably turned around and gone on a subsequent aircraft or sometimes on the same aircraft until we really get the details of what happened from our maintenance group. So that can take anything from a few minutes to an hour to sometimes the next day before we really know what the assessment of the reason why we turned around or the details of that reason.

So there's where we come into what we call customer notification form. So what we've committed to our customers is that -- our customers being our individual operators, that in 24 hours, we will have prepared what we call customer notification form to you, and that customer notification form will contain,

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of course, the base, the date of the event, the nature of the event, flight crew dialogue. In any turnaround, our flight crew comes back and files under -- and it's a driven system that when they file their flight report, they have to give us details of that flight. So that will be entered into our system, the dialogue, the pilots, what they -- words right from the pilot of why they turned around and what was their event. That's on that customer notification form.

And then, of course, we get the maintenance actions. We get the maintenance actions onto whether they changed a component, they did -- required a subsequent test flight. All the details is entered in there as well. And you will see comments there from the logistics comments, what was the impact on the activity. Did we -- did the passengers go out two hours later or they're going out the subsequent day or these types of things. And there's an operations summary of what did that turnaround really mean to the operation, what was the impact.

So that notification goes out in 24

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hours. So you know, if I can go back, we start from immediately on the turnaround the pilot will brief the passengers, going right back to the end, at least 24 hours later we have a customer notification event form in. And it doesn't stop there if it was considered a safety event. If it becomes a safety event, then it goes into our safety system for action. So that's basically the crux of what the communication on a turnaround that will happen within a 24-hour period.

MS. FAGAN:

Q. I take it that it is quite possible that when the passengers are briefed -- I mean, I can understand if the pilots are busy trying to fly the helicopter that, you know, they only have so much time to brief the passengers. But once you're back on the ground and then the passengers go into the briefing room and then there's an expectation that well, now, you have to get on -- you know, go again on another helicopter a half hour later. I understand from what you're saying it is possible that during that briefing, you may not know the reason for the turnaround. For

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example, a chip light.

MR. WILLIAMS:

A. We will know the reason for the turnaround, but we won't know the conclusion of the chip light.

MS. FAGAN:

Q. Okay. So you'd know it's a chip light, but you won't be able to say why the chip light went off?

MR. WILLIAMS:

A. Correct.

MS. FAGAN:

Q. But when would -- if it was a chip light, when would sort of the determination or the investigation of the chip light be dealt with?

MR. WILLIAMS:

A. Well, you know, it depends. If we're not using all of our aircraft that day, the priority is like let's take another aircraft and let's move the people offshore. But within -- we will pretty well assess that chip light within two to three hours to see what further maintenance action is required.

MS. FAGAN:

Q. Okay.

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MR. WILLIAMS:

A. But we're always not waiting two or three hours before we put passengers on a subsequent aircraft and move offshore, or a substitute aircraft, I should say.

MS. FAGAN:

Q. Okay. So for example, let's say the maintenance department dealt with the chip light issue and had a conclusion, knew what the cause was at midnight. They go in four or five hours, they've taken the thing apart and they figured it out and they now know. That would be maintenance action. So that would be in the maintenance action portion of the notification form?

MR. WILLIAMS:

A. The customer notification form, yes.

MS. FAGAN:

Q. Okay. So that would meet the 24 hours, that would likely occur with that 24 hours?

MR. WILLIAMS:

A. Correct.

MS. FAGAN:

Q. Okay. So then what happens with the customer notification form? I mean, where does that

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form go? You filled out the form, but where does it go? Who gets it?

MR. WILLIAMS:

A. It goes to our single point of contact, which I mentioned was the logistics individuals for each company and they will fan it out as they see fit from there, and I don't want to speak for how they fan it out, but my understanding is that this goes to the offshore workforce, more specifically to any passengers that was affected by that particular flight.

MS. FAGAN:

Q. Okay.

MR. WILLIAMS:

A. But it is -- you know, once we get it to them, they disseminate it how they see fit.

MS. FAGAN:

Q. Okay, and just to be clear, if it was a chip light and the maintenance department was dealing with trying to determine the reason for the chip light, would that helicopter go without that determination being made or would you use a different helicopter?

MR. WILLIAMS:

A. You mean the -- no, absolutely not. The

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aircraft would not be returned to service until there was a full evaluation of the reason for that chip light.

MS. FAGAN:

Q. Okay.

MR. WILLIAMS:

A. Yeah, absolutely.

MS. FAGAN:

Q. Now, the next section is first response, and we have a video on first response and I think what we would do is probably play the video and then have a discussion as to the capabilities and the types of services that Cougar provides by way of first response and medevac. So that's the next video.

(VIDEO PLAYED)

Rescue specialists. Although contractually required to provide first response only, Cougar Helicopters has developed the initial first response team to such a level that they are now capable of search and rescue. Regardless, medevac has always been a capability that complemented both levels and has also evolved over the years. Today, Cougar Helicopters can conduct

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search and rescue when required, but mostly perform medevac flights. Cougar's search and rescue capability is recognized by the Federal Government as a taskable asset in its own response plans and protocols.

Cougar rescue specialists have a unique and diversified experience base in search and rescue operations, such that we are recognized as a taskable asset through the JRCC or Joint Rescue Coordination Centre as part of Canada's national SAR system. For the primary response for SAR operations on the east coast remains with the military in the 103 Rescue Squadron in Gander. There are occasions, however, where that asset may not be available, whether it be maintenance issues with their own aircraft, previously deployed on other operations or weather conditions in their area that may preclude them from responding. When that occurs, then certainly they know Cougar is prepared and able and willing to respond as required. Basically what that means is if an event was to occur outside our primary response responsibility, which is oil and gas, the response centre can contact Cougar,

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request us to respond. Although operator approval is required, we've got a pretty wide latitude in our ability to respond and certainly in life and death scenarios, we would respond immediately and notify the operators as we initiate the response.

The effectiveness of Cougar's response has been demonstrated time and again by successful deployment in a number of emergency response and search and rescue operations. At all times, there must be a serviceable helicopter on the ground ready to respond as an emergency response platform. We have eight dedicated pilots who take turns rotating into the emergency response role, where response is what they do exclusively. We also have 12 full-time rescue specialists on staff. Cougar's rescue specialists are highly trained professionals with skills that are truly world class. Most are former military air crew hired because they have the specialized skills and experience that we require.

When we recruit to hire rescue specialists, we predominantly seek experienced individuals who have worked in search and

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rescue in the past. Our main target audience for that is ex-military personnel, simply because they come with a wealth of experience and knowledge already and their operational procedures and equipment is very similar to ours and they integrate into our system very smoothly and quickly.

Skills are kept current with 40 hours per month of ongoing training, on the ground, in the air, from support vessels and in the water.

There's a constant training regiment within the search and rescue program at Cougar Helicopters. We have minimum required standards. We constantly strive to exceed those minimum standards. There's required annual ground school. There's ground training exercises that take place, as well as flight training exercises where we try to mimic as many potential response scenarios that we may encounter, whether that be hoisting to the water, to a ship or vessel, or even to land. We do quite a bit of training over land as well to hone our skills.

Cougar provides an all-weather daytime

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emergency response capability. At this time, Cougar's nighttime emergency response capability is restricted to searching, hoisting from well-lit areas and the deployment of airborne rescue kits or SCADs. However, Cougar is implementing an auto hover system that will enable full nighttime rescue operations once the system has passed Transport Canada's stringent regulatory approval process and crew training with the new system is completed.

(VIDEO ENDED)

MS. FAGAN:

Q. Thank you. Now I believe Mr. Burt is going to lead on this and have Mr. Banks join in at certain segments and I'll leave that to the panel to answer the questions as they see fit. The first question is we've seen in this video a description of Cougar's capabilities. Could you summarize the first response capabilities and how that's done?

MR. BURT:

A. Sure. The first response scope of work that we're responsible for requires us -- it's a dedicated service, and that service, we have a

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requirement to be airborne, wheels up, within one hour. The capability, we have rescue specialists on board. We currently have now three rescue specialists. We call one a primary cabin attendant, a hoist operator, and a rescue swimmer. The nature of the standby is to provide search, as you've heard, and rescue services, as well as medical evacuation of emergency medical trips. So we have the capability through our flight management system to do search patterns both day and night. We have search lights on board for night time as well, and radar, for that matter. The aircraft is equipped with a winch or a hoist that will allow a rescue specialist to go down to the water to a life raft, to a vessel, or to a platform, and extract an ambulatory or even a stretcher patient and bring them back up to the aircraft. So that capability, of course, we have that full day time, we have -- as the video pointed out quite well, we have a limited night time application. We can do that to some well lit environment, such as a rig, or in some cases a supply vessel, and we have done that. The

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service and the nature of the service is unique because it is basically supplied from a pool of three aircraft, or any aircraft in a passenger configuration can be converted to a first response capability, and that also explains the one hour dispatch time. If I could, I could go into how that might happen.

MS. FAGAN:

Q. That would be fine. Go ahead and tell us how you do it.

MR. BURT:

A. Okay, sure. Typically the aircraft is in a passenger configuration, so the sequence of moving it to a first response would be, number one, removing seats from the aircraft. We would have to install hoist on the aircraft, put in a seat or the tray, you know, so as we hoist people up there's salt water there. We would put in the search and rescue equipment. In most cases it would have to be refuelled. The search and rescue team would also be called in. They may not be on site. That includes the rescue specialist and the flight crew. As the aircraft is prepped, there's also some ancillary equipment such as the

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search and rescue -- we have a special search and rescue door that is installed on the aircraft to help effect that mission, and that, of course, is a special piece of kit.

MS. FAGAN:

Q. So the seats come out, the hoister winch has to be attached?

MR. BURT:

A. Uh-hm.

MS. FAGAN:

Q. And a door --

MR. BURT:

A. Installed.

MS. FAGAN:

Q. A door installed. So the existing door --

MR. BURT:

A. Is taken off.

MS. FAGAN:

Q. Is taken off, and another door put on, and what about fuel? Is it necessarily fuelled or not fuelled?

MR. BURT:

A. Yes, it would be -- 90 percent of the time you would have to adjust your fuel load.

MS. FAGAN:

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Q. Now you mentioned that you may have to call in the crew. Generally speaking, where would the crew be, and is there a difference if it's day time or night time, or if you're flying or not flying? Where are you crew?

MR. BURT:

A. We don't differentiate day time/night time. Our posture is the same, one hour day, one hour night. Our crew are always by hire where they live are within a maximum of 30 minutes from the facility, and whether they're in some cases on site during the day or off site during night, and in some cases they may be at home on standby as well, but again these are dedicated crew, that's what they do, and so that is a focus right now with this -- we have an enhanced first response capability right now.

MS. FAGAN:

Q. We had heard earlier that the co-authority, the OCC Centre, is staffed 24/7.

MR. BURT:

A. Correct.

MS. FAGAN:

Q. In that there's someone there 24 hours a day.

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MR. BURT:

A. That's right.

MS. FAGAN:

Q. Is there a -- what about the planning? If you get a phone call from the rig or the platform, how does the flight planning work and the communication with the air traffic control? We heard from Colonel Drover that air traffic control generally requires a certain amount of time and notice. So who looks after the planning and --

MR. BURT:

A. This is for a first response mission?

MS. FAGAN:

Q. Yes, for a first response mission.

MR. BURT:

A. Right.

MS. FAGAN:

Q. Because not only do you have to fuel and change the seats, that type of thing, you have to get your crew in, but there's a flight planning component, as I understand it. So who looks after that and when is that done?

MR. BURT:

A. Right, that comes right into the dispatcher

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that's sitting there 24/7 on that standby, and it is 24/7 on site, everything is up and running. Again it's seamless in that regard. The call comes in, they have the emergency response manual, and again we have that exhibit here too, if necessary.

MS. FAGAN:

Q. Yes.

MR. BURT:

A. And that manual has a very strict protocol, who to call, when to call, what numbers to call, and the sequence that's involved, and as it comes in, first of all we'll notify the RCC, the Rescue Coordination Centre, we will notify our senior managers, the Director of Flight Operations, Hank and myself, for example, would be notified, and that's all done by one notification, it's a blast e-mail that goes out. Automatically with that as well even in our hangar, all of our screens with go to SAR. When a SAR mission comes up, our engineers will see that, and they'll all be notified and then we have a sequence of people who are notified long after that. I mean, a long list of people notified during

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that process.
MS. FAGAN:
Q. And the seats and the hoist and the door, that all is done by the Maintenance Department, is that correct?
MR. BURT:
A. That's correct, yes.
MS. FAGAN:
Q. So where are they -- you said that the SAR techs or the rescue specialists, and the SAR pilots, the pilots that conduct those SAR missions, we'd heard that they're -- you know, you have a group that are specialized or able to do that.
MR. BURT:
A. Yes.
MS. FAGAN:
Q. They're within 30 minutes. What about the maintenance people who have to reconfigure the seats?
MR. BURT:
A. Well, we have maintenance people at the facility 24/7 as well.
MS. FAGAN:
Q. Okay.

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MR. BURT:
A. As a matter of fact, their main activity is during the night time, so you'll see -- we have a fairly large complement of maintenance staff and we then have an active staff that are dispatching aircraft. Maintenance people, I mean, to use a better word, maintenance are seeing aircraft off and seeing aircraft back, as well as the day time support staff. So some of these functions are not all maintenance functions, like, bringing chairs in and bringing equipment out. What happens in our facility, it's all hands on deck when that happens.
MS. FAGAN:
Q. So from a timing perspective, if you receive a -- the first area that I'm interested in covering is a medevac, for example.
MR. BURT:
A. Sure.
MS. FAGAN:
Q. So you get a call from a rig that says, I hate to pick on John Smith, but let's just say John Smith is having a heart attack or we think he's having a heart attach, we need a medevac.

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MR. BURT:
A. Right.
MS. FAGAN:
Q. So would that be one of the one hour wheels up scenarios?
MR. BURT:
A. Yes.
MS. FAGAN:
Q. And let's say it happens 9 o'clock p.m., 9 p.m. So he's just finished his shift or whatever and it's now 9 o'clock you get the phone call. So there's people there at Cougar to deal with the seats and the reconfigure, you know, the aircraft.
MR. BURT:
A. Yes.
MS. FAGAN:
Q. There's someone there to take the phone call, there's someone there to plan the flight?
MR. BURT:
A. Uh-hm.
MS. FAGAN:
Q. And the rescue specialists and the pilot would have to be within 30 minutes?
MR. BURT:

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A. Right, and, of course, there's a little bit of a nuance here too because at AOMS is the contracted party that handles the medical evaluation of somebody offshore.
MS. FAGAN:
Q. Yes.
MR. BURT:
A. So in parallel, they're engaged as the primary contact, the status of this person, how are they doing and the health is determined, and then they call the medevac. Then we get involved as the transporter of the specialized medical crew from AOMS, not our people. It would be a doctor or a nurse that's assessed to go with that flight. Our rescue specialists will provide the cabin attendant and the security in the back and complement the medical crew.
MS. FAGAN:
Q. So who just is a -- give it to me again, the medical?
MR. BURT:
A. I'm sorry, Atlantic Offshore Medical Services.
MS. FAGAN:
Q. Atlantic Offshore Medical, okay.

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MR. BURT:
A. Yes.
MS. FAGAN:
Q. All these acronyms. I knew there was Atlantic, I knew there was medical in there.
MR. BURT:
A. Yes.
MS. FAGAN:
Q. This is, as I understand it, a group of doctors who are in St. John's who are contracted to provided medical consultation services and medical services --
MR. BURT:
A. Directly to the offshore operators.
MS. FAGAN:
Q. Directly to the offshore?
MR. BURT:
A. Correct. So we operate in parallel with them. They actually have some of their equipment right at our facility ready on standby, even in coolers ready to go to -- to keep a very close eye on the time, the response time.
MS. FAGAN:
Q. So is it possible or is it normal that either a doctor or a nurse from Atlantic Medical

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would go with the medevac?
MR. BURT:
A. Absolutely, yeah, and that sometimes is the constraint. We're quite often ready earlier, but we're not the main thing here, it's the security of the individual offshore, making sure that they have the proper equipment and people to serve that. So we do wait for that person to come out and that is our -- sometimes the long pole in the tent for the mission.
MS. FAGAN:
Q. So when you line all this up, something else that has to get to Cougar Helicopters is the doctor or the nurse?
MR. BURT:
A. Correct.
MS. FAGAN:
Q. Okay, so not only does the pilots have to come in and the rescue specialists or the attendants, the Cougar people, we also have to have a physician?
MR. BURT:
A. Right.
MS. FAGAN:

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Q. Or a nurse, in order to attend to the worker who's having the heart attack?
MR. BURT:
A. Correct, and, of course, you know, we have a contract -- a literal contract that we keep our obligations here regardless of how long they are, but we are ready and in position to launch at any point. Then they do show up when they're ready to go, and when they've dealt with the situation with the individual offshore to make sure that they have the proper people and equipment on board to effect their part of the mission.
MS. FAGAN:
Q. Okay, so they may have to organize themselves in that they may have some preparation, the doctor may have some preparation to do in order to be prepared for that particular medical emergency?
MR. BURT:
A. And in most cases, they quite often do, I think. That is the case, it's quite a logistics coordination to be prepared. Once you go, everything else is back at home, so we also do a very quick brief with our cabin

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staff so that we're operating as one crew once they arrive. So we've known them for quite a few years, it's a very good relationship. In fact, one of our lead search and rescue technicians used to work for them, so we have a lot of good connections with them.
MS. FAGAN:
Q. Thank you. I don't think anyone has mentioned the fact that on a medical evacuation -- it sounds very basic, but you need the doctor or the nurse.
MR. BURT:
A. It is a bit of a dance, and it's a nice orchestrated - it flows quite well, but there's a lot of detail to effect a very effective medical evacuation, and again you have to be there timely, but you have to be there in a very capable fashion as well.
MS. FAGAN:
Q. Okay. We have a slide and we'll go back to another couple of scenarios, but perhaps before we do that if you could go to slide 60, and I'd like you to deal a little bit with the rescue specialists that you have and the training for the rescue specialists. We heard

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in the video that the majority of the rescue specialists are ex-military. Do you have a breakdown -- I can see from the slide it's 12. So do you have a breakdown of the background for the 12 rescue specialists that Cougar currently employ?

MR. BURT:

A. You mean where they come from?

MS. FAGAN:

Q. Where they come from.

MR. BURT:

A. Yeah. As Ian mentioned on the video, we have a -- we do lean heavily to hire from the ex-military. This is -- from the military. It's a very capable group of people that they have in the military, their training is quite extensive, the background is absolutely incredible. They do come to us after a long career, in many cases after retirement, after 20 years, and we draw upon that quite heavily. So 70 percent of the people we hire typically come from that background.

MS. FAGAN:

Q. And the other specialists, what would you be looking for, do some of those come with

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specialized skills?

MR. BURT:

A. Yes, we have some that come from paramedic backgrounds, high angle rescue, fire fighting backgrounds, and that also complements our capabilities as well, especially some of the medical, the advanced medical as well.

MS. FAGAN:

Q. What do you do with -- you hire them, they may come with a certain set of skills. Once they come in through the door, we've heard yesterday about how you train and deal with the various specialists in each department.

MR. BURT:

A. Right.

MS. FAGAN:

Q. For example, the pilots, or the aircraft maintenance engineers. What happens when you hire a rescue specialist?

MR. BURT:

A. I think this would be a good opportunity -- we've got a 22 year veteran of the Canadian Forces right here on our panel, and I'd like to ask Mr. Banks to speak to that, if we could, because I think he speaks from a very

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deep knowledge base of those people that come and how we train them. Even though he's our Director of Safety and Quality, we always have this -- each a nice operational background. So if I could, I'll let Rick do that.

MS. FAGAN:

Q. Okay.

MR. BANKS:

A. Sure, Rick. First of all, I'd like to just back up a little bit here. In saying that we have the 12 full time rescue specialists, you know, you must understand that these individuals while quite competent and capable, they retire after 20 years, but the majority started the military when they were 18, so we're getting them at 38 years old, fully trained, senior rank individuals with more experience than just about any rescue specialist in the world, you know, a combined effect -- if we take 8 of the 12, 20 years, we're looking at 160 years experience. I mean, that is vital and not seen in the civilian agencies. Again, you know, we could also add up the missions or the rescues that have taken place through all these

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individuals, and it's quite capable to say that we're looking at 800 missions completed, rescue missions. That's pretty well unheard of as well. So we have a topnotch team, and in a search and rescue facet, it's team work that counts. These guys, they don't only come with leadership, but they've been involved and engaged in all the training through specialized schools, as well down in the States with para-rescue units, cross border into Europe and had training with those guys, and worked in our own search and rescue schools training younger search and rescue specialists. So, you know, it's quite a complement. Our air crew up front, many of them as well are from the military background of search and rescue. The coordination, the communications, the "have seen it before, here's things to be looking out for", the risk factors in flight, it's just a well complemented group, with many having a lot of east coast experience with the Atlantic Ocean, which is a pretty hazardous place to play search and rescue, as well as the Pacific. So, you know, the borders are not just -- you

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know, we have this team put together, this is a team of experience essential and competent individuals that'll get the job done. They're a good group of guys, and we have many more on line waiting to join our ranks, but, you know, when those places become available, I've got a list of guys ready to come, and that's a good thing for the experience levels. As well as just -- you know, from a whole unit point of view, there's just a lot of experience there that people don't realize that's on our team. The other three just in St. John's -- we have others at other bases as well, but just talking about the 12 here, you know, we've screened them and hired them through paramedicine background, marine rescue as well, which wasn't included when Rick was talking, but from that point of view as well, it brings a really nice rounded complement to the team, and in the future, you know, just with the training aspect of what they're doing, it's just an incredible job. If we go in a little further here and talk about operational duties, before being released, they do come in very highly experienced, but

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they still have to go through our parables of training. So it's not like we're doing anything much different, but we enhance it a little more because we have the time to play around with it, and we have the individuals that have brought all this experience. So previous experience, yes, that's great, but our training, you know, we have to revert them back to the Cougar way and how we want thing done. So they get all the ground training and flight training before being assigned onboard duties, and there are currencies for that. They have a base allotment of 40 hours per month. That's a good complement of training hours for them. The SAR flight training consists, it says here, of search patterns, land based training, over water training, vessel training, and night training. When you take that and look at how they achieve that, when a training day occurs, the crew will come in, they'll pick up a simulated mission, they'll work that mission so that it can entail a bunch of these things to actually go out, find a vessel, first of all doing the search patterns while talking inside the

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aircraft, and working up scenarios of what the medical condition may be or what the rescue condition is going to be, and play it over in their mind from plan "A" to plan "B", because in SAR the plan changes rather quickly. So they're getting that kind of training experience and knocking off their currencies at the same time. They have a set of many currencies to do in a month long time frame. So in between all the training, they're trying to hit everything for that month. So they're well capable and trained individuals.

MS. FAGAN:

Q. Thank you. The recurrent training, what is recurrent training, I mean, how often is it? What do you mean by recurrent training or do you just train all the time?

MR. BANKS:

A. Well -- and again that's what recurrent is coming down to, but there are certain avenues there. Again with their EBS training as a recurrent training, so they have to go into the dunker every three years, they have to do their in-house training that's syllabused for them by the team lead. He'll have some

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medical recurrency training to be doing, some marine recurrencies. So many of it is monthly currencies, but then you'll have some annually. So that's what it means by recurrent.

MS. FAGAN:

Q. Okay, thank you. There's a note here as well that says, "Exceeds Transport Canada standards". Is this an area that's regulated by Transport Canada, are there standards? Does Transport Canada have a -- are they involved? I wouldn't say a role, but are they involved?

MR. BANKS:

A. It is listed and they do have information regarding what should be in place, but it's very minimal because you've got to understand, I believe, we're pretty well the only ones doing in the civilian world, so it's Class D they call it which is, you know, a certification, I guess, that we must hold, but at the same time they do have a header or rescue specialists, but it ends at about that stage. It doesn't really go into what kind of training they must have or anything like that.

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MR. BURT:
A. That's correct, yeah, there is no SAR standard per se, but there is a standard on having loads hung outside an aircraft and that's where Transport Canada will have their say in it. For example, anything that is on our hoist attached to it, whether it be the rescue equipment, the collar, litter kit or anything, that all has to be certified in the chain. So that's one part that they do regulate.
MS. FAGAN:
Q. So the equipment itself, such as the hoist, and the weights, that type -- the equipment must be certified, but would it be fair to say the combination of how much equipment or what the components of a SAR --
MR. BURT:
A. They don't stipulate that. There's no standard for that in Canada.
MS. FAGAN:
Q. Okay, well, I believe the next slide is the equipment that Cougar Helicopters has available or uses. It's that slide 61.
MR. BURT:
A. Right.

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MS. FAGAN:
Q. And I believe Mr. Burt is going to cover this slide.
MR. BURT:
A. Yes, sure.
MS. FAGAN:
Q. You're all capable, so you just take whichever slide is best suited, and Mr. Burt, can you go through what's on this list and explain the significance of the highlighted portions?
MR. BURT:
A. Sure. First of all, where we do develop our list initially, we are -- we do have a requirement in our scope of work with all of our three contractors, or I should say, the companies that we work for, the oil companies. We are compliant with that. In some cases we do have fairly extensive stores of rescue equipment, so we'll even bring that whole stores together and offer it whether it's on that list by the companies or not. So that's the nature of why some is yellow and some is not in yellow. The equipment that we do have on board is basically designed to effect -- for us to complete our scope of work. For

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example, we have a Stokes litter, which is a litter that will raise somebody up that, you know, needs to stay in a horizontal position. We have rescue baskets so we can effect a rescue from the water. You'll see that there's a SKAD kit, and that stands for Sea Kit Air Dropable. Now this is a unique piece of a kit. It comes from the military linage and what it has is a life raft attached to it, a length of rope, a survival kit, and another life raft at the end of another rope. So that's dropped from the aircraft to people in the water. So you'll have a life raft, a rope so they can grab it, there's a survival kit and the end of that there's another life raft. So that's a piece of a kit that we have available. Then you'll see the pieces of equipment that the rescue specialists use to effect rescues. We do have obviously the search light, we have night vision goggles in the back of the aircraft that the search and rescue technicians, the rescue specialists, use to search in night time operations. So it's a very effective kit that we have in the back to complete our mission.

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MS. FAGAN:
Q. Now the list itself is not likely to be seen by the -- because the PowerPoint is not likely showing, but it is part of the exhibit, so if anybody is interested in seeing the list afterwards, they can always look at the exhibit and it's 61 of the PowerPoint. This is the equipment. Can you tell me how this equipment is located on the aircraft.
MR. BURT:
A. Sure.
MS. FAGAN:
Q. And I believe the next slide is how the helicopter is configured.
MR. BURT:
A. Sure.
MS. FAGAN:
Q. And perhaps you can take us to -- you know, there's various locations on the helicopter. Explain what's located where, and you can reference back to the equipment as to where some of this equipment would be.
MR. BURT:
A. Okay, and I'll even give you a little bit of background which, I think, is good context.

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We have an area of our hangar, first response area. That area is dedicated to all this rescue equipment. It's outlined in red, it is a secure area. All of this equipment is staged on rolling tables for quick deployment, so every piece of kit that I just talked to you about is virtually there. There may be some medical equipment in coolers, but for the most part, it's all there. Even our hoist, which we do install, is on a specialized hoist rack which can be rolled out and used to affix to the aircraft in as quick a fashion as possible. So all this is designed for as quick as possible -- a quick response. So that station is where all this equipment comes out. It goes into the aircraft, and as you see here, we do have the aircraft equipped with now a dual hoist and this is a new piece of the kit that we put in in the last year. It is an international standard best practices, so we now have a dual hoist, and the obvious benefit here is if we're out effecting a mission, a critical mission, and we have a cable that shags or if we have a hoist that breaks, we do have that second

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hoist to complete and effect our mission. So that's also very good news that we've implemented that already. Additionally, you'll see things on the aircraft like the forward looking infrared radar. Now while we don't have that here, it is part of a kit elsewhere where we fly and that's why it's represented here as number five. So I just wanted to -- I'm sorry, number three, just so we can comment on that. The other kit that we do have is a multi-bed stretcher system. We have three layers of stretchers that we can put on board this aircraft. High intensity search light. You will see that we have our auxiliary fuel tanks, of course, which do help us with the extended range for search and rescue missions. The equipment on board the aircraft, the search and rescue technicians, the rescue specialists use, are like the Stokes litter I talked to you about, and all their kits and bags to effect some advanced first aid. Outside of that, we have the medical kits, the night vision goggles for search in the back of the cabin, and items that are listed here, but again I want to

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point out just that FLIR system is not standard here. We do use FLIR in the Gulf of Mexico, Alaska, and the North West Territories.

COMMISSIONER:

Q. We've only got a couple of minutes before we take the break, but if you wouldn't mind explaining the FLIR system to us.

MR. BURT:

A. Sure.

COMMISSIONER:

Q. So we know what it does.

MR. BURT:

A. Right. The forward looking infrared radar is a piece of kit that actually examines the difference between temperature differentials. So if you have a body in the water, even the most minute difference in temperature and thermal difference -- you see it sometime where somebody would shoot a camera at a house and see where it's leaking heat. It does the same thing. For example, somebody in the water, even in an immersion suit with the head out of the water, will be picked up quite significantly actually. A life raft, a life

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boat, are quite detectable by this FLIR system. The system that we have not only has the device outside, but we have a FLIR station. So we have an observer sitting at a station looking at a TV screen that can sit in the back of the aircraft and pan throughout a large portion of our area of search. So not only are we doing a visual search, but we're using another wavelength to search.

COMMISSIONER:

Q. But this is in the Gulf of Mexico?

MR. BURT:

A. We're using them in the Gulf of Mexico on our S-61, on our S-92s. It is a kit that we build ourselves and we use it in the North West Territories and Alaska. We have found it to be very effective. It's also now become much a standard in the search and rescue world, and it provides an incredible layer of information.

COMMISSIONER:

Q. How far ahead can it -- you know, kilometres, yards, whatever you'd like.

MR. BURT:

A. It's about three to five nautical miles

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effective range.
COMMISSIONER:
Q. Three to five nautical miles?
MR. BURT:
A. Yes, so it's quite a sweep especially when you're in a general area. If you're in a general area, you're doing your search pattern, you know where you are, this is something that can actually pull out that temperature differential and it's quite significant with the signals that this can pick up, the differentials in, like, half a degree. If you have somebody that's half a degree in the temperature, it'll come up as a different colour.
COMMISSIONER:
Q. So you're not using it here because it's not called for in your contract, I presume?
MR. BURT:
A. That's correct, yeah.
MS. FAGAN:
Q. I was going to say, how much would you have to see -- if it's -- you've just said it's three nautical miles, three to four nautical miles?
MR. BURT:

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A. Three to five nautical miles.
MS. FAGAN:
Q. And what could it pick up -- how big a source would it have to -- say, a human floating in a survival suit, I mean, that's what we're talking about here.
MR. BURT:
A. Right. If you have somebody floating, of course, you know the head is where a lot of the heat comes from. So somebody in an immersion suit in that capacity somewhere around two to three miles, you would have a significant target. Now sea state, if it was a high sea state, like anything else, it also relies mostly on line of site, so sea state would be a little bit tougher, but on an average sea state, it can pick something up within that two miles, two to three miles, somebody in the water by themselves.
COMMISSIONER:
Q. How long has this thing been in use?
MR. BURT:
A. FLIR has been in use a number of years, but it does -- like, night vision goggles has generations of technology, and, in fact, since

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we've started we're onto the second generation. Our S-92s are using a second generation FLIR from when we initially started, even our 61s. We have now standardized our fleet so that we have a number of units around and try to keep them standard so they can swap them back and forth. A very capable piece of kit, and I will say that having the station in the back and a dedicated search individual that sits at this station has full control of the panels, and full control of the search mechanism, provides a focused search capability. We do not put this capability in the cockpit. That's not what the pilot should be doing. They should be flying the aircraft, so that's a very important point, and we build this station and we put it into the aircraft as well.
COMMISSIONER:
Q. Okay, perhaps we should take the break now.
MS. FAGAN:
Q. Yes, thank you.
(RECESS)
MS. FAGAN:
Q. Just before the break, we were discussing

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FLIR, which is Forward Looking Infrared, and you had indicated that right now FLIR is not being used here at the St. John's base. Can FLIR just be installed, I mean, what would be the process in order to have FLIR? We talked about, you know, the winch and the chairs, the seats and all that. I mean, can we just pop in a FLIR and --
MR. BURT:
A. The FLIR installation is a little more complicated, and again we do have that on different operations, but it's normally associated with a dedicated operation. It takes about between an hour to two hours to install the FLIR operation because panels have to be dropped, the -- what they call the FLIR ball, the camera has to be installed, and on top of that, of course, the back end mission specialist station has to be installed, connected, and full integrated into the system. So it just -- it takes quite a while to do that, actually.
MS. FAGAN:
Q. Okay. You have included in your -- you have included in the exhibits a number of pamphlets

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and this particular slide, slide 62, I believe this comes out of your search and rescue brochure.

MR. BURT:

A. Yes, it's right out of our standard brochure. That's why I had to explain the FLIR in this case because it's more of a standard -- part of our full kit.

MS. FAGAN:

Q. Okay, and so in these, if you advertise it as being part of a standard kit, then is it installed or is it swapped -- permanently installed or is it swapped in and out? I mean, if it's going to take more than an hour to install, would it be fair to say you would not be able to manage the wheels up within an hour, if in addition to the winch and seats you had to install this device?

MR. BURT:

A. The only application of FLIR that we have is in dedicated SAR -- dedicated aircraft that are preconfigured for SAR.

MS. FAGAN:

Q. Okay.

MR. BURT:

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A. And this pamphlet here speaks of our gross capabilities, this is what we're capable of, full capability.

COMMISSIONER:

Q. That's what I assumed, that this would be a plane or an aircraft that would do SAR?

MR. BURT:

A. Correct, correct.

MS. FAGAN:

Q. Now you had mentioned a dedicated service earlier, that what you provide here is a dedicated service. Is there a difference between a dedicated service and a dedicated aircraft?

MR. BURT:

A. Yes, and, of course, that's how you effect the difference in the response times. We have dedicated services in the Gulf of Mexico, as we talked about, in Alaska, and in the North West Territories. So we're quite familiar with what it takes to do that. These aircraft are pre-configured, pre-fuelled, pre-flight planned, and even staged in a manner with a tug, a towing unit attached and ready to go. In some places, we even have our hangar doors

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that are especially built that open in a very quick fashion, a specialized mega-door. So we get very specific about how we handle a dedicated SAR service.

COMMISSIONER:

Q. So that's why in the North Sea, for instance, they can have wheels up in fifteen minutes?

MR. BURT:

A. Absolutely.

COMMISSIONER:

Q. They're ready to go.

MR. BURT:

A. You literally have to be ready to press starters. When you talk about fifteen minutes, you got to start an aircraft up, that's three minutes, and to be wheels airborne, effectively that once you push that button somebody is hitting the door and opening the door within ten or fifteen seconds. We're drilled on that, and to be honest with you, when we first started, it was like a -- I think we had to go through an education process that it's a challenge to meet those 20 minute dispatch times every single time. We found that even having our

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crew across the airfield at their accommodations unit sometimes can be a challenge, so we had to make some accommodations to have some of our crew at the hangar. So it was a learning experience we've gone through in the last three years.

COMMISSIONER:

Q. If I may, I'm obviously interested in this. What about weather, let's say there's a dedicated and fitted out helicopter ready to go and all things being equal, in fifteen or twenty minutes - what about weather? Supposing it's freezing rain, you can't --

MR. BURT:

A. That's correct.

COMMISSIONER:

Q. You can't fly.

MR. BURT:

A. There are limits.

COMMISSIONER:

Q. Yeah, what happens, does it build up on the fuselage, or on the rotors?

MR. BURT:

A. Well, freezing rain, number one, I'll just say it because it's the proper thing to say, we

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can't fly in freezing rain, but the risk is that the build up on the rotor system is too fast of a rate to shed by any means of a rotor ice protection system, and the accretion time and the water droplet is the specific reason why -- the differentiation between freezing precipitation is the water droplet size.

COMMISSIONER:

Q. Yeah.

MR. BURT:

A. And it's just that the build up is so fast, the accretion is so fast that you cannot actually mitigate it with your de-ice system.

COMMISSIONER:

Q. I see, okay, and what about other weather conditions? Wind wouldn't affect it, I don't think?

MR. BURT:

A. Wind shouldn't affect it. Again we're prepped and ready to go for that. We have special, for example, start up grates that we'll put down. If there's ice on the ramp, we put these grates down, so we manage that business to make sure that we can be airborne. We do have special low weather operating criteria.

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We have capability of having the additional fuel, and one thing that is, I think, quite material, that our dispatch department does a real time flight plan, they actually forecast. So they'll actually have our area listed and coded in green or yellow or red. So any time we call they'll know that one area is green. Green means the weather is suitable for immediate dispatch. We're not reactive, we're proactive. So that served us well, and all the time they almost have a dynamic ability to say our flight planning is done, it's done, it's green, green, green, yellow, and they'll be able to say right away, it's yellow over here, so you may have to carry more fuel. So we have a status that we keep all the time.

COMMISSIONER:

Q. Okay, thank you.

MS. FAGAN:

Q. This status for your dispatch, is that here in St. John's or is that in some of the areas that you spoke about where you offer the SAR?

MR. BURT:

A. We do keep that status here as well.

MS. FAGAN:

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Q. Okay.

MR. BURT:

A. Because again it's a capability we have here, and remember it's done at the same place, it's done here in St. John's for the States, it's done here for Alaska. That's the beauty of doing it here. That capability is here and that is extended to our capabilities and service in St. John's.

MS. FAGAN:

Q. So it's the -- we heard earlier that the St. John's office is the location where the operation -- is it Galliano?

MR. BURT:

A. Yes, in Louisiana.

MS. FAGAN:

Q. In Louisiana. That that's -- it's the St. John's office here that is monitoring the activity in Louisiana, is that correct?

MR. BURT:

A. That's correct.

MS. FAGAN:

Q. So this green, yellow, red forecasting is done here for both St. John's and Louisiana?

MR. BURT:

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A. For both locations.

MS. FAGAN:

Q. And Alaska?

MR. BURT:

A. Wherever we're operating and contract for 24/7 service, yeah, and again building that situational awareness, if we want to know if the aircraft is in the hanger, we have cameras on the ramp in Alaska, Barrow, Alaska, in the middle of nowhere, but you have to have that situational awareness to manage your business. So that's why we do employ closed circuit TVs on the ramps to make sure that the aircraft is being towed out on time, the refuellers are showing up, so we have to integrate our refuelling people into this too as well. If we have to adjust our load, they're on site, they're briefed, they're part of our system. So it's quite an integrated system.

MS. FAGAN:

Q. So to be -- just to summarize or to be clear, the configuration here with the FLIR is your standard configuration for SAR that you offer in other locations. With the exception of the FLIR, is the rest of the items on this

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configuration consistent with how we're configured in St. John's base?
MR. BURT:
A. Yes.
MS. FAGAN:
Q. Okay.
MR. BURT:
A. That's correct.
MS. FAGAN:
Q. And could you please just name the locations where you offer SAR service in addition to St. John's base, what are the other locations?
MR. BURT:
A. Right. We offer the service in the Gulf of Mexico, in Louisiana, in a place called Galliano.
MS. FAGAN:
Q. And who is that for?
MR. BURT:
A. That's for the oil industry. Our customers there are BP, Shell, and Statoil.
MS. FAGAN:
Q. What other locations?
MR. BURT:
A. Again -- seasonally again this year in Barrow,

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Alaska, for Shell.
MS. FAGAN:
Q. And is that oil and gas?
MR. BURT:
A. Yes, that's oil and gas offshore. This year we also did Tuktoyaktuk in the North West Territories, and we did that for BP. We just were awarded a contract yesterday and we're providing that service for Cairn Energy in Greenland. We have two dedicated -- I should say three aircraft going to Greenland for July. All of them will have the capability of full search and rescue. Two 92s will have auto hover, they will have FLIR, high intensity search lights, and one of those aircraft will be dedicated at all times for our Greenland operation.
MS. FAGAN:
Q. The toll for Greenland would be three?
MR. BURT:
A. Three aircraft.
MS. FAGAN:
Q. Now the Louisiana, is that over water or is that land?
MR. BURT:

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A. It's over water. It fits our 97 percent.
MS. FAGAN:
Q. Okay. So you've named four places.
MR. BURT:
A. Uh-hm.
MS. FAGAN:
Q. Are the four places all over water?
MR. BURT:
A. Yes.
MS. FAGAN:
Q. And in all four places is it a dedicated aircraft for SAR?
MR. BURT:
A. The Louisiana, Barrow, Tuktoyaktuk, and Greenland are all dedicated SAR.
MS. FAGAN:
Q. Are all aircraft 92s, or is it a mix between 92s and 61s?
MR. BURT:
A. It's a mix between 92s and 61s.
MS. FAGAN:
Q. Okay, but either a 92 or a 61 is preconfigured for SAR?
MR. BURT:
A. Correct.

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MS. FAGAN:
Q. What is the response time in each of the four locations?
MR. BURT:
A. I'm not -- I can't -- if memory serves me, it's 20 minutes, I believe, in the Gulf of Mexico, and 30 minutes in the other two stations -- the balance of the stations.
MS. FAGAN:
Q. Okay, and --
MR. BURT:
A. I'm sorry, 20 minutes is -- again it's a facility that we have, it's built for dedicated SAR, so that explains why it's 20 minutes. We're operating out of third party hangers elsewhere. That's why it's 30.
MS. FAGAN:
Q. Okay. So what is in place -- let's go with the 30 minutes and we'll work our way down to the 20 minutes. What is in place or needs to be in place to achieve 30 minutes wheels up?
MR. BURT:
A. So a preconfigured aircraft, a pre-fuelled aircraft, and a briefing with your dispatch department to understand the scope of

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deliverable service, co-located crews, and an ability for a 24/7 response. In other words, a day crew and a night crew. So we do have two sets of crews, two full sets of crews in these locations, as we do here in St. John's. The difference is that they are co-located with the facility, like a fire hall.

MS. FAGAN:

Q. Okay. So we'd heard earlier that in St. John's the crew can be, say, off base, within a half hour of the hanger.

MR. BURT:

A. Uh-hm.

MS. FAGAN:

Q. In the three locations that are providing 30 minutes, they physically have to be on site, as you said, like a fire hall?

MR. BURT:

A. Correct.

MS. FAGAN:

Q. Okay. What's - now there's a difference, I take it, between achieving 30 and 20 minutes. So can you explain -- I think there's a further, I guess, sophistication or --

MR. BURT:

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A. There's further realities.

MS. FAGAN:

Q. Okay.

MR. BURT:

A. The reality is that when we operate in the three other locations outside of Galliano, they're not our facilities, they're not our hangars, they're not dedicated towards it, and those jobs are seasonal jobs. So, you know, you don't have the ability to say this is our home, this is our house, this is my property, I control everything here. So in some cases the refueller might be a little slower, and we just can't guarantee the 20 minute response time in some of these locations. In the Gulf of Mexico, we can because we can control that. We control the fuel, we control the facility, we control the people.

MS. FAGAN:

Q. And that hangar is your own hangar?

MR. BURT:

A. Correct.

MS. FAGAN:

Q. Is there anything special with respect to the doors or the hangar itself between the one in

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Galliano and the other three?

MR. BURT:

A. In fact, we did -- we did a spec and purchased the hangar doors so that they would have a full opening effect, 100 foot doors, in 45 to 60 seconds. So they were actually spec'd to open up quickly, and that again cuts down on about a minute and a half.

MS. FAGAN:

Q. Just take us through either a 20 or a 30 minute wheels up. What has to be done and how quickly, and who has to do that? I mean, we now know what's on site.

MR. BURT:

A. Uh-hm.

MS. FAGAN:

Q. How do you achieve it? Physically, where do all the people -- what do all the people do?

MR. BURT:

A. So assuming that the customer has a clear connection with our dispatch department, that's a big assumption, but let's assume that has to be clarified, who calls who, and make sure they call the right person. Our dispatch is called and our dispatch then has a

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protocol. Dispatch immediately will contact the on site crews either on a cell phone or right at the facility itself, and they'll call an alert, and that alert spins in a whole series of contemporaneous actions, and that means that maintenance will have the aircraft towed out, the pilots will talk to dispatch and grab their flight planning, and they'll literally head to the aircraft and get ready to go. The equipment is on board, the search and rescue technicians or the rescue specialists are basically attached at the hip with the pilot staff at the same location, and they head out together. They arrive at the aircraft, do their equipment checks, get in the aircraft and literally once maintenance gives them a green light, they'll start the aircraft and prepare to go. They do have some checks on start ups, such as checking the hoist and specialized equipment, and again that would take about a minute and a half to two minutes to check that equipment. In many cases, we've also advised air traffic control and we have what's called canned -- under the canned flights. In other words, we call a

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rescue flight, air traffic control knows that if it's rescue 493 or rescue 453, whatever we designate, then they know, okay, this is a search and rescue mission and they have top priority. So it's prior -- it's this preplanning which is key to everything, and folks in our fire departments they've been doing this for years, and for us it's been a very interesting learning process over the last three to five years.

MS. FAGAN:

Q. The auto-hover is on these aircraft as well or not?

MR. BURT:

A. We don't have auto-hover on any of our aircraft at this time.

MS. FAGAN:

Q. Okay.

MR. BURT:

A. We have provisions for auto-hover. The S-92 is the only aircraft in our fleet that has provisions for auto-hover, and as we speak, they're just finalizing the certification of the auto-hover in the FAA in the States, and, of course, we have an interest in that because

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of our US operations. The target for certification for the FAA certification of the auto-hover in the 92 is April/May this year. Transport Canada is tracking that, and we are tracking it together with them. As soon as it's certified in the States, then we expect a 30 to 45 day review process, what they call a familiarization process in Canada, and then a follow on certification in Canada.

MS. FAGAN:

Q. Do you know if the auto-hover is currently on any S-92s in the world?

MR. BURT:

A. They're using the auto-hover system and have been for almost three years in the North Sea. The UK search and rescue government contract is using three S-92s in the search and rescue role with auto-hover on the 92s. It's approved by EASA.

MS. FAGAN:

Q. And we've heard that that's the European Aviation Safety Agency.

MR. BURT:

A. That's correct.

MS. FAGAN:

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Q. We've also heard that the European Aviation Safety Agency is now the organization that regulates Canadian operators?

MR. BURT:

A. That's correct.

MS. FAGAN:

Q. So, I take it, you can't take advantage of the European certification because you must wait for Transport Canada?

MR. BURT:

A. That's correct. The European -- I mean, EASA in Europe are very sophisticated search and rescue entity. They have a search and rescue standard, a SAR standard, in their CAA. It's very well thought out, they've been doing it for years. Companies like Bristow have been doing it, companies like CHC Europe have been doing it, Helicopter Service in Norway have been doing it. So they've been quite sophisticated in that capability and the regulator has been recognized and developed the standard for that.

MS. FAGAN:

Q. Okay. We've heard from Colonel Drover on auto-hover as to what it allows or enables a

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helicopter to do. Could you just explain what auto-hover would allow Cougar Helicopters to do? We've heard that you do do hoisting at night, but it must be in a well lit area. How is auto-hover going to improve your capabilities?

MR. BURT:

A. Well, it's important to understand that while we can fly in instrument conditions with a helicopter, it has a limitation on what you can do on instruments. In fact, there is a minimum instrument speed and every helicopter that flies in instruments has a minimum instrument speed, and the S-92, I believe their minimum speed is 55 knots. The Puma will have a different speed. In that case, it's 65 and 70, respectively, but it's actually a minimum speed with the basic autopilot that the aircraft is certified to fly to. Anything less than that, the aircraft becomes inherently unstable and you need visual acuity with the ground to maintain a hover and control and a transition to a hover. So saying all that, and then throwing that into a condition where you're going over a

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very poorly lit poor reference environment, such as over water night time, it is almost impossible, unless you have the proper lighting, for a pilot to maintain effective hover over a spot. You have a drifting target. Once you come in over the water, you have your downwash that creates an environment that is confusing and it is unmanageable, and that's why we don't do that, that aspect of it. Auto-hover uses onboard technology, stabilization systems, and there's various things that will make an aircraft hover automatically. We have Doppler, we have onboard inertia laser ring gyros, and the like. Effectively all they do is they say they know where the aircraft is in space and they know it very well. The aircraft is -- that equipment is certified to assist the pilot and crew not only in its lateral transition as to where it is, but also in its vertical, its height. The interesting thing about the auto-hover, of course, is it has all this technology, these modes, these transition modes. It has, for example, a mark on target. You can fly over a target or a weigh point,

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press a button, and handsfree the aircraft will fly a full circuit, come back around, come into wind, and present itself 300 feet down wind in a position ready to do a rescue all by itself at 100 feet. From that point, the aircraft will then come in and effect an extraction, and there's also another significant element that the back end or the rescue specialist has a control pendant that has somewhere between 10 and 14 percent control authority because he is looking at the rescue situation. While the flight crew is in charge of the aircraft, 10 percent of that authority is given over to the rescue specialist and he can actually move the aircraft with 10 percent and fine tune that location over the site and effect the rescue and complement the flight crew in that rescue mission.

COMMISSIONER:

Q. The fact that he does that does not compromise the safety of the flight?

MR. BURT:

A. No. It's contemplated, certified, and trained, and it's actually a complement to the

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flight crew. The flight crew have ultimate authority over the aircraft, and what they're job to do is to monitor the auto-pilot, not fly the aircraft. It now becomes the job of monitoring the auto-pilot. It's very similar to us when we do precision approaches, we have the aircraft flying itself here in St. John's on these approaches, precision approaches, to the instrument landing system. We monitor the auto-pilot and if anything should vary, then we take over. So this is why we talked about transitioning to this technology is a very specific task. We have to go to the simulator, train these missions, and do it. So the auto-hover effectively is the kit that will allow us to do extractions of individuals that might be in the water, from a life raft, from a life boat, in some cases smaller vessels, and even if you do have a supply vessel that is somewhat well lit, even if you could do it manually, the auto-hover would obviously add a huge complement to the stability and the task loading of the crew, and, therefore, an element of risk mitigation.

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MS. FAGAN:

Q. You said that you know that the FAA, which is the aviation authority in the United States, is in the process of certifying auto-hover, doing their investigation, and that you're anticipating that certification in the spring of this year?

MR. BURT:

A. That's correct. We're actually participating in that process with Sikorsky, the manufacturer. So it's our search and rescue crews that are actually down there proving the flight testing missions with the auto-hover and the hoist integration because the hoist is an integral part of the auto-hover, and let me explain that. If you are hoisting over the water and you have an engine failure over the water, then all these systems are integrated, you know, so that can you fly away in a proper manner and prove that and make sure that all these avenues are covered off. So we're flight testing and providing all that data with and for the FAA. So it's kind of interesting we have a nice direct hand in that with our crews and it's actually our rescue

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crews that are helping do that.
MS. FAGAN:
Q. And Transport Canada, you indicated that you anticipate they would likely certify within 30 to 45 days. Are they involved in this process, or are they monitoring --
MR. BURT:
A. Yes.
MS. FAGAN:
Q. I mean, how can you say that, what do you know about Transport Canada's activities with respect to this certification process?
MR. BURT:
A. We have kept them engaged in the process, and this is Mr. Gerber's position to keep them engaged in the process, as well as our Director of Maintenance from an aircraft point of view, and on top of that Sikorsky, as the manufacturer, has kept them engaged as well. So they're invited to participate and also be aware of different phases of the certification, because again with a bilateral agreement we have between Canada and the United States, they have an obligation to familiarize these certifications back and

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forth. They know they have a customer, as Transport Canada would call it in Canada, that has an intent and we've signalled our intent to use it, and so Transport Canada is acting appropriately, and I must say they have been doing a great job in serving our industry in Canada and being diligent about that. So they're quite aware of it and they've been involved in every aspect.
MS. FAGAN:
Q. I take it from all of this discussion that Cougar has an intention to place the auto-hover on its aircraft?
MR. BURT:
A. We will have auto-hover in the aircraft in Greenland operating in July.
MS. FAGAN:
Q. Okay.
MR. BURT:
A. And I should say in our US operation, even before that.
MS. FAGAN:
Q. Okay, because the US -- is the US operation going to be governed by the FAA certification, or is the US operation going to have to wait

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for Transport Canada?
MR. BURT:
A. It will be by the FAA certification.
MS. FAGAN:
Q. Okay. So that's why they would be able to have the auto-hover ahead of Greenland?
MR. BURT:
A. Correct.
MS. FAGAN:
Q. And Greenland would be covered under your Transport Canada certification?
MR. BURT:
A. That's right. We're operating there under a special permit.
MS. FAGAN:
Q. Now I'd just like to take you back to the medical evacuations and the SAR type missions that would be conducted here out of the St. John's base, because we talked about reconfiguring the aircraft and putting the hoist on the aircraft, and I know that these missions are different, a SAR mission is different from a medevac, and would you clarify for me what needs to be done or what's different about a SAR versus a medevac? I

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mean, do you need the hoist for a medevac, is the crux of the question?
MR. BURT:
A. As far as the -- no, the hoist is not required. They're quite different missions. As you've heard, we do rely and team with the offshore medical people as well. They are really the leaders in direction when we go and almost how we go. So we don't need the hoist, however, we do have our same rescue specialist, and as I say, they act as a cabin attendant and a security attendant for those staff, those medical staff in the back, but again the difference is quite clear. If we do a medical evacuation flight, there's no need, and we don't contact RCC for those missions. That's an internal service that's required, that's not a rescue.
MS. FAGAN:
Q. Okay. So the difference would be if it's a medevac, you need the physician, and you don't need the hoist?
MR. BURT:
A. Correct.
MS. FAGAN:

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Q. And you don't call JRCC?
MR. BURT:
A. That's correct.
MS. FAGAN:
Q. And if it's a SAR search and rescue mission, you need the hoist?
MR. BURT:
A. Right.
MS. FAGAN:
Q. You don't take the doctor, and you contact JRCC?
MR. BURT:
A. Yes.
MS. FAGAN:
Q. Would that be --
MR. BURT:
A. That's correct, you got it.
MS. FAGAN:
Q. All right. What is the level of communication or coordination between Cougar Helicopters and JRCC, DND? I mean, do you speak to each other, have you met, have they been to St. John's, have you been to Gander?
MR. BURT:
A. Yeah, we've had a long history with JRCC. On

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a yearly basis, we'll go up with -- our customers here will quite often go with us hand in hand to Gander, and just say, hi, how's it going, this is what we're doing and have a sit down for the afternoon, even at that level. So again it's both Cougar and our customers will go up.
MS. FAGAN:
Q. So who do you -- just for the record, who do you mean by your customers? Cougar Helicopters will physically go to Gander to have a meeting with Squadron 103, and who would also participate in that meeting?
MR. BURT:
A. Who's participated, Hank?
MR. WILLIAMS:
A. In the past -- I'd just like to go back a little further when we talk about -- our first, my predecessor, was the Commanding Officer of 103 Rescue in Gander. So he came with a lot of communications already in place with 103 Gander. Drawing from that, over the years that I've been involved and been responsible for it, we've done what we call -- I call it industry courtesy, for want of

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better words, is that we've had cross meetings with these people in Gander. More specifically when the S-92s came on line, we took a team. I've had some representations from the various oil companies logistics folks that come with me to Gander. We've done a presentation on the S-92, its capabilities, how many we have, this is what we do, this is our staffing requirements, and at some point letting them know about our rescue capabilities, and in turn they've done the same thing. When we go out, we're typically meeting with the Commanding Officer of the 103 Rescue Unit and a bunch of his rescue specialists. So we've done that -- you know, in my five years of being the Base Operations Manager, I'd say we've had four or five of those trips to Gander.
MS. FAGAN:
Q. Okay.
MR. BURT:
A. I think sometimes it's an unofficial limit on how many people we can poach. That's what it turns into. So it is a tongue in cheek, but there's a clear recognition that this is a

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great place that we've got people from, so we work with them on that too.
MS. FAGAN:
Q. Okay. Now I'd like you to -- there's two other sort of scenarios that I would like to go through. I guess there's three. The first one would be a non-oil operator medevac air ambulance because we've heard from the video that on occasion Cougar Helicopters could be providing a service other than to the oil operators. I believe it might have been phrased as a life and death or a humanitarian type service.
MR. BURT:
A. Yes.
MS. FAGAN:
Q. So are there occasions when Cougar Helicopter provides a medevac and it's not requested by the oil operators, and if that takes place, can you please describe how that takes place and why it takes place?
MR. BURT:
A. Mr. Williams can speak to this.
MS. FAGAN:
Q. Okay, thank you. Mr. Williams.

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MR. WILLIAMS:
A. Okay, the -- just one understanding is that all the aircraft that we have here, the three S-92s, are under exclusive contracts to the oil companies. So, in essence, they contract 100 percent of that aircraft. To use that for any other service other than the service of those individuals, we need to have approvals.
MS. FAGAN:
Q. So it would be like taking my car and using it?
MR. WILLIAMS:
A. I wouldn't take your car unless you said it was okay.
MS. FAGAN:
Q. All right.
MR. WILLIAMS:
A. So typically the Government Air Services here, of course, which operates the air ambulance for the island, they've had occurrences where there's been a requirement for medevac that their fixed wing can't land. I can go back to a couple. There was a very serious car accident in Clarenville at 10 p.m. at night, and in order -- the only way they could get

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that individual to town was to call us. So what we've done is in consultation with the oil companies, we've determined that if I get a request for an aircraft that's not life and death, I'm going to be consulting with the oil companies on the phone because I say can I have your asset, whether it's to pick up a box in Clarenville, or if it's a medevac, but from a life and death situation, the oil companies have been very, very good in saying that we are not going to question whether we are going to a life and death situation if we are the only entity that can respond to it. The Government Air Services will be contacting 103 before they call us to do that. If 103 can't do it, many times that's -- they're on a mission or they have some serviceability issues, they will call us. So in the past five or six years, I think we've done probably 15 or 16 of what we call life and death transfers for the Government Air Services.
MS. FAGAN:
Q. Okay. So when you say the Government, would this be the Newfoundland Government?
MR. WILLIAMS:

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A. Correct.
MS. FAGAN:
Q. Basically, the people of Newfoundland and Labrador?
MR. WILLIAMS:
A. Correct.
MS. FAGAN:
Q. And when you conduct -- it's an air ambulance type service. When you conduct this service, what you're doing is you're using the oil operator's asset or property to provide this humanitarian life and death ambulance service?
MR. WILLIAMS:
A. Correct, and I need that approval, which we had that agreement with the oil companies and how we manage that part of our business.
MS. FAGAN:
Q. So when you say you have that approval, have they given you the discretion or the pre-approval that if it's life and death, you can rescue that individual that needs the medical treatment?
MR. WILLIAMS:
A. Exactly. If it's a life and death situation at 3 a.m. in the morning, that if I'm going to

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be going through the process of getting all the approvals, I'm wasting very valuable time, so if it's a life and death situation, we will proceed in doing it and inform the operators of what we're doing.
MS. FAGAN:
Q. Okay, after you've launched?
MR. WILLIAMS:
A. After the -- the first priority is to expedite the transfer.
MS. FAGAN:
Q. Okay, and then you inform or tell the operators that you've used their helicopter?
MR. WILLIAMS:
A. But I might add, we do get calls that are not life threatening that we will step back and say, you know, are we the only entity that can do this because, you know, they may say, well, we'd like to have him in just because -- it's not life threatening, but we'd like to have an individual transferred to St. John's from Clarenville. We will say no.
MS. FAGAN:
Q. Okay. Do you receive requests, and I believe Colonel Drover covered some of this, but from

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Cougar Helicopters perspective, have you received requests from JRCC, or the Department of Defence, to conduct a SAR search and rescue type mission or something that would be under the 103's jurisdiction or responsibility?

MR. WILLIAMS:

A. Yes, we have.

MS. FAGAN:

Q. And what is the protocol or process when that happens, and how does that happen?

MR. WILLIAMS:

A. It pretty well falls under the same umbrella. If we get a call from JRCC for a rescue mission, it's mission critical or they would not have called us to begin with. These calls are not frequent, but they often will call if they want us on a standby position, and it's the same protocol that we would do for the Government Air Services, that if it's life threatening, we're there.

MS. FAGAN:

Q. Okay. Now the last scenario is the Cougar Helicopter in distress itself. So your helicopter has a problem, it's in the air and it requires a rescue service. So we have

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heard from Colonel Drover in DND and he has gone through what DND provides, and we've just heard from you on the first response. So I take it when a Cougar helicopter is in distress, we end up with both aspects coming together. JRCC is involved and as well Cougar may provide its own first response to rescue its own helicopter.

MR. WILLIAMS:

A. Correct.

MS. FAGAN:

Q. So can you take us through what happens if the pilot in the Cougar helicopter calls and says I have a problem?

MR. WILLIAMS:

A. And I think that's where we would activate our emergency response plan from our dispatch centre, and I think, Rick, you're ready to speak to our emergency response plan to that type of scenario.

MR. BURT:

A. Yes.

MS. FAGAN:

Q. Okay, and the emergency response plan is in as an exhibit. I believe it is one of the -- it

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is Exhibit 178 and if the Registrar could go to Exhibit 178, it would be helpful. I understand, Mr. Burt, you are going to take us through the scenario of a Cougar helicopter in distress and how it would be handled by Cougar Helicopter dispatch and the rest of your personnel?

MR. BURT:

A. Right. This document, of course, resides in the dispatch centre, and part of the training of the dispatcher and the radio operator is to understand and be tested to this manual.

MS. FAGAN:

Q. Now are you going to refer to a particular page because if --

MR. BURT:

A. Yes.

MS. FAGAN:

Q. If you had the page, the Registrar could bring it up on the screen for the parties.

MR. BURT:

A. It's Tab C, page 31. So it's Tab C1, and page 31. So there's two. It's titled "Overdue/missing aircraft".

MS. FAGAN:

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Q. Okay. Now I believe we had these pages numbered at the bottom perhaps, I'm not sure.

REGISTRAR:

Q. What page number again?

MR. BURT:

A. The first one is called Tab C1 at the bottom of the page.

MS. FAGAN:

Q. Is there a Chapter, let's start with that. Commissioner, the pages are all Chapter/, I believe.

MR. WILLIAMS:

A. They're action tabs.

MR. BURT:

A. It's labelled Tab C.

MR. BANKS:

A. Okay, if you go to Chapter 2.

MS. FAGAN:

Q. Okay.

MR. BANKS:

A. And then scroll down from Chapter 2.

MS. FAGAN:

Q. Okay, I believe your hard copy all has tabs and action tabs, and we can't create tabs on the computer.

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MR. BURT:
A. It actually says tabs. That's how we refer to it in the document as well.
MS. FAGAN:
Q. Okay, so you have tabs.
MR. BURT:
A. So Tab C1 in the bottom.
MS. FAGAN:
Q. All right, so this would be the --
MR. BURT:
A. That's it.
MS. FAGAN:
Q. That's it?
MR. BURT:
A. Yes, that's the one right there. So this would be the document that the dispatcher or the radio operator would use, and you'll see from this here a list of actions to go through.
COMMISSIONER:
Q. What tab is that?
MR. BURT:
A. Tab C1.
COMMISSIONER:
Q. In the document, C1?

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MS. FAGAN:
Q. It's at Section --
COMMISSIONER:
Q. 31.
REGISTRAR:
Q. Tab 24, Commissioner.
COMMISSIONER:
Q. Oh, Tab 24, okay. Thank you.
MS. FAGAN:
Q. The books we have have all of the exhibits in it, so our tabbing is very different. The manual that Mr. Burt has is its own book.
MR. BURT:
A. It's the live manual.
MS. FAGAN:
Q. It's the live manual, it's its own book, and it's individually tabbed with letters. So we should be at Chapter 2.
COMMISSIONER:
Q. Okay, I have it now.
MS. FAGAN:
Q. Okay.
MR. BURT:
A. As soon as we have notice of an overdue aircraft, of course, as we said before, RCC is

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the default notification. But as we go into the details here, you'll see that if we have a St. John's aircraft overdue, we'll contact the Cougar Helicopters flight following as they may know location. Contact information is there. Notifying the duty operations manager is the second one, and there's a list of numbers. Now they should be aware that when this happens, we also have an automatic function in our operation control centre where one button is pressed and all these individuals are e-mailed at the same time, and the hangar, as I say, goes into a stage of SAR alert, literally on our screens.

Number three, call the local air traffic control to find out if they have any communications. Also have Blue Sky pick up positioning from dispatch. As we come down here, it says advise them that there's no emergency. You're trying to get an updated estimate of time of arrival. Give them the phone number where they can contact you. So this is an actual working document for them.

I will say that this also, we do a tabletop exercise two to three times a year

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and we'll create a scenario and this is all run through and this is how it's also refined and tested and validated.

Proceeding down, we call the platform, the rig, to find out the actual take off time. Four, I'm sorry, five, the base manager will determine whether the incident will require upgrading or downgrading, and then from that point then, we go down to the -- go to Tab 4.
MR. WILLIAMS:
A. I think the key to remember is the scenario we selected here in the manual is overdue or missing aircraft, not an aircraft that we know is missing.
MS. FAGAN:
Q. Okay. So this is each scenario is laid out.
MR. BURT:
A. Right.
MS. FAGAN:
Q. And you go to the tab for that scenario?
MR. WILLIAMS:
A. Correct.
MS. FAGAN:
Q. So this scenario is you're expecting -
MR. BANKS:

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A. The other one is just contacts.
MS. FAGAN:
Q. - you're expecting an aircraft back from a rig and it's overdue.
MR. BURT:
A. And then from that, we would go to Tab 3.1. That's page 3.1, I'm sorry, and we gather our management team and assign responsibilities. Turn to Tab 5, forms, and of course, this is a working form here, emergency team and assigned responsibilities and distribute. Ensure everyone has form A and then move from there, and again confirm that RCC has been informed. As I said, that's our default role. All these have active numbers which are validated and updated. Confirm with Transport Safety Board, the RNC, being this is a St. John's based procedure, and confirm that the RCMP have been informed, other emergency phone numbers, and again, we have a list of those on 4.3. We have our customer contact numbers, and then we establish our team members, secure the building, secure the records and then we have a procedure for that in Tab 9, for doing that. If required, courier aircraft data sheets to

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RCC, and there's procedures again in Tab 10.
MS. FAGAN:
Q. Okay.
MR. BURT:
A. I think there's a -- one thing I would emphasize is that there's a big difference in having a manual like this and making sure that it's exercised on a regular basis, and for us, the key with this is actually running through those exercises two or three times a year where we do that tabletop exercise.
MS. FAGAN:
Q. And when you mean tabletop, could you describe that?
MR. BURT:
A. It's a scenario we'll create, and of course, you have to be very careful of how you create the boundaries with this here, but we'll have a scenario that an aircraft is missing or we have an aircraft that is in the water and then we'll start from that. It'll be an exercise and people won't be notified, but they'll be notified this is an exercise, this is an exercise, and from that point on, we'll have people at stations and then perform this as a

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live exercise, and then out of that, there's always great learnings and this is how we refine this document. So it's just not a book that's on the shelf.
MR. WILLIAMS:
A. And we take that to the full spectrum, which includes the reconfiguration of an aircraft right to pushing the start button.
MR. BANKS:
A. And that's timed.
MS. FAGAN:
Q. So it's a drill?
MR. WILLIAMS:
A. It's a drill.
MR. BURT:
A. It's a drill.
MS. FAGAN:
Q. Now on March 12th, what did Cougar Helicopters have to do to get the responding helicopter in the air? Can you just bring us through what took place on that day?
MR. BURT:
A. As soon as we heard from the flight crew that they had an anomaly, we had, of course, our staff immediately assemble in the operations

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control centre, and it's our procedure at that point, regardless of what's going on, that we put the standby aircraft or the first response aircraft on what we call pre-alert. So it goes into a mode as if it's being dispatched for real. But we do call it pre-alert. No assumptions are made, just preparations.

From that point, we went through our emergency response plan and brought the team together and started engaging the crew of the aircraft, as well as RCC immediately, and once that was done, the Blue Sky information was brought in, and the automatic SAR response button was pressed. Our whole hangar was immediately and at the same time notified.

Literally Mr. Williams and myself were taxiing in to Halifax, where we had a meeting there, and both of our cell phones received an e-mail at the same time, which is an automatic function, and we were advised immediately that there was a SAR alert. So again, everybody knew immediately. We phoned in, like we were arranged to do, and we were briefed of the situation, and then following that, of course, RCC were aware of the situation and they began

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their own internal process of responding to it.

We had the aircraft being reconfigured immediately, and this is a case again where the seats were being taken out. The hoist was being installed and the flight crews were being called in and the rescue specialists were being called in. This was a case where they weren't -- they were not there. All of them were not there on site, so they were coming in. And as we gathered the information from the flight crew and the events, that progressed to the stages that we knew.

When we lost contact with the aircraft, it changed nothing in the way of how we were preparing. We were preparing as if that was an eventuality. Therefore the crews were notified that the aircraft, we've lost contact. They were given the last position. Our dispatchers developed a flight plan for the flight crews for the rescue mission and our aircraft was prepared, refuelled and launched as soon as possible, and in this case, it was launched in under an hour.

MS. FAGAN:

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Q. How long does it take to hoist someone out of the water?

MR. BURT:

A. If you're on site, it'll take about three minutes to effect one man down, to put a horse collar on somebody else and to hoist them back up. That's if you're on site overhead. Mr. Banks here, he's done enough and I just want to make sure that he'd validate that that is a cycle. Again, the one thing I will say, that that is a pretty generic cycle. If you're hoisted to the water, they're also trained to make an assessment of the individual and in some cases, you know, how they're extracted out of the water, they had to make accommodations for that, but if it's a straight down and straight up cycle, it's about three minutes.

MS. FAGAN:

Q. Okay, thank you. When you mentioned your rescue specialists, how many rescue specialists were you carrying on March 12th? What was normal? What's normal now?

MR. BURT:

A. We were carrying three rescue specialists on March 12th and we're carrying three now.

MS. FAGAN:

Q. In the dedicated helicopter with the FLIR, you described that there is an observer monitoring the searching feature.

MR. BURT:

A. Right.

MS. FAGAN:

Q. Would that add another person or how many -

MR. BURT:

A. No, that would be the third person that is the medical specialist in the back. Now the medical specialist is also dual trained as a hoist operator as well. When you get into an actual hoisting situation, your FLIR is not an active asset at that time and what they're doing is if you're bringing somebody up into the cabin, they're helping, you know, extract that person and bring them into the cabin and then, very importantly, to secure them. You have an open door, an ongoing hoisting mission where you may be hoisting multiple people. So you bring them into the cabin, secure them, and then assess them, so that initial first advance, you know, first aid assessment of the

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individual. Are they in shock or what is the immediate attention that needs to be given to that person?

MS. FAGAN:

Q. Okay. On March 12th, you had three rescue specialists. Can you describe what each person did? We don't have the forward -- the FLIR, so what were the three specialists tasked to do?

MR. BURT:

A. One specialist was prepared and ready to go as a rescue swimmer. That's one of the three disciplines, as we mentioned before. One of them was the primary hoist operator and the other one was the second cabin rescue specialist. The rescue, once we were on location and established the scene and found that there were two individuals there, we got the rescue swimmer on the hoist and lowered that person down to the water to make the assessment, and once they made the assessment, there was a hoist back up with the survivor and the survivor was brought in the cabin and then secured by the cabin attendant that was taking care of the security and the general

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condition.
MS. FAGAN:
Q. Okay. I understand that a second Cougar helicopter also responded. Did that have rescue specialists or can you describe how that came about, when that helicopter arrived and what that helicopter did?
MR. BURT:
A. And I'll -- I should back up also that there was another body in the water that we went over and the rescue specialist went back down again and stayed there and the assessment, the dynamic assessment in the cabin stated that Mr. Decker was in critical condition and that time was of the essence. The rescue swimmer, together with the crew, elected to stay with the other body in the water and the aircraft left the scene with Mr. Decker. At that time, almost as one was leaving, we had a second aircraft that was reconfigured, equipped with a second rescue team, a full rescue team on board, that came out and effected the extraction at that time of the rescue specialist and the other fatality.
MS. FAGAN:

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Q. Okay, thank you. Now you have gone through the search and rescue services that you provide for the east coast, the St. John's base, and for other areas, other customers. I understand there are other services that are provided by Cougar Helicopters beyond that of transportation and search and rescue, medevacs, and I would like to take you to the service of helideck surveys, and I understand there is an exhibit which is 167 which you would like to refer to, which is the Cougar Helicopters pamphlet on the surveying of helidecks, and we did have some information from the oil operators on Cougar's activities in surveying and inspecting the helidecks offshore here. So now that the pamphlet's up, can you please describe the surveying service that Cougar Helicopter provides and then I'd also like you to describe the inspections you've performed on the platforms and rigs offshore St. John's.
MR. BURT:
A. The service that you're referring to is a helideck survey. In that is a bit of a broader scope of what happens, but

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essentially, we take some very senior team members from our organization. These are captains, actually aircraft captains, that we've sent to points in Europe to train on helideck inspection and standards, as well as fuel standards, fuel and fuelling standards. They complete the training and they're both in Norway and the UK, depending on where the courses are available, and we also work to a broader regulatory standard. We refer to the British CAP 437 standard, the fifth edition. We do use those, but we also use them in conjunction with the Canadian Coast Guard TP, transport publication, 4414. That's our basis for doing our inspections. That's where our checklists are built from, CAP 437 being more inclusive and more of a global standard.
What we do is we'll go out and do initial assessments of new vessels that are coming into the area on behalf of our customers, on the request of our customers. We may go to, in some cases, Rotterdam. We may go to Galveston or we may be in Halifax or actually here when they arrive and do these inspections. But the one thing is that, for

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sure, we have consistently been requested to do this, again by the oil and gas companies, prior to any revenue flights to those locations. Again, as we say in the front, we have to know where we go. That's our saying.
So we take the teams in with a checklist and I think it's good to look at the sample, just a few things that they'll check.
MS. FAGAN:
Q. So would you like the next page?
MR. BURT:
A. Oh sorry, okay, yes, yeah. Thank you for that.
MS. FAGAN:
Q. Mr. Burt is referring to the hard copy. We have to wait for the -- would this be the correct -
MR. BURT:
A. It would be the next page.
MS. FAGAN:
Q. Okay, thank you.
MR. BURT:
A. And then I think it would be -
MR. BANKS:
A. Scroll down.

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MS. FAGAN:
Q. Scroll down?
MR. BANKS:
A. One more page.
MS. FAGAN:
Q. Oh, one more page.
MR. BURT:
A. Could be a scrolling down -- there you go, right here. So what I'm referring to is the surveyor's documentation or a checklist. It has 23 basic points, but some of them are looking for obstructions, the general deck condition. I used to do this at one point, as the -- in my career. Deck markings, and these deck markings are also to the CAP 437 standard.
MS. FAGAN:
Q. Now the CAP, we've heard a lot about CAPP here, which is the Canadian Association of Petroleum Producers. This CAP that you're referring to is a different organization, correct?
MR. BURT:
A. Yeah. This is Civilian Aviation Publication, so it's a UK document.

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MS. FAGAN:
Q. Okay.
MR. BURT:
A. It's a CAP standard.
MS. FAGAN:
Q. It's a CAP, yeah, okay.
MR. BURT:
A. As versus the Canadian Association of Petroleum Producers. And of course, some of the other ones are signage, lighting. Most of these again are stipulated in the standards. Helifuel systems, again this is a little bit to the side. As I talked to you before, the fuel offshore is our fuel. The quality control of that fuel is ours to control. The tanks are free issued to us by the customers. However, we refuel those tanks. We seal those tanks. We have the quality control. The tanks go offshore, they're transported by supply vessels. They're put on board and then they're tested and that procedure, we stipulate how they're to be tested and records. So that's quite important for us to understand. We have a very good vested interest in that fuel offshore. So it's good

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to have our finger on that.
We look at emergency response and fire suppression equipment for the deck, weather equipment, communications equipment and all aspects of flying to that rig. Again, we've also got crew who are doing these inspections who fly to these locations. I think, again, there's a nice complete loop here.
So this service that we supply, I think, bodes us well in managing our business and it's also been a good service for our customers.
MS. FAGAN:
Q. And this, at the bottom of this, it notes that Cougar conducts yearly surveys. So is that the situation for the HMDC Platform and the FPSOs that you land on here when you're transporting the workers offshore Newfoundland?
MR. WILLIAMS:
A. Yes, that's correct, yeah.
MS. FAGAN:
Q. And would you have conducted this type of survey in -- you know, a survey like this for the platforms off the east coast, out of the

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St. John's base?
MR. WILLIAMS:
A. Yes.
MS. FAGAN:
Q. So the Terra Nova and the SeaRose and the HMDC Platform?
MR. WILLIAMS:
A. Correct.
MS. FAGAN:
Q. Would all have been checked?
MR. WILLIAMS:
A. Correct.
MS. FAGAN:
Q. Now we heard that the lights on the helideck on the HMDC Platform, the Hibernia Platform, were changed. Was Cougar Helicopters informed of the change? I mean, did you know they were going to change the lights prior to them changing the lights? It might sound obvious, but I'd just like to know Cougar's involvement, if any, in that change. I mean, it's HMDC's property, but it's a helideck that you land on. So what was your connection, if any?
MR. WILLIAMS:

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A. I'd just like to explain a little further, if I could, the process of -- we just don't do helideck inspections for our benefit. It's a very formal process that we go through with each operator. On an annual inspection, the helideck inspector will submit to myself a report, a very detailed report of the findings, recommendations and together with the logistics -- that's forwarded to the respective oil company and we sit down as part of our logistics meetings that I mentioned yesterday and we go through those helideck inspections together. We will -

MS. FAGAN:

Q. You mean you go through it with the oil operators?

MR. WILLIAMS:

A. With the oil operator on what the helideck inspector's findings were, his recommendations and a go-forward plan for implementation of any recommendations. The specific, I think the green lighting, if I can recall -- I'm trying to recall this from memory, I would say that you will find green lighting recommendations by our helideck inspection for

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the same green lighting as per the CAP 437. We recommended that the lighting be changed from yellow to green. You will find that in our previous helideck inspections. So the changing of the lights was a process between Cougar and Hibernia, side step with each other, absolutely.

MS. FAGAN:

Q. Okay. From a priority perspective, we have heard in the presentation, that the recommendation was made, but it -- like it didn't happen the next week.

MR. WILLIAMS:

A. No.

MS. FAGAN:

Q. There was time between changing these lights. So how did that rank from a priority or a safety issue?

MR. WILLIAMS:

A. Yeah. Of course, it wasn't a high priority item. If it was, it would have got done. Some of our helideck inspection items, and Rick got into some of the weather reporting equipment. We've had incidents where we could not prove the certification on any vessel that

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come in, the calibration of the equipment. We would not fly a next flight there until we got that. So it ranges, like I'm saying, from a high priority. The green lighting was not a high priority, but it was something that we discussed the process of how we're going to go ahead as a continuous improvement opportunity, not as a safety concern.

MS. FAGAN:

Q. And the lighting on the helideck, did it meet the Canadian marine standards as it was?

MR. WILLIAMS:

A. Yes.

MS. FAGAN:

Q. And if the lights had never been changed, would it still have met that standard?

MR. WILLIAMS:

A. Correct.

MS. FAGAN:

Q. Okay. The lighting itself, where you do these helideck surveys, can you give us a sense of what's involved? I mean, is it just change out the bulbs? What goes into changing the lights from -- is it just changing the light bulbs or is there more to changing the lights?

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MR. WILLIAMS:

A. Changing of the lights would be something that wouldn't be our process, so I think the individual company or the owner of that facility would understand their engineering requirements and process for doing that. So we followed that through, but yet we have no control over that part of the process.

MS. FAGAN:

Q. Okay, thank you. The oil operators also have entered as exhibits their helicopter operations manuals. Now these are the oil operators' documents. They're not your helicopter manuals. It's how they manage their interaction with the helicopter and they are in as Exhibit 133, 141 and 149 for HMDC, Suncor and Husky respectively. Has Cougar Helicopters and -- have you had any involvement -- number one, have you seen the manuals?

MR. WILLIAMS:

A. Absolutely. You will find a copy of each of those individual manuals in my office and in our operations manager's office.

MS. FAGAN:

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Q. Okay, and with respect to the contents of the manuals, has Cougar been involved in any revisions or anything that should go into the manuals? Have you had any discussions around the procedures that are in these manuals?

MR. WILLIAMS:

A. Yeah, absolutely. The manuals are the owners -- the documents belong to the oil companies, but any revisions is consulted with Cougar on aspects pertaining to helicopter operations offshore. There's some things in the helicopter operations manual that's not necessarily Cougar's involvement, but issues around the helideck, how passengers are transferred, how we handle the HLO activity with the captain, and Rick mentioned about fuelling, all that stuff would be there and would be vetted through Cougar and in consultation in every step of the preparation for the helicopter operations manual, absolutely.

MS. FAGAN:

Q. Okay, thank you. That covers, I believe, the questions that I have on this section. Unless you -- we next have safety management system

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and we have a video to play and then we have to move into the safety management system questions. So we can break it if we want, because the video needs to be played and then -

COMMISSIONER:

Q. Yes, probably be a good idea, but I have two or three questions which I'll ask.

MS. FAGAN:

Q. So if there's a few questions that take us to the -

COMMISSIONER:

Q. And that might take us through, you know. These are fairly quick questions, things that occur to me. We were talking about the pilots' suits earlier. Now obviously I shouldn't think that their suits -- they don't, I'm sure, come up over in the way the passengers' suit does, but does the pilot suit come up to the -- fitting around the neck?

MR. BURT:

A. They do have a latex collar and they're a dry suit that fits around the neck.

COMMISSIONER:

Q. Yeah. So they must have a hood then that goes

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on, if necessary?

MR. BURT:

A. A separate hood that the suit has, yes, but it's not on during flight.

COMMISSIONER:

Q. No, because you wouldn't be able to fly the plane and have your -

MR. BURT:

A. That's correct. As well as gloves.

COMMISSIONER:

Q. So they would have to don this hood, if you like?

MR. BURT:

A. Correct.

COMMISSIONER:

Q. Yeah, afterwards, okay. The other thing that occurred to me, I should think the pilots would have their own suits. In other words, you're a pilot. You don't take a size large that I might have worn the day before.

MR. BURT:

A. No.

COMMISSIONER:

Q. It's your suit.

MR. BURT:

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A. The suits are actually -- you're measured to your individual size and the suits are ordered specific to the individual from the manufacturer.

COMMISSIONER:

Q. I thought that might be the case.

MR. BURT:

A. Right, yeah.

COMMISSIONER:

Q. Okay. The boots, are there boots on the pilot's suit? What kind of foot covering?

MR. BURT:

A. We have the sockettes in our immersion suit. So it's almost a sock that's attached to the suit and then we fit them into our issued boots that we have for our flight crew.

COMMISSIONER:

Q. I see, okay.

MR. BURT:

A. And those boots are all issued and even those boots are made so they're oil resistant, standardized and they don't interfere with the operation of the aircraft.

COMMISSIONER:

Q. Okay.

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MR. BURT:
A. They're also, you know, steel nose so that they're accommodating for all the OSH requirements.
COMMISSIONER:
Q. I see, okay. I've read that in some jurisdictions when a helicopter flight goes offshore, they have a cabin attendant who generally looks after the passengers, makes sure everything is in order.
MR. BURT:
A. Right.
COMMISSIONER:
Q. Is that necessary in your view? Is that discussed ever in Canada?
MR. BURT:
A. The requirement, the essential requirement is any more than 19 passengers, the law is that you must supply a cabin attendant. That's one trigger.
COMMISSIONER:
Q. Oh, okay.
MR. BURT:
A. And that's why you'll see the limit of 19. It's not a coincidence in fixed wing or rotor

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wing. In some instances, the operators will also provide a cabin attendant if it's an unfamiliar area or -- I know that internationally some of the standards are a little bit different, so they will insist that they do that. However, it is not a standard for normal passenger carrying to have a flight attendant in any of the operations that I'm familiar with.
COMMISSIONER:
Q. I see, okay. A small point, but it could be important. When I did the one-day training, which I was required to do before going offshore, I went back the next day and spent the morning with an instructor, a lady who gave me, I suppose, the best -- I won't say the only, but the best briefing on safety I think I've had, and she was talking about what to wear under the suits and she said she came up through the Coast Guard as an officer and then a safety officer and she said "I would not go offshore without thermal protection under the suit."
MR. BURT:
A. Correct.

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COMMISSIONER:
Q. And she made the comment that a lot of people go offshore wearing jeans or whatever under the suit, which she said is not a good idea. I sort of tucked it away in my mind, but I was quite interested to read within the last two weeks them say, one of the authorities in the North Sea saying that no matter how good your suit and if it keeps you absolutely dry, if you haven't got thermal protection, your core temperature will start to decline, go down fairly rapidly, depending on water temperature.
MR. BURT:
A. Right.
COMMISSIONER:
Q. Cougar, any of you any thoughts on whether thermal protection is an essential?
MR. BURT:
A. Well, we provide a waterproof layer and we provide a flameproof layer and also with the thermal layer. We'll issue the undergarments for that as well. Some of the flight crews will have their own particular type of undergarment that they like better. Some like

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the mesh ones that keeps the -- that wicks the moisture away. We've used Helly Hansen underwear and that's also been very good as well, because some of this stuff is designed to wick away the moisture.
COMMISSIONER:
Q. Yes.
MR. BURT:
A. But we do provide that layer of thermal protection, and you're absolutely right, it is essential. It's part of the system, if you will.
COMMISSIONER:
Q. Okay. I'm glad I asked about that then. The other thing, the only other thing, it's not so much a question as a request, and I asked the same thing of the operators. During the course of the Inquiry, new things, and you've told us about new things which are coming like the auto hover and that sort of thing, but I would ask the company, through you and people here, to inform us if any new things are coming or actually here or on the horizon during the course of the Inquiry, because I'd like to know that, as part of the overall

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process.
MR. BURT:
A. And that's a great piece of advice. I am the chairman of the offshore committee of the Helicopter Association International. So we do get a lot of information and we do bring those groups together. We attend the European Helicopter Association, even though we're not a European operator, for best practices. So I certainly will take that request and give it some serious thought.
COMMISSIONER:
Q. Thank you. That will be appreciated. Okay then, we'll adjourn now then until 2:00.
(LUNCH BREAK)
MS. FAGAN:
Q. Okay. We are going to move into the safety management system, but we have one clarifying point before we move to this next topic, and I understand, Mr. Williams, you would like to clarify the situation when a third party, non-oil operator, makes a request for an air ambulance or if it was JRCC for Cougar Helicopters to do a SAR mission and it would have to deal with what happens to the standby

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helicopter or the first response helicopter for the oil workers if you've sent a helicopter off to conduct an air ambulance.
MR. WILLIAMS:
A. Yeah. Just want to clarify. Just wanted to clarify that in the incidents where we do use one of the oil company assets to perform a third party service, we always ensure that there's another airframe at the heliport to respond to any offshore emergency.
MS. FAGAN:
Q. Okay, thank you. We now have a section on safety management and this will actually be the last video. If the Registrar would play it? Thank you.
(VIDEO PLAYED)
Safety management system. Safety is tightly integrated within every aspect of Cougar Helicopters' operations. These various processes and procedures do not exist in isolation. They fall under the umbrella of our integrated safety management system or SMS, which is a documented process for managing risk that integrates operations and technical systems with the management of

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financial and human resources to ensure aviation safety and the safety of the public. In other words, all aspects of our operations, from flights to maintenance to office work, are governed by a single comprehensive document.
The SMS was initiated by Transport Canada in 2004 as a part of an international effort to reduce incidents in the airline and helicopter industries. Although regulated audits are scheduled to begin in 2011, Cougar Helicopters has already developed a safety management system of our own that exceeds regulatory requirements long before the international need was determined.
Safety management system is a documented set of processes that govern total oversight of safety within a company, especially the aviation division. Transport Canada has made this a regulatory initiative and by 2011, helicopter operators must have this safety management system in place. Cougar Helicopters has developed and has in place an integrated safety management system which not only encompasses aviation safety, but has also

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included health safety and environment processes as well as ISO 9001:2008. By doing so, by the collective group of all these safety processes, we have total oversight throughout our operations globally. It encompasses all departments. It doesn't single out any departments. General safety rules are built for every employee and it's a fluent system within Cougar Helicopters globally and it's not the safety department system. It's the employees' system.
This safety culture includes careful attention to the extensive paperwork and documentation generated by our work processes and is essential to meet the requirements of regulators and needs of our clients. Cougar Helicopters also performs ongoing internal audits of our systems and processes as well as any external review requested by regulatory, customer or industry stakeholders. It is a part of Cougar philosophy that having fresh eyes to look at things is always a good idea.
Scheduled audits take place internally from Cougar on a rolling basis. The audit program itself sees a lot of cross auditing

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capability through the departmentals and facilities and operations globally. New startup operations will also go through a series of audit inspection to ensure that we have all bases covered before we turn blades on a new base. We also have many third party contractors that come in and they audit on behalf of our customer. Quality assurance has quite a few more because they do it in a month-to-month basis. It doesn't necessarily bring in a lot of findings at times, but it gives you an opportunity to get down to the employees' levels that are working in the areas and the departments and have oversight to see if there's any underlying problematic areas and just let the individuals know that there's somebody to talk to that if there is change occurring, we've got to know that and address it in a timely manner.

Cougar Helicopters has worked hard to create a safety culture in which all employees, no matter what their work roles, are empowered to act wherever and whenever they observe unsafe behaviour or situations.

Our company maintains a non-punitive just

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culture. This is one we worked hard to achieve and this is where we sit presently, and we're going to go that way forward. This entails individuals reporting freely using their name or the option of anonymous reporting. This opens up a wide variance to us and we can get back to individuals with the corrective actions. If not, on the anonymous side, we're still getting the information and, you know, you can be a reactive company. You can be a proactive company. You can be a generative company. The further up the scale you go, the more that you know that the culture is set and embedded within your employees. It's not an easy task, but once you get there and individuals spell that off to newer employees coming in, you know that you've grasped the mind set that everybody is thinking alike. We like to think of our company as a very proactive company with a lot of new initiatives. The generative side is coming along very strong and it's to the point where employees aren't waiting for departmental heads to make initiatives. They are bringing the initiative to us, which tells

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us that generative mind set is alive in Cougar Helicopters.

Cougar Helicopters has been successful in creating a proactive safety culture across all aspects of operations in Newfoundland and Labrador. We have since exported that culture, along with our rigid standards and procedures, to every corner of our global operation.

(VIDEO ENDED)

MS. FAGAN:

Q. Now the next portion is a slide presentation on the safety management system at Cougar and I understand Mr. Banks is going to lead on this and Mr. Burt is also going to jump in where necessary. The first slide that you've prepared, I think we've seen this before. So Mr. Banks, if you could just speak to this and then we'll move into the system itself.

MR. BANKS:

A. Sure. We did see it before, but I thought it was important to show it again because it clearly states from the top down approach, how safety is governed in our company. Our CEO right down through the general managers,

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safety is the priority of all Cougar Helicopter operations, as is VIH. So I'd like to say it again. No operation or business opportunity, either new or ongoing, should ever compromise safety or unduly affect our accepted levels of risk of the VIH Aviation Group of Companies. That's a heavy statement. That's what Mr. Norie believes in and that's how everybody is distinguished through our company. It's across all avenues of our operations and the full group of companies. The most important statement and belief is from the top down.

MS. FAGAN:

Q. Okay, thank you. Now we heard safety culture. We've heard this term before. Could you tell me what does that term mean? What does safety culture mean to you and at Cougar?

MR. BANKS:

A. Right. Safety culture, it's the way safety is perceived, valued and exercised by an organization and its employees. It reflects the real commitment to safety at all levels, again from the top down, and the highest point you can say about safety culture is, you know,

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it's right there on the slide, how an organization behaves when no one is watching, and that's a true statement. It's one that's taken a long time for Cougar Helicopters to develop, all the way back into the early '90s. We've strived to, you know, ensure all new employees coming in from other avenues, other industries, that they get the grasp, they understand what we're trying to achieve, to be a team player, to get involved, to mention new initiatives and don't be afraid to come up with anything, you know, if it's say reporting any acts or any hazards, anything they've done, but bring it to us so we can correct things. I think truly without a safety culture any SMS or safety management system is not effective. You have to have everybody on the side thinking safety at all times and willing to take an active stance where others wouldn't normally.

MS. FAGAN:

Q. How do you develop a safety culture? And I believe the next slide may have -- it's a fairly detailed slide, slide 67, but what I'd like you to do is tell me does Cougar

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Helicopters have one? I mean, I believe that's what you've been saying.

MR. BANKS:

A. Yes.

MS. FAGAN:

Q. But how do you know? Give me some practical examples as to how you know that the safety culture exists.

MR. BANKS:

A. Okay. First of all, by setting up a safety management system that has been in development and has been used for quite a few years from Cougar, not to the specs of the Transport Canada regulation, but to have that in place, to understand -- everybody knows the responsibility, their effective achievements, their proactive reporting. You know, you can go into the policies and the set rules and everything else, but people have to understand all this. They don't necessarily have to go find it in a book somewhere. It's got to be embedded through every aspect of the operation. So when you have, you know, the reporting that we have, it just states in our own minds that people are generally, you know,

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bringing things forward to us, not necessarily major changes but things they'd like to see.

So we've really partnered with every part of our organization at the employee level to ensure that they know that they can bring any implementations or any concerns, any initiatives, they can bring it forward to us and we'll act on it, have a good look on it and if warranted, then we can put it in place for them, and as I said in the video earlier, it's not necessarily, you know, that the organization -- that the management's safety management system, it's everybody's system. It's facilitated and developed by higher management, but everybody within the organization has a play and a participation within it. So we want to make sure that it's active, that role, and that's why we made it an integrated system with ISO included, aviation and health and safety. We pulled them all together so that when an individual thinks safety, there's a one-stop shop for safety. Everything's embedded in that. Everybody knows where to go for it and not to separate programs. We've pulled it all

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together because it's truly the heart of our organization and nothing is more important than safety.

MS. FAGAN:

Q. Okay. You've described, and I'm going to have you go in through the system in a little more detail to describe the actual system, how it works. Have you fully implemented the safety management system? Because in some of the information that's been put forward earlier, there was discussion, say the return to service, that Cougar Helicopters is implementing a safety management system. So is the system itself fully implemented or are you still in that phase?

MR. BANKS:

A. Okay, I'll just step back a little bit of time. As I said, we had components and we had programs in place. By pulling it all together to make an integrated system, you know, a lot of those safety programs that were in place came on board the safety management system. So it's not to say that we didn't have one before. We've always had one. This is just a newer format and we built it in spec to the

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Transport Canada regulations. So to that regulation now, the SMS has been implemented as of July 1st, 2009 and it far exceeds where we were supposed to be with it. So we had so much embedded before, as we pulled together, we came out with a really nice package. It was understood by many. So there wasn't much change to do. There were new initiatives put into it and build it up to this and the integrated facilitation also allows us to use it as a training vehicle. Whenever I'm training with the SMS, all employees are orientated to it and now we bring it into components, and there's a division line of components within it, but we can tailor it and facilitate it, keep it live and actually educate our staff at various meetings and SMS lead way briefs, we call them, that departmentally I can take a group of people and we'll walk through, say, management of change. Now it's an education tool, so that when I'm not there and they may have forgotten how to use something, it's built so that they can use it on their own. They've been, you know, educated on it, but it goes step by step

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all the way through. So it's not just a safety manual. It's actually an education series.

MS. FAGAN:

Q. You say that you're further ahead than where you should be or need to be. We heard in the video that it's going to be regulated or required by 2011. Is that correct?

MR. BANKS:

A. Yes, it is.

MS. FAGAN:

Q. Is it required now in the fixed wing airline or is 2011 the helicopter -

MR. BANKS:

A. 2011 is the helicopter time line. Fixed wing is under their audits right now. Many have been done. I couldn't speak to how much is completed there, but under our category, it's, I believe, November 2011 they start.

MS. FAGAN:

Q. Okay, and do you know if other aviation operators, I'm talking helicopter aviation operators, will they end up being subject to the SMS and is this something that's coming in? Is this an emerging trend? Do you know

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where the rest of the industry is, the helicopter industry?

MR. BANKS:

A. It certainly is. Over in Europe, it has been regulated for a couple of years. Canada took a step up. They were next to really proceed under Australia's background, as far as I know, and we seem to be next in line for regulation and the United States is coming up fast and furious now too with their programs and regulatory bodies. Through some of my training, it's been taken down in the States on SMS as well as up in Canada here and there's a number of operators that are going that route, not waiting for the 2011 regulation, but acting upon themselves, the larger helicopter groups that I'm talking about, really struggled. You know, a lot of them are struggling because they're not really sure of how the implementation is going to happen. The guidelines are there, but until it does, I think they've got a grasp on it. A lot of operators have come to me for assistance and we've fostered out quite a bit of our information on how to make it not

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necessarily a 20-page document but actually a system, a full system.

We didn't want to use it as a reference material which a lot of companies only have to do. We wanted to have the whole package in front of people, that they have the bible, as you would, for safety at hand.

MS. FAGAN:

Q. You had said that you've been to the United States and Europe. Are you part or is Cougar part of any industry groups or organizations, associations? And I'm talking in relation to safety, and if you're involved, why would you be involved? What do you get from these groups?

MR. BANKS:

A. I think it's a very important aspect that every organization participates in not just foreign, but any of these committees. When conventions are held, there's so much to learn, so much education to learn from others and the sharing of best practices. Myself, I'm the co-chair of the safety committee for the Helicopter Association of Canada, also the liaison for the International Helicopter

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Safety Team, and as Mr. Burt was saying earlier, he's had a large presence on the offshore oil committee down in -- for the HAI, which is the Helicopter Association International. There are others. They're the three I'll highlight, but we take an active stance on getting involved and not only sharing our information, but gaining and grabbing education from others.

MS. FAGAN:

Q. Okay, thank you. Now the system, the integrated system has been provided as a confidential exhibit. It's Exhibit 179, and you also have some slides. So is it your preference to go through the slides? Because the next slide would be the risk assessment matrix, but I would just note that the entire system is there in a hard copy as an exhibit. I believe it exceeds over 200 pages. So if you're satisfied to move to slide 68 and deal with risk assessment matrix, we will. But if you see the need to actually refer to the manual or the table -

MR. BANKS:

A. I'd like to, yes.

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MS. FAGAN:

Q. Would you like to go to that now?

MR. BANKS:

A. Yeah, the table of contents.

MS. FAGAN:

Q. It is helpful in helping people understand. So that would be 179. So we'd move to the -- at least the table of contents. Everybody can rest easy. We're not going to cover the 200 pages.

MR. BANKS:

A. And again, with that confidentiality, you know, we're all about sharing information so it's not quite a big deal as it may seem with confidential label on it. If anybody wants to see it, they're welcome to come up to the office and sit down and go through it with us.

MS. FAGAN:

Q. Okay. So if there's another operator out there would like some help, you've done that before?

MR. BANKS:

A. Yes.

MS. FAGAN:

Q. Okay. So I believe the table of contents, Mr. Banks, perhaps you can indicate -- you can either move it or the Registrar, where -- here we are, okay.

MR. BANKS:

A. I'll pick it up here.

MS. FAGAN:

Q. Okay. So just indicate where you'd like her to scroll and she'll scroll down.

MR. BANKS:

A. Okay. Well, I just wanted to give you a brief look at it and how it's developed and leads into a full set of programs. So we start off with an introduction and that's coming for our company, our CEO and you know, the need for SMS, his requirements and truly his initiative to move this forward was to take every group of his company and appoint a director of safety management systems. We liaise with each other quite a bit. We tailor our programs together. We share a lot of information and by doing that, we have certain fleets within the group that are the same aircraft, so it only benefits on not only regulatory side of the house, but active objectives in our flying routines.

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So we'll look at safety management plan is there and you can see what's listed under there. That's all our operating procedures, company standards. Standardization has become a big player with us now with more operations.

MS. FAGAN:

Q. What's third party standards and operating and guidelines? What would be a third party standard?

MR. BANKS:

A. Well, we go into different areas of standards within regulatory bodies that have us -- certain guidelines that we must follow, where we're flying in, what areas of the world, that we must take into account prior to starting up operations there. Our flight operations group, our maintenance certificates and when we're cross-bordering that kind of thing, as well as third party standard for our customers, what they would like in their contracts maybe a little different than what we have set right now. So we'd make applicable changes through management of change and ensure that we're operating under the guidelines set by our contracts, as well

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as government agencies as well.
Safety promotion. Certainly it's all about communication. It's one of the biggest factors in our safety programs, from meetings to general meetings, committee meetings. There's a number of avenues there as well as safety boards and, you know, generation of completed safety events, our reporting systems, to make sure that everybody is aware of what's going on. We try and involve also everybody in the company, you know, whether it's a secretary down the hall in finance. We want her to know about the operation as well, instead of just saying HFDM, she now knows that it's helicopter flight data monitoring. Bring her in, get her immersed in everything we do. Everybody knows every part of our business. Nobody is pushed to the side and not know about a certain area of what we do.
Document control, another big factor. We have a lot of reporting that goes out to customer, regulatory bodies, in house to management, to the people on the floor or just day-to-day collection of data that people should be seeing and how our performance is

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doing.
And one of the biggest factors here, hazard identification and risk management. That's a daily effect for us. We go into risk assessment matrix, rankings. We have company risk assessments that not only go into general operations and ongoing operations, such as safety cases that we take a hazard register, have meetings, build up as many hazards as we can think of and then pick them apart and make sure we're mitigated right to the final end. But we also go down into the job safety assessments, risk management, risk assessments for new operations. You know, the general managers have put together teams where if we're going to start up a new operation, we'll take a lead from each department, travel to that location far before the operation begins and we'll piece it together. What is our risk? Bang, we'll set it out as a team, pull it all together, come back, work on it, ensure that we can do it safely even before, you know, signing contracts or we want to make sure that we're not jumping into something we can't handle. Every element of risk is

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covered before we accept a job and it's got to be down to, you know, a risk level as low as reasonably practical.
Incident hazard reporting. We have a really good system and we'll get into that in a couple of minutes. It's an in-house built system that is tailored on a monthly basis and we're seeing a great deal of new initiatives coming to it that are allowing us trending. It really affects our performance going forward. It's done us quite a bit of benefit, and also we've had a lot of other players out in the industry come and view it and use it on their own operations.
Investigation and analysis. That's an ongoing event. Every time that we have something that raises our eyes, we'll dig into it as a team, not just the safety department, but our specialists from other fields within our divisions.
Safety assurance, and that's when we'll get into audits and inspections, risk assessments, our database, drug and alcohol testing criterias, policy and program. Management of change is probably our biggest

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factor that we have set our eyes on lately and use it a lot more in the last year than we did before. We have new processes to it that allow us to do it departmentally, not just from the safety department, but now we're engaging all employees in every department to develop these on their own and sign off through the safety department to understand that we're reasonably -- not reasonably, but mitigated throughout before we proceed.

MS. FAGAN:

Q. Okay. What do you mean by management of change? And I think we've -- some have touched upon it. The title may speak for itself, but could you give us an example of what would be a change? You said you've used that a lot more in the last year. So what would be a change, and then how do you use this system to manage the change?

MR. BANKS:

A. Well, for example, just the latest one we've done, I guess, is the new S-61 came into our operation just recently. For that, to reintroduce a new aircraft to our base, we have to get together as a team of all

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departments, break down all the responsibilities, ensure this isn't going to affect our operations as we're working now. We also want to use it, utilize it for a little bit of SAR training. So if -- or on standby. So if we have these parallels that we have to make sure every area is mitigated from towing to properly certified engineers and pilots and crewing and dispatch. There's a variance. There's lists that go on and on, scheduling, and so we make sure we've got it all together and then we assign duties to these departments to ensure that everything is done correctly and completed and we take the risk assessment matrix and we utilize that against all areas here to make sure that our numbers down to ALARP again, as low as reasonably practical, and then when we're sufficiently satisfied that the criterias have all been met and everything is in place, then it's safe to move forward, then a sign off occurs by the general manager.

MS. FAGAN:

Q. Okay.

MR. BANKS:

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A. Again, I'm just showing you how, you know, we go from aviation into HSE here into training, safety management training. Management of change is a whole section on its own. Our emergency preparedness and response is embedded. And finally, we can't manage what we can't measure, so we have to have that ensured that measurement is in there for all of our safety and leading us into improvement. So we audit the system ourselves as well as third party audits and coming up in 2011, we'll have regulatory as well. So it does get oversight. It's a living and breathing system and like I said, it's the bible of everything we do.

These are components. I believe Canada, Transport Canada is asking for seven or eight components and as you can see here, we have 11. There's 12 listed, but one's the introduction. So we've gone a little further, but that's -- you know, that's only because we've already had those kind of things in place and we really didn't want to lose them. We brought them across as we developed it, and I'm sure they'll be added as we go as well.

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MS. FAGAN:

Q. Okay, thank you. I think that gives a good idea as to what is covered in a system. I noted there was everything from forklift to pandemics. So perhaps you could now move back to the slide presentation and we'll go to slide 68, which is a risk assessment matrix. We have had this type of presentation. It mightn't be exactly the same, but some of the other presenters have gone through their risk matrix. So if you could -- and I think the next slide, if -- I know it's a little difficult to move back and forth, but the next slide gives the levels, low, moderate and unacceptable. If you could just briefly give us these definitions and then move back to the matrix and explain how you apply it to a scenario at Cougar Helicopters.

MR. BANKS:

A. First of all, it is one of our highlights of risk and hazard management. It's something that we use practically in investigations, event reporting, safety cases, management of change, as well as any risk assessment. So it's used frequently. It gives us a

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quantifiable number that through past experience that will enable us to see where a condition sits, whether it's a new condition or an established condition. It tells us where we are with that, and what we have to do is bring it down to the lowest level of risk. Red being unacceptable, if we come up in those kind of numbers, we have to work it down to get it into the yellow or the green. Even in some cases into the yellow, and that's a sidebar to me that it's not good enough, so we want green. Yellow, you know, you will end up monitoring and maintaining strict controls. That's pretty tough, you know, if you're going to leave that to departmental levels, it still needs to be mitigated in my eyes. So you want to get it down as low as reasonably practical. When you get into areas of search and rescue, some of the -- you know, some of the critical activities that we do, the lower level of yellow may be as far as you can get, so that the monitoring is definitely going to be the biggest factor there, but the green is what we desire and that would be monitored and managed through normal safety procedures. If it's in

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the red, it's a no go.
MS. FAGAN:
Q. Okay. So if you could go back -- I know it's a little difficult, we couldn't get it all on the one slide, that's why were into two slides. So 68, now that we know the definitions, could you explain your matrix? You just mentioned -- a SAR mission, you say, I guess there's just so much -- it's the type of activity that you may end up in the yellow no matter what you do.
MR. BANKS:
A. Right, and yellow is controllable. You know, it's the red that we're worried about. If we can work the yellow into green, all the better.
MS. FAGAN:
Q. So can you take us through an example or show us how these numbers work?
MR. BANKS:
A. Okay. Many of the oil industry guys will notice this and be familiar with it. Those who aren't, it's the potential and consequence coupled together from the left side to the right, and as you'll see in the boxes, we have

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people, assets, environment, and reputation. This is the consequence that we may see of a particular aspect you're looking at or a hazard register or an operation. So the potential would be on the right hand side, with improbable, known in the industry. Now you've got to know what they are first and a little research goes into that on past history, so if you come up with that, coupled with the consequence on the left, it'll bring you across to a number. Now there is another aspect there that we include in all our risk assessments that if you're caught between two, go to the higher number every time. That's just to stay on the safe side. Once you come up with that quantifiable number, then it'll definitely put you in a -- put you in an area where you need to know what to do on the next page. So that's where you'd have to take it and work a hard risk assessment on it, a safety case study, and bring it down with mitigation through steps known which you have in place within your operation, or what you need to develop or purchase to help you engage and bring it down.

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MS. FAGAN:
Q. So is there an example, a tangible example? If you're applying this, and I know this would be a hypothetical, and I'd like you to, if you could, keep it to a very simple hypothetical because I have gotten the sense that your industry involves a lot of factors, probably a number of considerations, but if there was a fairly simple example as to how you would come up with one of these numbers, I'd appreciate it?
MR. BANKS:
A. Yeah, new operation, start up of a new operation. This card would go with us. We'd be up and we'd apply it to every aspect. Flying in the north, is that aircraft capable of it; what are the SAR resources in place if we have one machine up there; do we have backup, apply it to this, come up to red, it's not -- how can we get it, who can be there for us, and how can we limit flight, as well as hangar, you know, do we have a place to store the aircraft inside, is the elements outside going to raise a particular problem for us, creating a hazard in providing the service.

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It goes into so many variables that one aspect wouldn't really give you the idea. So if we take that, focus it against one area, you know, towing the aircraft on a slope into the hangar, that type of thing, you know, so how many people would you need, have we got the people in place for eyes left, right, back, and front, so that you don't ding a blade on bringing it into the hangar. Is it the proper tug, is it the proper tow bar, you know, things like that can come into these effects, and if you're getting the red and the yellows, then you know you've got a lot of mitigation to put in place and do it right before you do it and bring it into operation.
MS. FAGAN:
Q. Okay, thank you. We've heard quite a bit on the risk matrix, so if there's more questions, I'm sure the group here will ask them, but as you said, most of the oil operators are familiar with it, and I just wanted to know how you apply it. So if you've covered that topic, I would like you to move to slide 70, which is the safety reporting and you did mention that you do have a very good reporting

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system. So can you please explain what is on slide 70?

MR. BANKS:

A. Okay, this is our electronic safety reporting system. This has been a home built system we started a couple of years ago, taking all of our paper copies, transferring it to electronic and it works through the back end of our website where every employee throughout not only our company, but group-wide companies, can have a look at -- can enter an event, first of all, can have a look at existing that are being worked on, and they can also -- they can also go into further details here, such as the safety management system and other things that we include, but as you see, we have Cougar Helicopters here for aviation events, health and safety events, and we've split that for a reason. There's different reporting processes to the two. We like to keep them separated, it's a tidy way to achieve them as well as trend them. There's a lot of back end -- there's only one slide you see here, and that's the first reporting slide. There's many more that go in

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and give us the ability to trend our events, to actually see where they sit. They have reporting timelines that the event has to be completed by, and I'll go to that next slide.

MS. FAGAN:

Q. Okay.

MR. BANKS:

A. So when an event -- you know, this could be a hazard, an incident, a threat to us. Anybody that wants to report one, it goes into the system. It comes to me, it comes to my department, we assign a threat level to it. So as you can see there, guarded, we put a date of 15 days on that. That would be something that was a hazard that's not really going to ground a fleet or anything. It could be, you know, a bit of -- you know, for instance, there was salt and wet freezing up in front of the front door of the facility. You know, it says 15 days there, but we want to correct it fast, but it's not going to ground the fleet, it's nothing that potentially is going to kill people right away. We do act on it as fast as we can. Elevated, it just starts moving up the chain.

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So in contrast where paper copies used to travel around and not get touched for weeks on end because people were either travelling and they needed to comment on it or help mitigate, now the electronic system is e-mailed to people. If there's one event goes through now, it's electronically generated to all our managers, right down to supervisor level, so that they know, they have a contact that's something's happened and they get it real time. This, in fact, helps me because people get back to me with, you know, corrective actions or ideas for corrective actions. It's also a way to let individuals report and know that their concerns are being addressed in a timely fashion and reported back to them. Once completed, they are logged within the system and it has notifications that tell people that it has been completed, as well as a paper copy that every safety board has a file or a record of all these. They can also see how far along the investigation has taken. If I have four specialists involved in mitigating the event, then I can also have -- you know, if two are complete, it will

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automatically click to the next guy saying, you know, you've got three days left, you better get this done. So it's all electronically generated and it's just a great system.

MS. FAGAN:

Q. We've heard the terms, hazard, near miss, event, or incident. Could you explain do you use those terms and is it -- these threat levels, are these hazards, near misses, or events, are they connected or are these two different things?

MR. BANKS:

A. Each one has a definition. I'll give them that, but to us, every one of those ones that you just said, they're all a concern. So to me, an event can be a hazard, an incident can be a hazard. You know, bring it all in and let us decide what they are through definition, but to just state incident or hazard or -- you know, they have definitions, but we want them in the system no matter what they are.

MS. FAGAN:

Q. They all go in?

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MR. BANKS:
A. Oh, yes.
MS. FAGAN:
Q. No matter what it is, it all goes in the system?
MR. BANKS:
A. Yeah.
MS. FAGAN:
Q. And it might have a definition, but you're going to look at it and then assign a threat level to that particular item?
MR. BANKS:
A. In the category, yes.
MS. FAGAN:
Q. No matter how it falls in the definition, whether it's a hazard or a near miss or an event, any one of those three can end up in any one of these other categories?
MR. BANKS:
A. Yes, and, you know, we don't want to distinguish to a certain degree which is which. We want to hear that there is an issue and let's get it mitigated. You know, when we have, say, a slated hazard or -- that could be a concern by one, but not by another, but if

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it's a concern to him, it's a concern to me. So the threat levels are -- you know, they're quite important to us. Again if we're not sure, we go to the next level up. At the start of the event where somebody actually puts in a report, we give them the opportunity of low, medium, and high. That gives me an idea that if he came in and said high, but I see it as a medium, then I get a chance to talk to him and say why did you classify it at high, and if he educates me along that, wow, you know, he's right, and we'll risk assess it then and we'll bring it up and see if it's high or severe. So again severe is two days with actuality of going straight to the General Manager or up top to the CEO, and, you know, possibly grounding a fleet if I have concerns with it.
MS. FAGAN:
Q. Okay. This is an electronic based system.
MR. BANKS:
A. Correct.
MS. FAGAN:
Q. And do you have a paper system? We've heard about the cards, reporting cards, and I think

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even one of the panellists for the oil operators had indicated they thought that Cougar Helicopters had their own cards, but they didn't want to speak to it. So do you have cards in addition to the electronic?
MR. BANKS:
A. We do, and it's on the next slide.
MS. FAGAN:
Q. Okay, and can you explain 72, and I think there's a card that can be passed around the room. In addition, the card is here, it's front and back. So can you explain your card system? You have HEBBO. So what does that stand for?
MR. BANKS:
A. HEBBO, yes.
MS. FAGAN:
Q. And how do these work?
MR. BANKS:
A. It's another avenue of reporting that we didn't want to lose an issue or a concern. Our electronic reporting system is an excellent venue for reporting, but sometimes if people are in between jobs and don't have time to go to the computer, file it in and

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everything, we needed something strategically located in the facility besides a piece of paper that was stuck under my door, that concerns can be addressed right away. Instead of coming back after -- you know, I should report that, but I've got something to do right now, when I get back I'll do it, and we've lost the opportunity if he forgets. It's just another avenue that we found assists us in capturing any critical issues that can be addressed. It stands for Hazard Event Behavioural Based Observations. It's primarily brought to us through dealing with our oil industry. I've seen a lot of their stop/start cards, focus cards, this kind of thing, and it was time that we put something in place, not to the degree that they fill them in, this works as an avenue for subsequent reporting to the electronic database. So if we look at it, it can be a behavioural based observation, a hazard, or an incident. You know, even if they don't know what to call it, I just want you to fill in the blanks and leave blank where, but give us what the observation or the hazard you think

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it is, let us work it out. It's very encouraged as is all our reporting, you know, it's encouraged all the time, they're set in certain places within the facility, so pick them up, fill them in, and we'll deal with them and get back to you on all issues.

MS. FAGAN:

Q. Okay. The electronic system, which employees at Cougar Helicopters have access to the electronic system?

MR. BANKS:

A. Every member.

MS. FAGAN:

Q. Okay, and the -- I believe you've pretty well covered this, but if a card is filled in, it would go into the system, so if an employee had filled out a card and it ends up in the system, the employee could go to the electronic system and hit view and look at the status as to how that particular event is being dealt with? Would that be a fair statement?

MR. BANKS:

A. That's correct.

MS. FAGAN:

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Q. And so that's how it's reported back? That would be how an employee would know that Cougar Helicopters is dealing with whatever they reported on?

MR. BANKS:

A. Yes.

MS. FAGAN:

Q. Okay. You had mentioned non-punitive and the words "just culture". It was either in your video or -- and I think it might have even been in the slide. What do you mean by "just culture", and "non-punitive"?

MR. BANKS:

A. To us, it goes hand in hand; non-punitive being don't be afraid to report, people make mistakes, we want you to bring forth any incident or something or concern that may have happened to you that we don't want happening to others. It's all about care for your fellow worker, it's about -- it's about bringing things to light and not being afraid of retribution. You know, there certainly is an area where people must know that there is penalty for, you know, busting procedures and things like that, but we want them to know

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that we're going to do everything we can to bring out the good in it and get it corrected, don't be afraid of bringing certain incidents just because they happened to you, bring them forward so we can correct them. The just culture, you know, we work in an area too that we want everybody to know that participation in the safety program and our whole system is an attribute that every one of our employees has, so this is known through -- and part of the safety culture, these people know this. It's not fabricated into a document, this is living and breathing within our company.

MS. FAGAN:

Q. We saw on the slide that you said they were divided. Safety is two categories. I guess it's all safety, but do you look at it from a health environment issue, and then the other is an aviation issue? Do you have an occupational health and safety committee?

MR. BANKS:

A. We do. What we call it is different, it's a Safety Management System Committee. Initially, a little bit of history here, we used to have a Flight Safety Committee, and an

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AOHS, or Aviation Occupational Health and Safety Committee. We had the two, and we said, well, why are we running two different committees when it's the same safety program, so let's blend the two, bring not only operations together with the workers that are not necessarily engaged down the hanger or on the flight line, but pool everybody together so we can educate each other and work issues together and raise any concern, and that's where the initiative came and it's worked out great because we have representation from every department on one committee, not only talking about health and safety or AOHS, but we're talking about flight safety as well.

MS. FAGAN:

Q. So before when it was divided, I take it what you're saying is there was not representation from every department?

MR. BANKS:

A. It was a little tough, yeah, we --

MS. FAGAN:

Q. On both committees, because you had two committees running?

MR. BANKS:

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A. Right, and that second one, the Flight Safety Committee, was also dealing with their own internal OHS things within it, not just flight. So that's where it really told us that these guys are working one area, and on the other side we had strictly OHS. So to combine the two, we have representation right across the departments from the organization.

MS. FAGAN:

Q. So where were the pilots and the maintenance engineers when the -- were they on the Occupational Health and Safety Committee, or were they on the Aviation?

MR. BANKS:

A. They were on the Flight Safety side.

MS. FAGAN:

Q. They were on the Flight Safety side, which also dealt with their own occupation health issues, they weren't on the main general Occupational Health and --

MR. BANKS:

A. Right, and we saw the communication lacking there, so the need to bring them across just fulfilled what we needed for the SMS Committee.

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MS. FAGAN:

Q. When did you combine it so that it's all one SMS Committee?

MR. BANKS:

A. I'd say one year ago now.

MS. FAGAN:

Q. Okay. So that would your -- your SMS includes your Occupational Health and Safety Committee?

MR. BANKS:

A. Right.

MS. FAGAN:

Q. So that would include -- that committee would include the pilots, the aircraft maintenance engineers, and somebody from every department?

MR. BANKS:

A. Yes.

MS. FAGAN:

Q. Okay.

MR. BANKS:

A. You know, when we structured it and developed it, we went along with the guidelines of OHS, so not only did we have pilot representation or air crew, engineering, we had to look at also the representation from management. We didn't want to go more than 10 to 15 percent

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management. So we have one management co-chair and we have one employee co-chair, trying to stay within the regulations with OHS as well, and it's a great idea because you don't want to overburden it with management where this is the workers forum that can bring the concerns up without feeling, you know, that they may be stepping out of bounds or something. So, you know, with that development came a lot of push out from me because I started it up, and I said, well, you know, the people are feeling now it's a little biased because the safety guy is chairing it, so I backed off, and now I oversee it. I'm not participant, I'm an oversight for the committee. I let the workers work this committee and, you know, there's no real plug from safety, but if they need direction or if they need assistance, then I'm readily available.

MS. FAGAN:

Q. Okay. Does Cougar Helicopters have any involvement or positions on the Occupational Health and Safety Committees of the individual oil rigs or platforms?

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MR. BANKS:

A. No.

MS. FAGAN:

Q. If there's a safety event at either the St. John's base or on the helicopter or on the heliport -- the helideck on the oil rig, so we've got St. John's base helicopter, or the helideck, to whom should the oil worker report the safety event?

MR. BANKS:

A. If he's an oil worker, I believe he's got his own avenue and direction of reporting systems to his company, but it's never not -- you know, known that they can't report it to us. In fact, I'd encourage it if it happened in our facility or on our aircraft that I hear about it from them. If not, then, you know, through ProAct and divisional health safety advisors from the oil companies or our customers. That would come to me through that avenue.

MS. FAGAN:

Q. Okay. If there is a safety event, how does Cougar Helicopters advise the oil operators? If you become aware of it yourselves, how do

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you advise the oil operators?
MR. BANKS:
A. Okay, of what, of one of their employees?
MS. FAGAN:
Q. Of the safety event, something that may have come to the attention of Cougar Helicopters, an event that happened at the base? It might not be their employee, it may just be an accident.
MR. BANKS:
A. Oh, okay.
MS. FAGAN:
Q. Let's say somebody slipped -- say, an oil worker slipped at the St. John's base?
MR. BANKS:
A. I got it.
MS. FAGAN:
Q. Okay.
MR. BANKS:
A. I have direct contact with their health safety and environment managers. I would certainly go that route. I'm obligated as well that if one of our employees has a lost time accident or incident, or a medical treatment case, that I immediately notify logistics managers, as

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well as my reporting to their HS&E people.
MS. FAGAN:
Q. So when you say if something happens to a Cougar employee, Cougar's logistics manager, is that who you --
MR. BANKS:
A. No, no, to our customers.
MS. FAGAN:
Q. So if something happens to a Cougar employee, you report that to the oil operators as well?
MR. BANKS:
A. That's right.
MS. FAGAN:
Q. Okay. The next area is the auditing, and you had spoken about internal audits and external audits, and for the information of the parties, Exhibit 181 is an audit summary. We have not reproduced the entire summary in the slides. In the slides, we have only reproduced the internal audits for '09 and the external audits for '09. So the history a little further back is in the exhibit, but we just thought it would take up too many pages to list all of the auditing, and I would like you to first explain the internal audits

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because I believe that's part of your safety management system that you spoke of in the video?
MR. BANKS:
A. And quality, yes.
MS. FAGAN:
Q. And quality. So can you take us through your own processes in-house?
MR. BANKS:
A. Okay, we have -- we have four departments that have auditing plans throughout the year. We have Flight Op, flight operations is one set of internal audits. There's SMS, which is my system, as well as Quality ISO 9001/20008, which is again my responsibility, and then we have Quality Assurance that audits their area of the maintenance. Now you must understand that my area is regulated different than Flight Ops would be because they're Transport Canada, and maintenance would be the same thing, they're under the umbrella of Transport Canada. So my ISO 9001/2008 doesn't dig too far into that because it's already highly regulated. There are areas of ISO that do connect into purchasing, product realization,

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that kind of thing. So there's a little bit that I get into there with probably stores and calibrations, but not on the actual maintenance procedures. That's already highly regulated by Transport Canada. So they'll conduct their own audits, Flight Ops, again Transport Canada, highly regulated, they will focus on their own audits, and myself with my audit plan. So these are constant and throughout the year. Each of us have a system that it's all collected in one area and goes to Q5 Systems, which is a local company in town that in the last year we've utilized and used some of their software that is just a great way of pulling it all together. You know, the oversight from the three of us and the meetings, and -- you know, there's an awful lot of audits going on, so we have a good judge of where we sit with them and we're on top of them at all times. It's certainly an oversight that we've developed over the last couple of years that does us well.
MS. FAGAN:
Q. So on slide 73 and 74, there is a list and the person responsible is the quality assurance

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manager and we're both in, say, the first two is January '09 and one is the hanger and one is the aircraft. So the heading is "Internal Audits", so can you tell us what is comprised, say in those two items? They're both happening in the same month, what's going on there?

MR. BANKS:

A. Right, that's part of his audit plan where he would one month work at that aspect of the operation, audit it to his checklist and the next month would be carry on, it's on a rolling plan, so he has all areas that he needs to cover broken down in a 12-month period.

MS. FAGAN:

Q. Okay, what is the reporting process for the results of these internal audits and inspections? What happens with the results?

MR. BANKS:

A. Well, you know, depending on the department, that would be brought up through--his director of maintenance would end up with the results, as well as, you know, it would be brought to a higher level in the manager of where we sit,

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and management review, gets to review all audits at year end. So we break it down and if we have a good review from a team of managers, that is part or our management review and they can see all activity that's happened within the year.

MS. FAGAN:

Q. Okay, you also mentioned the quality management system, ISO 9001 and that has been entered as Exhibit 180, how does the quality management system ISO 9001 fit into this auditing, the SMS and this auditing program--or does it fit, is there a connection?

MR. BANKS:

A. Well it's a certification on its own, but it's a group of systems and processes and procedures that identify how our operation works, so to audit against ourselves on ISO, I go through all departments and make sure that we're doing exactly what our book says. If there's changes to our processes, changes must occur in our manual as well. It's just a way of saying that this is a set guide of procedures and processes that must be followed. We don't deviate from this, it's

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the international standards organization, so that when the registrar comes in and he audits us, then we understand and he understands that we're doing everything, abiding by this book, regulations and internal auditing would catch any deviations. So it's just another oversight to ensure that, you know, we are all on board and nobody straying from different standards.

MS. FAGAN:

Q. Okay. Slide 75 is--the first two were quality assurance manager, what is different about these, it has a different person responsible, is that you?

MR. BANKS:

A. That's the director of safety management systems, that's myself, yes.

MS. FAGAN:

Q. And what are--these are internal audits, I take it these are in addition to what the quality manager is doing, and what are these audits?

MR. BANKS:

A. These are, like you said, internal audits. If you see the first one, that is Halifax pre-

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start-up audit, so that's a SMS audit that I conducted in Halifax before we started operations with EnCana over in Halifax

MS. FAGAN:

Q. Okay, and then YYT is St. John's, so some of these are in different areas.

MR. BANKS:

A. Yes.

MS. FAGAN:

Q. They're not all St. John's.

MR. BANKS:

A. No, this is global.

MS. FAGAN:

Q. Okay.

MR. BANKS:

A. Just like here, you know, we still have the same procedures and processes say in the Gulf of Mexico, North West Territories and so I go out and actually audit those facilities as well and all the operations, as do the qualify manager and the director of flight ops or his chief pilot. Again, it's just another sense of oversight.

MS. FAGAN:

Q. So the other directors will also do auditing

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or go with you to audit?
MR. BANKS:
A. Yes, sometimes with me; sometimes when they're down there doing other things, they'll put their audit in as well, but, you know, no longer than on an annual basis, that's for sure.
MS. FAGAN:
Q. Okay, now I'd ask you to move to the external audits, and what do you mean by an external audit?
MR. BANKS:
A. Well an external audit would be anything that is not completed internally by ourselves. There's, you know, they would have the regulatory through the government agencies, Transport Canada, Transportation Safety Board, we have, you know, there's a number of areas there. Then we have customary audits, so it could be our customers from all operations, it could be down the Gulf of Mexico that not only audit our operations down there, but they come up to headquarters to audit us up there to make sure up in St. John's, so they make sure everything we're doing up there is in line

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with down in the Gulf, just as an example. Then we have all of our customers in town here who are QHS&E, which is Quality Health Safety & Environment auditing us, as well as their aviation advisors, so we have that side of the house as well. Then we have ISO Registrar, which I spoke about earlier and they also perform audits on it and then Transport Canada and other agencies.
MS. FAGAN:
Q. We have had entered as exhibits one Transport Canada audit and a couple of the other annual audits that are prepared by Exxon Mobil and I believe we also had a summary, not necessary the full audits for the oil operators, but at least the summary or the results of audits and then the last one that was entered was a summary that was contained in the PowerPoint of Husky. So, you know, that's smattering, that's four, your list is much longer than four, can you give me--how many audits have there been since 2007, last three years, external audits?
MR. BANKS:
A. We've had 27 external audits.

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MS. FAGAN:
Q. Okay, and how long do the audits take on average, the external?
MR. BANKS:
A. Anywhere from one to five days.
MS. FAGAN:
Q. Okay. How often does Transport Canada audit Cougar Helicopters?
MR. BANKS:
A. Normally annually, once a year, sometimes twice.
MS. FAGAN:
Q. And how long does the Transport Canada audits take?
MR. BANKS:
A. Again, three to five days.
MS. FAGAN:
Q. Okay, we had heard from the oil operators that Exxon Mobil has an aviation expert, there are letters and information in the HOTF report, so those audits, those annual Exxon audits, how long do they take?
MR. BANKS:
A. It varies, but normally two to three days and the good thing there is we're on very good

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terms with them, so I mean, it's a shared, not only audit but education to each other. They're a wide group of experts and we enjoy their presence.
MS. FAGAN:
Q. Would you consider it a resource -
MR. BANKS:
A. Oh yeah.
MS. FAGAN:
Q. Gain information from them.
MR. BANKS:
A. For sure, with all our audits, I mean, we encourage a new set of eyes to come into our operation and pick up things possibly that we may not be seeing, so it's all about proactive.
MS. FAGAN:
Q. Okay, and the Husky audit that was also referred to in their PowerPoint, do you recall how long that one would have taken?
MR. BANKS:
A. I don't know which one we're talking about.
MS. FAGAN:
Q. Oh, well perhaps it's unfair because you may not recall each individual one.

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MR. BANKS:
A. January '09, is that what we're talking about? Well, with any of them, that would be-- Contrail Aviation, they're a third party and yes, you know, we've had three with him this year, I guess, so he's a knowledgeable individual.
MS. FAGAN:
Q. Okay. And what was the total of internal audits since 2007, do you know?
MR. BANKS:
A. Twenty-five.
MS. FAGAN:
Q. What resources are needed during an audit process? If Cougar Helicopter is being audited and it's two days, five days, what does it take on Cougar's part to respond and deal with the auditing process?
MR. BANKS:
A. We've pretty well got it down to a science now as a team, we usually have myself, a qualify assurance manager from engineering, director of flight ops and the chief pilot, director of maintenance and we'll meet to pre-audit, so to set it up is one thing, there are some

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cancellation of trips and things because, you know, we're on their time zone too, so you know, we have to pool it together. Everybody has to be present, we don't want anything lacking, you know, to have representatives there that aren't used to the auditing taking your spot is not desirable, so we try and, you know, be around for it all and there's days that will, okay, the set up, then there's the actual audit days and then there's, you know, the post audit get togethers to ensure that we've closed out.
MS. FAGAN:
Q. Because it's not just the two days or the five days, there may be things to respond to.
MR. BANKS:
A. Oh no, no, yes, there's many meetings after that to clarify things, yes.
MS. FAGAN:
Q. With all of this auditing, has there been any significant or major findings, I mean, how would you category the findings or the results of the auditing?
MR. BANKS:
A. In my eyes and my experience, no, there's, you

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know, no non-conformances, but opportunities for improvement, so you know, things that we'll look at and see if it is in our scope to add or not and move forward. You know, if we were to act on every one of the improvement opportunities, we have a really good look at it, but we don't want to be changing necessarily all of the time too, we need people to understand our procedures and our way of dealing with things. If you interchange so rapidly then, you know, you could be adding risk, so we really scrutinize, have a good look at them and if it works for us, then we'll put them in place. And normally they're very good, you know, they're good improvement opportunities that we'll get around to and if so desirable, we'll put them in place right away.
MS. FAGAN:
Q. But non of them are non-conformance, so if it was a non-conformance issue, then -
MR. BANKS:
A. It's been quite awhile since I've seen a non-conformance, yeah.
MS. FAGAN:

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Q. Is there anything that can be done to improve the auditing process?
MR. BANKS:
A. We're in discussions now with our customers, as well as others, but mainly our customers and I think the best approach forward and these discussions have been for the last six months, but to find a time zone that our team can get together and book once a year and, you know, have a two-week period or a week period where teams of audits or customers conjoined can come in and audit during that timeframe and, you know, have a really good look at the operations and, you know, it can be called a joint audit through all levels and we'd be available for that time and welcome it and not take so much oversight away from the operations. Get it done in one timeframe and we'll move on from there.
MS. FAGAN:
Q. This list here is only for 2009 and I would think I counted 15 maybe or somewhere around 15, 17 audits, would that be about the right number? Would it be in excess of 10 or 15 audits for 2009? This list here, are these

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all individual audits?
MR. BANKS:
A. Yes.
MS. FAGAN:
Q. So if they're 15 and they take 3 days, that's 45 days.
MR. BANKS:
A. Okay.
MS. FAGAN:
Q. Of auditing, if they're all separate and then you have all the start -
MR. BANKS:
A. Right, and that's why discussions have been going on and I think we're going to achieve that, you know, as early as this morning I was talking to one gentleman that, you know, he said he's up and working on it now and we're going to have a good look at it. I think they agree as well, you know, they see that, you know, it maybe getting to the point where, that we need to put in place an avenue and a time zone like that and I, you know, it's agreeable. We just had a joint audit by the customers, QH&S and there was three customers came in, they worked together and I think it

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solidified a lot of things and we had a really good audit and we learned a lot from it.
MS. FAGAN:
Q. Okay, thank you. I have one more question area but it's not going to matter because there is one more section to go anyway, so we can break now and then we'll be back at 3:30.
(BREAK)
MS. FAGAN:
Q. The last section of questions under the safety management system has to do with drug and alcohol testing and I believe there's a slide, 78. And could you please--this is just one of the aspects of your safety management system, could you please describe Cougar Helicopter's randem drug and alcohol testing procedure, your process?
MR. BANKS:
A. Right, the randem testing has been in effect now for about one year for these positions. Initially we had pilots only and then with contract and how we wanted to move forward with safety management, it really came into effect that we required safety sensitive positions, not just the air crew, but the

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people who were working on the aircraft who were working with helicopter flight data monitoring, our traffic staff engaging, you know, the flights with dispatch, flight following, ramp staff and security agents, just to take it to that next level, as well as rescue specialists. We just needed to be above the curve of where we were before, you know. I think initially we were thinking, well it's getting to a point where we have to research this because of, you know, the laws of Canada and protection of individuals, so we researched it and found out it can be done and grouped them together and came up with a good list throughout our organization that we will test now on a monthly basis and again with our providers, Atlantic Offshore Medical Services, AOMS, it's a service they provide to us both in Halifax and here at our operations that electronically generates a name. We give them an employee-base list of all of these positions and they screen, well they screen, get the name and come up and that way we're not involved, the safety department is not selecting, it's an outside non-bias selection

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and it's conducted once a month.
COMMISSIONER:
Q. Do you mean a name in each category of -
MR. BANKS:
A. No, just one individual, it could be any of those -
COMMISSIONER:
qQ. Just one name, I see.
MR. BANKS:
A. So we're getting ourselves 10 percent a year is what--well, 10 percent a month, so that's what we're looking at.
MS. FAGAN:
Q. What do you mean, 10 percent a month?
MR. BANKS:
A. Well through contract it stipulates that 10 percent must be tested on a yearly basis, so in that year we get 10 percent. One individual per month with the number of employees we have.
MS. FAGAN:
Q. So it would be 10 percent of your workforce?
MR. BANKS:
A. That's correct.
MS. FAGAN:

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Q. So if you had a much larger workforce, there'd be more per month?
MR. BANKS:
A. Right.
MS. FAGAN:
Q. And have you had any situations where a pilot or a dispatcher, maintenance engineer has failed the alcohol or drug test?
MR. BANKS:
A. No, never.
MS. FAGAN:
Q. The last section is the changes since the return to flight after the March 12th accident and some of the changes that have been brought forward by Cougar Helicopters and some of-- we're going to address some of the recommendations from the return to service, the HOTF report, so the first thing and I believe Mr. Burt is going to handle this set of questions. I'd just like you to set it up for the group before we get into the changes and I'd like to know how Cougar Helicopters was involved in the return to service process after March 12th.
MR. BURT:

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A. Well together with the HOTF team, we collaborated on analysing the questions that came from the employee group from offshore and onshore. We took that information and had several meetings as we distilled the questions; in other words, there was lots of groups of similar questions, we took that and developed a mandate.
MS. FAGAN:
Q. So are you--we saw in the HOTF report there were three hundred and fifty or maybe three hundred and sixty-five questions that were put forward, are those the questions that you're talking about?
MR. BURT:
A. That's exactly right and we spent actually hours pouring over those and making sure that we grouped them and tried to be as efficient as possible.
MS. FAGAN:
Q. Okay. In addition to the questions, this was your, I guess contribution to the HOTF report was to help with the answers or provide some of the answers.
MR. BURT:

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A. Yes.
MS. FAGAN:
Q. Would that be fair?
MR. BURT:
A. In the background regards to different topics that did come up, of course, you know, we were actually answering and structuring the whole thing at the same time.
MS. FAGAN:
Q. Okay. Did you make any presentation or have any meetings or deal with the HOTF group prior to the questions and how long was the HOTF process and what was your involvement in the process itself, beyond the question section?
MR. BURT:
A. Right, well it was several weeks. We had meetings beyond just analysing the question period, we had presentations absolutely from Cougar's point of view or Cougar's information and we met with their team several times as we developed the best strategy to provide the information and a clear and open format and you know, it was a lot of information to process and we wanted to make sure that it, as a group and we were a group from beginning

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right to the end, as a group we communicated clearly, openly as best we could.
MS. FAGAN:
Q. Okay, and when you mean as a group, do you mean Cougar Helicopters and the oil operators as a group worked together?
MR. BURT:
A. Right, that's exactly right.
MS. FAGAN:
Q. Were the pilots and employees at Cougar Helicopters, did they submit questions, you know, the 365 questions were their questions part of that 360 questions?
MR. BURT:
A. No, that was the employees of the--and family members of the offshore oil and gas companies. We had our own process at Cougar.
MS. FAGAN:
Q. And what was that process?
MR. BURT:
A. We took our different areas of discipline in our organization, flight operations, maintenance, our rescue specialists and our administration and we assembled a team out of that group and that team was given a mandate

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to represent the company at large and we wanted to collect all the questions, inquiries we had from that and we took those six--because it was a little bit of a similar analysis we did within our own company. Again, we boiled that down to questions and had an opportunity to speak to the group at large. That team took that information and we want forward and disseminated that information to our employees and it was a very effective process.

MS. FAGAN:

Q. The oil operator's presentation included a slide on--and in particular it was 118 of the joint panel, and that listed the changes that occurred at Cougar Helicopter prior to returning to flight.

MR. BURT:

A. Right.

MS. FAGAN:

Q. And I understand that slide 79 has some of those items restated and can you please describe, from Cougar's perspective, what the changes were and then we'll get into the recommendations of the HOTF report which are

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in addition to these items.

MR. BURT:

A. Yes, and certainly I recognize this, I was involved in numerous presentations. So based upon the information we had learned as we went to the return to service process, we had a revision of our emergency procedures and our normal checklist. Now we got together with Transport Canada, we sat with them, looked at this checklist and said is there a, based upon what we know now today, is there a more efficient or more relevant way we can structure and add to the content. So with Transport Canada, we sat down and said yes, what we effectively did, we moved, for example some of the emergency section forwarded in the checklist, we had a couple of comments to clarify things, and then we took that together and I'll combine the two of them if you don't mind.

MS. FAGAN:

Q. Yes.

MR. BURT:

A. The first two points with a revised dissent profile. Again, based upon the knowledge that

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we now had--and we also added the manufacturer on this, to revise a dissent profile to be as efficient and lined up with the manufacturer as possible for, you know, for these emergencies. So we developed the checklist procedure and revised dissent profile and together with Transport Canada, we took that and went down to West Palm Beach in a simulator. And so we took it and used it in the simulator in a similar events as we replicated March 12th, had a look at the scenarios there, different, you know, main gear box scenarios and we tested for those procedures and that actually was very, very validating of where we went with it. So again, we took those back and brought those back to our pilot staff and as required by Transport Canada, any changes we make like that, they have to have the training done and annotated before we do that.

MS. FAGAN:

Q. Okay, thank you. The last one is the change of the location of the auxiliary tank. Now that issue has been dealt with, I understand it has been changed, the presentation by the

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joint panel indicated that it had been changed. I understand it's certified to be on either side of the aircraft, is that correct?

MR. BURT:

A. Correct or two tanks on, you know, one on one side, one on the other, together.

MS. FAGAN:

Q. Okay. One issue that hadn't been covered but it has been raised is could you explain why the auxiliary tank is located inside the aircraft and not mounted externally?

MR. BURT:

A. Sure.

MS. FAGAN:

Q. Could we just take these tanks and strap them to the outside instead of having them inside?

MR. BURT:

A. Right. That's a question that we really, you know, obviously we own that answer because we developed this tank, "we" being Cougar, the operator developing the spec and the need, together with our sister company, VIH Aerospace and a team throughout North America as we developed it and we said, you know, what do we want to add additional range to the S-

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92. We've already talked about why we need to go further with the aircraft, so we surveyed the aircraft and realized that on the exterior of the aircraft there was really no real estate that was available on our analysis that wouldn't either block an exit, be quite onerous to the aircraft and from, again, from our design engineering point of view and again, there's a return on time and effort and investment as to what you can do on the outside of an aircraft, so clearly our solution was to design an appropriate operationally oriented auxiliary fuel tank that fit inside the aircraft. So we came to that conclusion and we designed that tank to the latest and greatest FAR/JAR 29 compliance standards. It's the same build standard as the new technology aircraft.

MS. FAGAN:

Q. I understand that if there's anything on an aircraft, Transport Canada's witness said that if there's anything on an aircraft, it must be certified by Transport Canada.

MR. BURT:

A. Uh-hm.

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MS. FAGAN:

Q. So this is something you designed, not Sikorsky?

MR. BURT:

A. Yes. No, we designed this and used an engineering team and a team of manufacturing experts, including our own expertise and then submitted it to Transport Canada for approval.

MS. FAGAN:

Q. Okay, and I believe you indicated it's certified to be located on either side and that certification is Transport Canada?

MR. BURT:

A. That's correct.

MS. FAGAN:

Q. So how long did this process take?

MR. BURT:

A. It probably took us a total of almost a year and three quarters to develop this tank.

MS. FAGAN:

Q. To develop the tank and get the certification?

MR. BURT:

A. Yes.

MS. FAGAN:

Q. I now ask you to move into the--we're going to

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cover some of the recommendations, we're not going to cover all of the recommendations. There were 18 in total and some of the recommendations have been dealt with throughout your presentation, such as recommendation No. 2 was Cougar safety management system and we just heard that the system has now been fully implemented, so we need not go back down through some of them. But there are a couple of the recommendations that I don't believe were covered in the main presentation so far and I'd ask you to look at slide 80. Slide 80 covers the floats, we had heard that consideration is being given to the installation of additional floatation on the S-92 to allow sea state 6 capability and can you tell us is consideration being given to such a floatation system?

MR. BURT:

A. Yes, again as a team we talked about this together and what I mean is the HOTF committee and Cougar, as a team we talked about this. Cougar brought forward the technical background as to what is available in regards to what is called enhanced emergency

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floatation as verses what we had and have right now is the emergency floatation. When we discussed this, I think it was really within a 24 hour period it was a decision made by all three operators to go ahead and immediately order this enhancement, it's there, it was just approved for the North Sea and employed in the North Sea, so therefore they asked us to order it and we did so.

MS. FAGAN:

Q. And so all three oil operators decided, I take it fairly quickly to order the floatation, they've been ordered, do you have a date when you expect the floats to be installed and how long will it take to install?

MR. BURT:

A. The floats have been ordered and they should be available for installation around June, July timeframe and what we're doing right now is actually opening up slots of aircraft, it's about a ten-day installation process for each aircraft, but that decision has long been made and we're now into the process of implementation.

MS. FAGAN:

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Q. Okay, and how will the float modification improve safety?

MR. BURT:

A. The floatation system, first of all, is an emergency floatation. This aircraft is not an amphibious aircraft, it's for emergency situation. The enhanced emergency floatation basically increases stability on the water, so that's the measure of how it does increase the safety and the status of an aircraft that's on the water.

MS. FAGAN:

Q. Okay. The next recommendation that I would like you to cover is number 11, which is the current SAR arrangement. It says here that "the last formal assessment was done in 1997 and that consideration should be given to response time in night flights." I take it that there was discussion about these issues and I do know that the oil operators' presentation included information that the training time has been increased. So can you please describe this whole process?

MR. BURT:

A. Sure.

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MS. FAGAN:

Q. What was being considered and what enhancements have been made and what enhancements are planned?

MR. BURT:

A. And I think it's good to understand that it's not an isolated process that we see here. Right since day one in 1997, when we started here, we've always had a process of engaging all of the oil operators in continuous improvement opportunities. This is another example of that. We've actually succeeded together by using this strategy.

In fact, this strategy of enhancing our first response started in December 2008. That's when we were having discussions about this, and these are fallouts out of what we agreed would be a three-phase enhancement program. So again, it was the first quarter that -- through our discussions that again all the operators unanimously agreed to increase our training hours to 40 hours. Now that was based upon a detailed proposal from Cougar as to what we would do and how that would complement our first response program, and on

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top of that, some of our experience internationally we brought forward in a presentation, again as a group, and again it was well received and we said it's our standard now moving to those three people in a search and rescue format. I think we talked about that, the cabin attendant, the hoist operator and the rescue swimmer. And they agreed to move toward that scenario and we hired, at their approval and concurrence, additional staff to do that.

On top of that, what we did do is instead of having the search and rescue crews mingle through the regular crews flying the line passengers, they fully supported us in retaining dedicated pilots and dedicated rescue specialists and that had a significant increase in the numbers and there was a cost increase with that and that's been implemented and that's in effect now.

MS. FAGAN:

Q. And when you say a cost increase, this is a cost that's being borne by the oil operators?

MR. BURT:

A. Yes.

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MS. FAGAN:

Q. Okay. So they're paying for these additional enhancements?

MR. BURT:

A. All those additional changes is borne solely by the three operators, yes.

MS. FAGAN:

Q. You said it was a phased in approach, so I -

MR. BURT:

A. Right.

MS. FAGAN:

Q. - I'll let you carry on with what else is planned.

MR. BURT:

A. Sure, and that's phase one. Phase one is that we have changed our posture together as a group. We have dedicated crew. We have an increased flight training hour scenario now. Phase two for us is, again, following through as we talked about the certification for auto hover. So we've had discussions now for months with the operators about auto hover and we've advised them that the certification is pending. So in our discussions with them, they have said that their intent is to follow

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through and acquire the auto hover for all of our aircraft.

Now I will say that when we purchased the aircraft and they were specked out in the beginning, all of the operators asked us to make sure we had provisions for dual hoist and also provisions for auto hover, whether we used them or not. So there was actually a material change to the aircraft to accommodate that, to the point where if we went and completed our auto hover installation, it's really a software change. That's all we have to do once it's certified.

So we're looking forward to that time and again, all three operators are moving forward with the intent to employ that auto hover system.

MS. FAGAN:

Q. So when you say when you specked out the aircraft, are you talking -- it's a while now, but yesterday we looked at the fleet transition.

MR. BURT:

A. Right.

MS. FAGAN:

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Q. And there were a number of dates, and I believe we were back in at least three or four years ago.

MR. BURT:

A. Yes.

MS. FAGAN:

Q. So are you saying it was -- is that when the specking of the aircraft took place?

MR. BURT:

A. That's when the discussion with all three operators took place, and in that, we put forward the growth, the potential of the aircraft, and I think it was important for all of us as we discussed with our customers to say, you know, we should really maybe consider the growth of this, where are we going, and we knew at that time the trend was moving to a dual hoist installation as a standard. So every aircraft has that provision. And we knew that, you know, auto hover would have benefits somewhere in the future. So we installed a second radar altimeter and that's really the only other hardware installation that we need to accommodate auto hover. So those provisions are all embodied in the

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current aircraft.

MS. FAGAN:

Q. And however, you can't -- as you'd said earlier, the aircraft is physically pretty well able to deal with auto hover.

MR. BURT:

A. Yes.

MS. FAGAN:

Q. You just can't actually use it until this certification process -- we still have to wait for the certification process?

MR. BURT:

A. Right, and you know, as IT people don't like you to say it's just software, but it is just software. But it's a certified level one software that will allow us to do these very intricate approach patterns, control the hover and all that, and of course, we do have to add that control pendant in the back for the rescue specialist and a few minor things like that.

MS. FAGAN:

Q. Okay, and I think that would cover this particular recommendation. The next item is the -- there were two items. One was the

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reenforcement of the seatbelt usage. I believe Mr. Williams was going to speak to this. It's pretty close to covered in any event, but this was the recommendation. There's not a slide for it, but this was the recommendation which dealt with ensuring the correct usage of passenger seatbelts is reenforced, and I believe this might have been on the helideck or is this at both locations?

MR. WILLIAMS:

A. It's a bit of both, at co-locations. Of course, we're back talking about the new suit and making sure the seatbelt's attached over the shoulder. So there's a process in place, if you notice by the video, when the passengers are seated at the heliport, the ramp agents will go aboard to ensure that everybody is fastened in properly and their seatbelts are fitting, and that same process takes place offshore under the oversight of the HLO team. So when they refer to reenforcing it, we went through a process and you will find memos and documentation that we made sure our people at the heliport were clearly instructed to the proper way the

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seatbelt should fit over those suits as well as offshore. So it was a joint incentive to make sure that we really addressed the seatbelts and before we close the door on that aircraft and said good for flight, that we made sure the seatbelts were securely fastened to everyone, for sure.

MS. FAGAN:

Q. Okay. The last slide is slide 82 and it has to do with the location of the goggles and I believe that this -- you don't really need to address 82. You can move to it, but the video and then the discussion after the video, it was clear that the goggles are now moved from under the seat to the location as depicted in the photograph.

MR. WILLIAMS:

A. Absolutely. The HOTF committee put forward many items and this was a great catch, for want of better words, that it was difficult to get to the goggles beneath the seat. So together with our ops manager, in conjunction with the operations folks, we've been able to put them in an alternate location, making modifications to -- as you saw today, the

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video, I think, just showed text to identify and that's being redone. So the goggles are moved to a location right now that's easily accessible to everyone.

MS. FAGAN:

Q. Okay, thank you. The last couple of questions, I believe I'll direct these to Mr. Burt and it's really looking to the future. You know this Inquiry is looking at improving safety and we've heard quite a bit of information about your experience and where you operate. So if -- well, it's not if you're asked, I'm going to ask. We're looking at safety and improving safety. Where would you suggest we should look, as a group, for best practices? I'm talking what areas of the world would you suggest would be beneficial for best practices in helicopter transportation?

MR. BURT:

A. And let me qualify that, because I am the chairman of an international offshore committee of operators, which oil companies and operators do attend. So it's near and dear to my heart to speak to this point. It's

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been clear in my experience that the most mature experience in the offshore aviation is clearly the North Sea and the Norwegian sector. I almost regard them as the same, the UK and Norway. They've led in regulation. They've led in standards, technology and also volume of aircraft. They've got a long and mature history. Their regulatory agency has embraced the development of standards and research for years and I think without a question, without a doubt, that would be the most significant place, the most reputable place I would go.

MS. FAGAN:

Q. Okay, thank you. On the topic of emerging safety practices and standards, what would you see as emerging practices for aviation safety? Where do you think the aviation safety world is going, from helicopters' perspective?

MR. BURT:

A. And I've given that a lot of thought too.

MS. FAGAN:

Q. Okay.

MR. BURT:

A. I bring my fixed wing background into this and

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I've always been quite perturbed about how the rotor industry sometimes treats itself as versus the fixed wing or airline industry. We are operating some of the most sophisticated aircraft in the world. These are large transport aircraft and we're transporting a number of -- a large volume of people in an airline fashion. I think we need to standardize our training requirements. If you are flying even a medium to a large aircraft in North America, you're required to do training twice a year and qualify twice a year. Other places around the world, even in rotor craft, you are required to train twice a year and certify twice a year. Right now in Canada, it is not a requirement. It's a requirement to train once, and what I mean by that is we'll go to the simulator, do our training, do our recertification. We do our IFR recertification and our aircraft type recertification. But when I flew fixed wing, you went in mid year and you also recertified with and did a line oriented flight trip and a certification. That I believe should be standard in our business, especially in this

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offshore area.
MS. FAGAN:
Q. You have a fair history in this area and you've seen a number of changes, I take it. Where would you see the industry going and you know, perhaps where have we come from? This number 11 recommendation says there hadn't really been an assessment since 1997.
MR. BURT:
A. Um-hm.
MS. FAGAN:
Q. From the east coast, is there any other trends or anything else that we should consider?
MR. BURT:
A. Sure, absolutely. That was point one that I made there.
MS. FAGAN:
Q. Oh, point one, sorry.
MR. BURT:
A. And I also feel quite strongly that right now that maintenance training and ongoing maintenance training in Transport Canada is not a regulated -- it's not stipulated in detail like the flight operations is. I think that needs to be enhanced and I think it needs

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to be regulated. Maintenance, they perform very intricate and detailed work and they have no less of a reason to train as a pilot would. In our company, we have taken a proactive approach to that and we've installed individuals who it's their responsibility and programs to train. That's a proactive thing with us, but I think it should be clearly a standard.

I also believe that, like in the UK, that here in Canada there should be a SAR, a search and rescue standard developed by Transport Canada as the CAA does.

Additionally, I think that, like the CAA in the UK, that we should have an offshore standard developed in our Transport Canada -- under Transport Canada, and this again is a standards document. It's not a Canadian Aviation Regulations but it is a standards document.

Additionally, I think that any of our survival training facilities that we have, and institutions, should have specific design to the type of aircraft that we're flying. If we are flying an S-92, when we do dunker

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training, we should be training in something that represents an S-92, in push out windows and seats and seatbelts, and I'm -- you know, that's just clear to me, and I've done enough of them to speak to that.

Just two more. I think that there should be seriously looking at developing offshore approach lighting systems. There really doesn't exist anything that is a certified offshore approach light. This is not the green lights. This is a lighting system that helps us approach the rig. We have conducted, together with our customers here, our oil companies here, two different studies on laser lighting and high intensity approach lighting, which was a Hibernia initiative, and they have helped us move that forward, but it's not just a one industry one customer effort. It is also a regulatory thing that we should be looking at.

And then finally, I think that our initiative for moving forward with a dispatch system, yes, it's required in an airline, even a Dash 8, if you have more than I think it's three or four Dash 8 size aircraft, you must

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have a dispatch system in Canada and the United States. I see absolutely no reason why we would not have a system like we have implemented here together with Transport Canada and have that as a broad base requirement for transport size rotor craft aircraft.

And I think I feel better.
MS. FAGAN:
Q. Thank you very much. That is it for my questions. I appreciate all the information all three of you have given us. I'd like to thank you and your group, because there's been an awful lot of work and the directors of all of your departments have spent hours and hours and hours. I finally said on the weekend I now know all the ins and outs of how to get around Cougar Helicopters' office and that only speaks to how much access you've given me and how much information you've given me. So I appreciate that and the Inquiry appreciates that.

You're now going to be subject to questioning by this group and I leave it to the Commissioner as to how he'd like to direct

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and start that.
COMMISSIONER:
Q. Before we go start that, just one observation I'd like to make and get your reaction, helicopters like the S-92 are what is called "heavy lift", is that correct?
MR. BURT:
A. Yes, heavy category.
COMMISSIONER:
Q. It seems to me that with the latest drilling development we're getting fairly close to the edge of the Continental Shelf, the distance is considerable, a fact that you have to have two tanks to safely get out there and get back. Are the present generation of heavy lift helicopters, are they getting near their limits?
MR. BURT:
A. I believe the industry in the last few three years has referred to it that the 300 is the new 200. 300 nautical miles out is the new standard, and design build of an aircraft is a process that can take 10, 12, 13 years.
COMMISSIONER:
Q. Yes.

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MR. BURT:
A. So this latency in the design versus need is not quite catching up with each other. So I think your observation is correct, the requirement to go further is definitely out there and 300 nautical miles is basically a new baseline. It needs to be looked at.
COMMISSIONER:
Q. I've read about what they call the extra heavy lift or something like that, a more -- I don't now if it's larger or more powerful helicopters. Do they have a greater range, is there anything --
MR. BURT:
A. Not necessarily.
COMMISSIONER:
Q. No.
MR. BURT:
A. No, and you can go to orders of magnitude beyond that. There are, for example, like the Chinook helicopters, the bigger tandem motor aircraft that, I think, do have some payload opportunities to do that for those distances. There's also, of course, the new generation tilt rotors which are like the V-22 in the US

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Military, which take off vertically and fly like an airplane, but that's new technology.
COMMISSIONER:
Q. Yes.
MR. BURT:
A. That's a big leap, and understandably making big changes like that is -- we talked about management of change. It's something that as an industry we wouldn't be jumping into, but it's a consideration because of their speed and ability to travel that far.
COMMISSIONER:
Q. By the sound of it, it's years out?
MR. BURT:
A. I would expect that we are talking years, a decade.
COMMISSIONER:
Q. This business of having to have two tanks, of course, will cut down on passenger carrying capacity fairly significantly, wouldn't it?
MR. BURT:
A. Well, as soon as you're required to fly as far as 274, like we're going, your payload will drop off anyways. So if you put two tanks in, it's not a matter of not enough seats because

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you're just not carrying any more than out to that distance probably about nine passengers. Albeit, that was our maximum load with the Super Puma to the Husky White Rose location. It does allow us to get our work done. We can get our work done fairly efficiently to those distances, but there's no more growth beyond that point. At 300, and in some cases, as I said with harsh weather environments, less than 300 is the max. We have tasked out everything that we have right now.
COMMISSIONER:
Q. On another matter, I'm glad to hear you say that the North Sea is the most comparable environment to ours because I have directed my reading and thinking and seeking of information toward the North Sea, and at times I've wondered, you know, should we be looking as an Inquiry elsewhere, so I'm relieved in a sense to hear you say that the North Sea is where we ought to go and look, perhaps to Brazil, thinking of what they're doing, or what they're doing in Australia, different climates, different sea temperatures.
MR. BURT:

A. And again it's not a disparaging remark on any other authority, but I don't believe, for example, Australia, although they've embraced SMS, when we went to Australia and went flying there, as we did in the United States, we said, look, we have this wonderful oversight system, this dispatch, and no matter how hard we tried, they would not accept this, even having a higher standard, even though they do it for their own fixed wing. That bothered me, there's no doubt about that. So I just, in some regards, don't -- I would not -- for offshore aviation, I don't think that they're anywhere close to where the North Sea is, respectfully.

COMMISSIONER:

Q. I'm interested to hear you say that also, and, of course, we have, and the oil operator representatives who were sitting there a couple of weeks ago, said that, you know, we are perhaps, in their experience, the most, among the most, if not the most highly regulated -- people sometimes rail against regulations, but I suspect in the offshore helicopter transport field, regulation is a

good thing. Would you agree with that?

MR. BURT:

A. I'm very much of the opinion that the Canada Newfoundland Offshore Petroleum Board is a large reason why we have the standard and the safety -- levels of safety that we enjoy here on the east coast of Canada, including the Nova Scotia Board in Halifax.

COMMISSIONER:

Q. Uh-hm.

MR. BURT:

A. And I've been here 30 years doing this, so maybe I have something to say about it.

COMMISSIONER:

Q. Well, I would certainly like to thank all three of you. It's been one of the more interesting two days that we have experienced here doing the Inquiry. So I do express my thanks. On the question of questions, a bit late I should think to start, and those who have questions would no doubt like to have the evening to think about it, so if you're all in agreement, I think it's wise to start questioning tomorrow morning rather than attempt any questions now. So in that case,

we'll adjourn until 9:30.

(CONCLUDED)

CERTIFICATE

We, the undersigned, do hereby certify that the foregoing is a true and correct transcript of a hearing heard on the 3rd day of February, 2010 at Tara Place, 31 Peet Street, Suite 213, St. John's Newfoundland and Labrador and was transcribed by us to the best of our ability by means of a sound apparatus.

Dated at St. John's, NL this
3rd day of February, 2010
Cindy Sooley
Discoveries Unlimited Inc.
Judy Moss
Discoveries Unlimited Inc.

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