

**OFFSHORE HELICOPTER SAFETY INQUIRY**

*February 2, 2010*

*Tara Place, Suite 213, 31 Peet Street*

*St. John's, NL*

February 2, 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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1 February 2, 2010  
 2 COMMISSIONER:  
 3 Q. Good morning, ladies and gentlemen. Ready,  
 4 Ms. Fagan.  
 5 MS. FAGAN:  
 6 Q. Yes, Commissioner. Today we are going to have  
 7 a presentation from Cougar Helicopters Inc. I  
 8 anticipate that it will take today and  
 9 tomorrow, or at least a portion of tomorrow to  
 10 present their direct information. We have  
 11 three presenters on behalf of Cougar  
 12 Helicopters and I'll have them all introduce  
 13 themselves. The first presenter is Rick Burt,  
 14 and he is the General Manager of Cougar  
 15 Helicopters Inc., and Senior Vice-President  
 16 Oil and Gas of VIH Aviation Group, which is  
 17 the parent company. We also have Mr. Hank  
 18 Williams, who is the General Manager East  
 19 Coast for Cougar Helicopters, East Coast  
 20 Canada. We have Richard Banks, who is the  
 21 Director of Safety Management for Cougar  
 22 Helicopters at the St. John's base. I would  
 23 ask that each one of the witnesses be sworn.  
 24 MR. RICHARD WAYNE BURT (SWORN)  
 25 MR. BRADLEY HANK WILLIAMS (SWORN)

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1 MR. RICHARD DANIEL BANKS (SWORN)  
 2 MS. FAGAN:  
 3 Q. Before we begin the presentation, I would like  
 4 to have the exhibits entered, and I'll just  
 5 explain what the exhibits are and the numbers  
 6 for the record. There is a PowerPoint  
 7 presentation which is Exhibit 155. There are  
 8 also two videos. The video -- one video which  
 9 is a production that was prepared by Cougar  
 10 Helicopters to assist this Inquiry and to give  
 11 us a virtual tour of what Cougar Helicopters  
 12 do on a day to day basis. That is Exhibit 156  
 13 and it's in six parts because we will play  
 14 that in segments and deal with questions after  
 15 each segment. We also have another video  
 16 which is Exhibit 182, and that exhibit is the  
 17 pre-flight safety video which is played prior  
 18 to the boarding of the helicopters for the  
 19 passengers to view. In addition, we have a  
 20 number of pamphlets and company records. So  
 21 the exhibits will run from 155, the  
 22 presentation, through to 182, which is the  
 23 pre-flight video. So if they could be  
 24 accepted as exhibits, we can then have the  
 25 public exhibits posted on the website. I note

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1 that in that group of exhibits there are some  
 2 confidential exhibits which won't be posted on  
 3 the website. They consist of company manuals  
 4 and company documents which are proprietary.  
 5 What will be posted are a number of pamphlets,  
 6 certificates, the videos, and the PowerPoint  
 7 presentation. Before we begin the PowerPoint  
 8 presentation, I understand Mr. Burt has a  
 9 opening statement.  
 10 COMMISSIONER:  
 11 Q. Good morning, Mr. Burt.  
 12 MR. BURT:  
 13 A. Good morning, Commissioner Wells. I'd like to  
 14 thank you for the opportunity of coming here  
 15 to speak today and through these days, and I'd  
 16 like to make some opening comments. The events  
 17 of March 12th changed my life forever, there's  
 18 no doubt about that, and I, like many  
 19 Newfoundlanders, have been profoundly affected  
 20 by the events, and I can only imagine what the  
 21 families and friends have been going through  
 22 as they've been going through this struggle  
 23 from the events, and I just wanted to offer my  
 24 condolences and my deepest sympathies to the  
 25 families. Also I found it quite profound, Mr.

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1 Decker's statement and testimony. I think it  
 2 took amazing courage for him to come and speak  
 3 in the way that he did. I'd like to thank him  
 4 for his openness. For me, it was very, very  
 5 impacting. Cougar Helicopters too lost a lot  
 6 of friends on March 12th. It was a pretty  
 7 devastating day for our organization, there's  
 8 no doubt about that. In the nine months since  
 9 that point there's been a time of healing,  
 10 reflection, and review of everything that's  
 11 happened, and this process, I think, is  
 12 essential to continue on with that. I just  
 13 want to say our organization is an  
 14 organization that embodies a safety culture,  
 15 it's basically embedded in everything we do.  
 16 It starts with the leadership, it starts with  
 17 me, it starts with Mr. Ken Norie, the owner,  
 18 and this proactive approach to our safety  
 19 culture is embedded in everything we do. I'm  
 20 very proud of that. It defines us as a  
 21 company. So these proceedings are definitely  
 22 a complement to that and I just want to say  
 23 that we're here to cooperate and to complement  
 24 this in any way possible.  
 25 COMMISSIONER:

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1 Q. Thank you.  
 2 EXAMINATION BY MS. FAGAN:  
 3 MS. FAGAN:  
 4 Q. Thank you. Now we have a PowerPoint  
 5 presentation, but before you introduce your  
 6 PowerPoint and we start to go through the  
 7 sections, I would like you to give us a brief  
 8 description of your history, work experience,  
 9 your background, and I would also like Mr.  
 10 Williams and Mr. Banks to give us that  
 11 information because it will give the group  
 12 here who are eventually going to ask  
 13 questions, as well as those viewing, a context  
 14 in order to know what your background is, what  
 15 your experience is. So Mr. Burt, could you  
 16 start with your background.  
 17 MR. BURT:  
 18 A. Certainly. Currently my position is the Senior  
 19 Vice President of VIH Aviation Group, and  
 20 that's the parent company of Cougar  
 21 Helicopters. I also hold the position as  
 22 General Manager of Cougar Helicopters, and  
 23 that's a global entity now. My beginning, I  
 24 started here, I'm from Newfoundland, grew up  
 25 on the island and graduated high school at

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1 John Burke High in Grand Bank, and then  
 2 proceeded towards the beginning of my career.  
 3 Not quite hold enough to get my pilot licence,  
 4 I did one year in university here until I  
 5 could. I did my training here with a company  
 6 called Sealand Helicopters. Many may be  
 7 familiar with that, the predecessor of CHC. I  
 8 did my basic training here in St. John's. I  
 9 went on to in 1979 start my flying career as  
 10 many pilots do in the helicopter business. Of  
 11 course, I trained on helicopters. I hadn't  
 12 flown any fixed wing or airplanes at that  
 13 time, and flew on the island and Labrador for  
 14 a couple of years, and shortly thereafter  
 15 moved into a new market that the company was  
 16 developing, and that was the IFR offshore  
 17 market.  
 18 MS. FAGAN:  
 19 Q. What do you mean by IFR?  
 20 MR. BURT:  
 21 A. IFR is a term that we used in the aviation  
 22 business to describe the nature of the flying.  
 23 It's Instrument Flight Rules. So it's like  
 24 flying in an airline environment where you're  
 25 flying on instruments and in inclement weather

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1 and bad weather, so you can fly in the clouds,  
 2 and it was kind of a different kind of flying  
 3 than I was doing for the first two years,  
 4 flying forestry in a jet ranger type of  
 5 aircraft, flying wildlife here on the island  
 6 and that stuff, so it was a new and different  
 7 type of experience for me and that started in  
 8 1981. At that time the company was flying in  
 9 Labrador, flying offshore for Petro-Canada, in  
 10 Halifax flying offshore there as well, and I  
 11 began my career as an offshore pilot and came  
 12 up through that process whereby I also got  
 13 involved into the safety department, the  
 14 training department, and in 1982 became a  
 15 captain on one of the Super Puma aircraft  
 16 flying off of St. John's. I moved on then to  
 17 become the company safety officer in September  
 18 '85, between that and August of 1986, and  
 19 helped develop many of the procedures and got  
 20 involved into the management of the company at  
 21 that time. About 1986, I was flying offshore  
 22 and in 1986 the business slowed down here.  
 23 The offshore was in the exploration mode at  
 24 that time, and wanting to stay in this region  
 25 and wanting to stay in Atlantic Canada, I then

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1 trained for and completed my fixed wing  
 2 training, and went over in 1986 and worked for  
 3 Air Atlantic in Halifax for a year and we flew  
 4 the Dash 7 and the Dash 8 aircraft there in a  
 5 regional commuter basis. One year later, I  
 6 was approached by -- at that time the company  
 7 was moving over to now becoming CHC, and in  
 8 1987 they asked me to come back to St. John's  
 9 and take the chief pilots position, and again  
 10 this is now going back to the rotor wing IFR  
 11 offshore environment here in St. John's. I  
 12 came back here, accepted the position of chief  
 13 pilot and -- from 1986 to 1989, and while I  
 14 was here, we not only had the responsibilities  
 15 of flying offshore here, but I was also a  
 16 offshore line captain, I was flying at that  
 17 time. I was an approved check pilot and that  
 18 was a designated position by Transport Canada  
 19 to fly with pilots and renew their licences  
 20 and to do aircraft type checks. So we had a  
 21 bit of a multi-role capability at that point,  
 22 and we also were -- I was also responsible for  
 23 our operations in South America. We had crews  
 24 flying Super Pumas in the jungle in Ecuador  
 25 and we would go in there with three aircraft

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<p>1 and I was supporting that as well. Shortly                  2 thereafter we had another cycle in our                  3 business here because we were still in                  4 exploration in 1989, and again I didn't want                  5 to leave the area, so I went over and started                  6 employment with Air Nova and that was based                  7 out of Halifax at that time. It was an                  8 interesting two years I spent there from '89                  9 to '91, flew the BA-146, the four engine jet                  10 that they had there, and I flew throughout                  11 Atlantic Canada and charters to the States,                  12 and that was an interesting time because I                  13 completed then my airline transport rating for                  14 a fixed wing aircraft, and for me that was a                  15 big goal in my career to do that. So now I                  16 was basically compliant and fully capable in                  17 both fixed wing and rotor wing from an airline                  18 transport point of view. In 1991, I moved                  19 over to Cougar Helicopters, and that's really                  20 where I started with Cougar, and came over as                  21 the chief pilot with Cougar, and again took                  22 over a lot of my knowledge from the airline                  23 business and developed some special procedures                  24 there under that role, and we were working in                  25 Halifax for Lasmo at that time and that was</p>	<p>1 and Labrador for Cougar Helicopters. In 2003                  2 there was a significant change in our                  3 operations. We were -- the company was in a                  4 friendly manner taken over, purchased by the                  5 VIH Aviation Group, and at that point in 2003                  6 I was asked and accepted the position as                  7 General Manager of Cougar Helicopters, and, of                  8 course, that position was still here in St.                  9 John's, but it was more from a corporate role                  10 and a commercial and business development                  11 role, and also a little bit broader than just                  12 St. John's. I continued on in that role still                  13 actively involved in the offshore, still                  14 holding my licences, and still flying, and                  15 then some two and a half years ago now in                  16 2007, I was asked to go to Victoria which is                  17 the head office for VIH Aviation Group and                  18 take the position as the Senior VP of Offshore                  19 Oil and Gas for the Aviation Group, and the                  20 reason for that is that our company was now in                  21 a major global footprint, and they wanted to                  22 bring me out there to help support that effort                  23 as we were moving into markets in China and                  24 Australia, South America, Alaska, the Gulf of                  25 Mexico, and St. John's. Since that point I've</p>
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<p>1 the first offshore oil production operation in                  2 Canada, and continued on there until 1996.                  3 Back up a little bit, in 1993 we started the                  4 process of bidding for the Hibernia contract                  5 and that was through a Request for Proposal                  6 process, and I was the Hibernia bid team                  7 leader. With the experience I had in St.                  8 John's, that's the reason while I had this.                  9 So we bid that contract and fortunately in                  10 1995 we were successful and I was the author                  11 of my own destiny, and in 1996 I moved my                  12 family back to St. John's where we started                  13 preparing for the beginning of the Hibernia                  14 contract. Then in 1997, we began operations                  15 with Hibernia and started here with three                  16 aircraft and that was an opening of a new                  17 chapter for sure in my life and life here with                  18 my family. From that point on, we developed                  19 that work, we brought on different customer --                  20 a larger customer base here, and then as time                  21 went on, in 2003 -- actually during that                  22 process I came over here as the base team                  23 leader and that was my initial point. I was                  24 flying offshore here still quite actively and                  25 transitioned to a role of VP for Newfoundland</p>	<p>1 been in Victoria. I still do hold the role as                  2 General Manager of Cougar because we are a                  3 global company now as well, but I'm                  4 responsible in this capacity now for the                  5 vision, the business development of the group                  6 of companies, not just Cougar, but all the                  7 companies, and primarily looking at focusing                  8 on our development of our market and the                  9 growth of our company. That's where I sit                  10 here today.</p> <p>11 MS. FAGAN:                  12 Q. Thank you. That, I think, will be very                  13 helpful for the group and when they're asking                  14 questions, they'll know where you were at the                  15 time when they're focusing. Now, Mr.                  16 Williams, I understand you're the General                  17 Manager for East Coast or Canada East. Could                  18 you please give us some of your background and                  19 experience so that the group will also have a                  20 context.</p> <p>21 MR. WILLIAMS:                  22 A. Okay. I guess I'll start off by saying I'm                  23 originally from Triton and as most                  24 Newfoundlanders, my first pay cheque came from                  25 a fish plant back in Triton, but I want to</p>

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1 start with 1990 is when I moved to St. John's.  
 2 I came into St. John's as a result of --  
 3 basically moving because of a disability my  
 4 son had and needed to be St. John's, and  
 5 started to look for employment. I was  
 6 fortunate in 1990 to get hired by the Pike  
 7 Group of Companies, the owner, Roger Pike, of  
 8 course, basically as Operations Manager for  
 9 all of his ground transportation activity, but  
 10 also Air Labrador being a part of that Pike  
 11 Group of Companies was my first taste of  
 12 aviation, and I guess most people say once you  
 13 get the first spell of jet fuel in your  
 14 nostrils, it's hard to do anything else. So I  
 15 really became very interested in aviation and  
 16 from that point of view. I did that for three  
 17 years and then moved on to work with Hudson  
 18 General Aviation at the St. John's Airport.  
 19 Hudson General Aviation was providing ground  
 20 support services to Canadian Airlines at the  
 21 time and a bunch of other airlines. I got  
 22 very involved in ground activity, ground  
 23 support, and the logistics around working  
 24 aircraft while on the ground. I did that for  
 25 a couple of years and I then moved into some

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1 self-employment opportunities where I had some  
 2 various contracts, and in 1996 I had, I guess,  
 3 a chance meeting of Mr. Burt. I think I  
 4 banged into his literally at the airport,  
 5 where we got into conversation and found out  
 6 what Rick did with Cougar Helicopter. It  
 7 sounded very interesting and they had just won  
 8 the Hibernia contract, and again very  
 9 interesting. I think the first night I had a  
 10 conversation with Rick, I probably spent eight  
 11 or ten hours on a computer learning about  
 12 Hibernia, what they were, what they're all  
 13 about, and Cougar Helicopters. So very  
 14 interesting. So during my thought process of  
 15 knowing Rick, meeting Rick, we became engaged  
 16 in would I be interested in a position with  
 17 Cougar Helicopters as they started the  
 18 Hibernia program. Of course, very interested.  
 19 So in 1997, February 13th was the date in  
 20 1997, I became a Cougar employee. My position  
 21 was a title of Passenger Movements Coordinator  
 22 at the time, and that was in very, very close  
 23 liaison with the Hibernia Management Team and  
 24 the logistics folks there of developing  
 25 procedures, processes around managing

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1 passengers, and more specifically the  
 2 implementation of a POB System, Personnel on  
 3 Board, because one of the prerequisites of  
 4 operating there was we needed to establish a  
 5 system that accounted for individuals being on  
 6 a platform and the prerequisites for being  
 7 there. So I guess the first major role that I  
 8 played in this offshore oil and gas industry  
 9 was in conjunction with Hibernia was in the  
 10 implementation of the POB System and  
 11 establishing the procedures for movement of  
 12 passengers, security, and cargo to and from  
 13 offshore locations. In 2005, I got a  
 14 promotion to Base Operations Manager. When I  
 15 moved into the Base Operations role, I got  
 16 more involved from the day to day operations  
 17 as well as the business and commercial side of  
 18 the activity at Cougar. I learned a lot from  
 19 Mr. Burt and my predecessor on what's involved  
 20 in an operational environment to manage  
 21 helicopters, to manage an operation the size  
 22 of ours, and working very closely with our  
 23 department heads, our Director of Maintenance,  
 24 Director of Flight Ops, and our safety  
 25 systems, but was the Base Operations Manager

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1 responsible for basically the contract  
 2 delivery. What we had committed to do to our  
 3 oil companies and provision of services to  
 4 making sure that that was done safely and  
 5 efficiently as possible. That ends up to my  
 6 present role, which is relatively new. In  
 7 2009, I was appointed as the General Manager  
 8 for East Coast Canada with the provision of  
 9 general oversight of the contracts,  
 10 operations, and the commercial and logistics  
 11 side, not only for St. John's, but we do have  
 12 an operating base in Nova Scotia as well, and  
 13 as Rick referred to yesterday, I think, it was  
 14 points north he said, points north. So that  
 15 brings us today where I'm the General Manager  
 16 for Cougar Helicopters. I will say I'm part  
 17 of a big team at Cougar, and with the Flight  
 18 Ops Department and the Maintenance Department  
 19 and safety team, we operate a team at Cougar  
 20 and I try and support that as much as I can  
 21 and provide as much oversight as I can.  
 22 MS. FAGAN:  
 23 Q. Thank you, and now to Richard Banks, and could  
 24 you please give us some information on your  
 25 background.

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1 MR. BANKS:  
 2 A. Sure. My name is Richard Banks, currently the  
 3 Director of Safety and Quality, ISO side of  
 4 the house for Cougar Helicopters globally. In  
 5 1980 -- I'm from Toronto originally. In 1980,  
 6 I joined the Canadian Armed Forces, Air Force  
 7 Division, serving 22 years as a search and  
 8 rescue specialist, primarily fixed wing and  
 9 helicopter operations, parachute rescue  
 10 missions, dive operations, hoisting operations  
 11 in mountain rescues across Canada and into the  
 12 States, and I did also serve a few bases as a  
 13 flight safety officer and liaison to the  
 14 Flight Safety Division in Winnipeg. After 22  
 15 years, and spending nine years in Gander as a  
 16 search and rescue technician, and falling in  
 17 love with Newfoundland, I had the opportunity  
 18 to be asked to join the Cougar team as a  
 19 rescue specialist. So in 2002, I took the  
 20 offer and ended up working as a rescue  
 21 specialist with delving quite heavily into the  
 22 safety management side of the house with  
 23 Cougar. I was a good liaison to assisting the  
 24 development of the safety management systems  
 25 as well as certify the company in ISO

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1 9001:2000, and as we fostered and grew that, I  
 2 left the rescue position and went into Manager  
 3 of Safety for the company, or company aviation  
 4 safety officer position as Transport Canada  
 5 would call it. After a couple of years of  
 6 that, in 2006 I took up more development with  
 7 the safety culture of the company and  
 8 fostering our programs and development and  
 9 initiatives within the aviation industry,  
 10 helicopter primarily. I was promoted to  
 11 Director of Safety and Quality. ISO has  
 12 changed from ISO 9001 to 2008. We hold that  
 13 current certification now, and just the  
 14 fostering of that across all of our bases of  
 15 operation was my main goal, to take everything  
 16 that we had learned and built here and  
 17 developed to move it to all of our operations  
 18 so that one standard exists throughout our  
 19 whole fleet. My education includes, as I  
 20 said, flight safety officer training  
 21 throughout the military, notably aviation  
 22 safety management, certifications from  
 23 Southern California Safety Institute, as well  
 24 as health and safety certification through  
 25 University of New Brunswick. I also serve as

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1 co-chairman on the Helicopter Association of  
 2 Canada, that's the HAC, and also I'm the  
 3 liaison for the international safety team,  
 4 helicopter safety team, and here I am today to  
 5 give you some insight into our safety  
 6 management systems, how we strive to go ahead  
 7 of the industry in many facets, and how we are  
 8 moving forward in the future.  
 9 MS. FAGAN:  
 10 Q. Could you just explain what the international  
 11 committee or group is, the organization, and  
 12 the helicopter organization, those two  
 13 committees, one where you said you were  
 14 liaison and the other where you said you were  
 15 co-chair? Could you tell us who or what  
 16 entities make up those committees or groups  
 17 and what their purpose or mission is?  
 18 MR. BANKS:  
 19 A. I'll start with the Helicopter Association of  
 20 Canada. That's a Canada based, largely from  
 21 the western provinces. They've put together a  
 22 huge committee where helicopter operators of  
 23 not just the oil and gas, but land based,  
 24 heli-skiing, everybody gets together and they  
 25 meet once a year to bring new ideas and -- new

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1 developments and ideas, I guess, to the future  
 2 of the safety and the air taxi, and every  
 3 facet of helicopters within the industry.  
 4 There's a lot of players that come from the  
 5 States as well. Internationally, it does have  
 6 some players, but mostly Canada, and it's a  
 7 team effort in the industry in providing more  
 8 safety to the future of helicopter operations  
 9 in Canada. The international helicopter safety  
 10 team, now that's a global worldwide situation  
 11 where everybody has a say in how we want to  
 12 move ahead with safety in the helicopter  
 13 industry, but taking best proactive learnings  
 14 from all parts of the world and piecing it  
 15 together, and significantly reducing the risk  
 16 in the past couple of years that it's been  
 17 formed. Like I said, I'm a liaison to that,  
 18 but it's a big sharing practice of everything  
 19 that's happening now and as we move forward.  
 20 Any new initiatives that come out are  
 21 generated quite fluently and all the companies  
 22 can pick up on smaller things to help educate  
 23 their people as well as gain a very just  
 24 culture within the helicopter divisions now.  
 25 MS. FAGAN:



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1 Q. Thank you. Now I would like to move into the  
 2 PowerPoint presentation, and as mentioned  
 3 earlier the presentation is in segments. Mr.  
 4 Burt is going to take us through the first  
 5 segment. You will note there's some -- this  
 6 is a corporate overview and some history.  
 7 We've heard some of the history, so Mr. Burt  
 8 is going to touch upon the high points from a  
 9 corporate perspective, and there are segments  
 10 where both or all three panellists will give  
 11 information, but for this first section it  
 12 will be lead by Mr. Burt. I understand you're  
 13 going to control the slides.  
 14 MR. BURT:  
 15 A. We're going to try.  
 16 MS. FAGAN:  
 17 Q. All right, well --  
 18 MR. BURT:  
 19 A. I just want to start off as we do in any of  
 20 our meetings with our senior leadership team  
 21 to remind ourselves and anybody that we're  
 22 talking to, everything we do in every aspect  
 23 we run our credo through here when it talks  
 24 about safety, so it's appropriate to run it  
 25 through here and if I could, I'd like to read

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1 this statement that Mr. Ken Norie, the  
 2 President and owner, has made sure that we all  
 3 understand. It says, "No operation or  
 4 business opportunity, either new or ongoing,  
 5 should ever compromise safety or unduly affect  
 6 our accepted levels of risk in the VIH  
 7 Aviation Group of Companies", and that's  
 8 important for us because that's the glasses,  
 9 that is the culture we look through everything  
 10 through. So I just wanted to basically set  
 11 that tone as we corporately do on a regular  
 12 basis. From a corporate overview point of  
 13 view, I just want to go into a description of  
 14 the history of our organization, the VIH  
 15 Aviation Group of Companies, as the oldest  
 16 privately held company in Canada, it started  
 17 in 1955, and had a couple key dates beyond  
 18 that, of course. In 2000, Mr. Ken Norie ended  
 19 up taking over full control of the VIH  
 20 Aviation and he currently is 100 percent owner  
 21 and the president of that organization today.  
 22 They entered the offshore oil and gas market  
 23 from an onshore point of view in 2001, and the  
 24 key date of 2003 was when they acquired  
 25 Cougar. Now Cougar's specialty, as we talked

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1 about the IFR, or the Instrument Flight Rule,  
 2 offshore aviation market and that is our  
 3 specialty, and they did, as we said, in a  
 4 friendly manner take over Cougar in 2003, and  
 5 I was involved quite instrumental in that  
 6 process as well. From that point on, we have  
 7 as an entity thrived, there's no doubt about  
 8 that. However, as the VIH Aviation Group has  
 9 progressed, we developed markets of search and  
 10 rescue both domestically and internationally.  
 11 We entered into a global marketplace in 2007  
 12 in Australia. We were in Alaska actually the  
 13 hear before in 2006, and we have continued to  
 14 proliferate our presence in the United States  
 15 as well, both under NAFTA and also through a  
 16 joint venture of a sister company called VIH  
 17 Cougar.  
 18 MS. FAGAN:  
 19 Q. Now NAFTA, I think most of the group may know,  
 20 but just for the record, could you indicate  
 21 what NAFTA is?  
 22 MR. BURT:  
 23 A. Yes, it's the North American Free Trade Act,  
 24 and under that, the aviation business operates  
 25 under a operating specification and there's an

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1 allowance through specialty air services of  
 2 that agreement to provide services in the  
 3 United States. Some of those services from an  
 4 aviation point of view are aerial photography,  
 5 specialty air services like we supply, there  
 6 is seismic operations and typically those  
 7 operations will be supplied where you're  
 8 really not carrying passengers, essential  
 9 crew, but not passengers, and we have been  
 10 doing that since our initial entry into that  
 11 marketplace.  
 12 MS. FAGAN:  
 13 Q. Okay, thank you.  
 14 MR. BURT:  
 15 A. Continuing on, we also participated in a  
 16 couple other global arenas. In 2008, we took  
 17 Super Puma -- sorry, the S-92s and some other  
 18 aircraft from our sister company, VIH  
 19 Helicopters, six of them, in fact, in 2008 and  
 20 participated in the first free elections in  
 21 Angola. That was an interesting part of our  
 22 history as well. Just recently in 2009, we  
 23 purchased 50 percent interest in HNZ  
 24 Helicopters out of New Zealand, and  
 25 particularly their Australian offshore oil and

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1 gas support company. So we are involved now  
 2 in Australia as well, and that was our latest  
 3 development.  
 4 MS. FAGAN:  
 5 Q. Thank you. Now you've mentioned the VIH, and  
 6 I understand your business is divided, so I  
 7 believe you have a slide coming up where you  
 8 have just an overview of the services and how  
 9 you've divided or organized the company.  
 10 MR. BURT:  
 11 A. Okay. The VIH Aviation Group of Companies is  
 12 essentially, as we talked about, the IFR,  
 13 although that's not a term -- that's a term  
 14 that we've used in our business to separate  
 15 the two. There's an IFR and a VFR. IFR again  
 16 is the Instrument Flight Rules, and that's  
 17 typically associated with the airline offshore  
 18 flying in harsh weather division, and the VFR  
 19 is the utility type aircraft, the lighter,  
 20 forestry, wildlife, Visual Flight Rules, the  
 21 VFR side of the house, and that's how we've  
 22 divided the divisions in our organization. As  
 23 far as those entities goes, the IFR offshore  
 24 has 17 aircraft and the VFR has 57 aircraft.  
 25 We also have a fixed wing division, it's a

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1 corporate division with two fixed wing  
 2 aircraft. Our customer base is made up of  
 3 major international oil and gas companies.  
 4 That's the IFR Division. For us we, as an  
 5 organization, what has really benefited us is  
 6 that we have a very broad-based capability  
 7 now, we're very diversified, we're a global  
 8 entity. We find that we have elements of  
 9 business that will work in this season with a  
 10 certain group of aircraft and those aircraft  
 11 can move over to another type of business. So  
 12 it does help take some of the peaks out of the  
 13 aviation business which comes and goes, but  
 14 that diversification and the larger fleet base  
 15 has really served us well.  
 16 MS. FAGAN:  
 17 Q. You had mentioned your customers. It's  
 18 already part of the record that you provide  
 19 services to Suncor, Husky, and ExxonMobil or  
 20 HMDC.  
 21 MR. BURT:  
 22 A. Uh-hm.  
 23 MS. FAGAN:  
 24 Q. And I believe there may have even been mention  
 25 of Statoil. Are there other oil companies

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1 which -- not necessarily east coast of Canada,  
 2 but are there other oil companies that you  
 3 provide services for?  
 4 MR. BURT:  
 5 A. Sure. We currently provide services for Shell  
 6 Oil, we provide services for BP, Statoil in  
 7 the Gulf of Mexico as well. Internationally,  
 8 we're flying for ENI, an Italian oil company  
 9 in Australia, and we are flying in Halifax, of  
 10 course, right next door for a major customer,  
 11 Encana. That makes up the brunt of our  
 12 customer base.  
 13 MS. FAGAN:  
 14 Q. Thank you. Now where are all these bases? I  
 15 understand -- you've mentioned a number of  
 16 countries and I believe you have a chart which  
 17 shows where the VIH and the various operations  
 18 are located. So can you explain this?  
 19 MR. BURT:  
 20 A. Sure. I mean, I'll speak to the existing  
 21 bases that we have and maybe even touch on  
 22 some of the recent operations we've had. Our  
 23 main bases, of course, let's start right here  
 24 in St. John's, near and dear to us, of course,  
 25 and in Halifax, we have a substantial presence

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1 in Halifax, and ironically, that was our  
 2 roots, of course. Moving out west, in  
 3 Victoria is the head office, but we do have a  
 4 substantial presence there. The Gulf of  
 5 Mexico in Louisiana, actually in Galliano, we  
 6 have a fairly substantial facility there, just  
 7 brand new state of the art that is supporting  
 8 our operations in Galliano. We also are in  
 9 Australia, as we mentioned, in Perth is our  
 10 head office and we've operated in various  
 11 locations such as Darwin, as far north as  
 12 Darwin in Australia. Outside of that, we  
 13 continually on a seasonal basis operate in  
 14 Barrow, Alaska, and that's providing search  
 15 and rescue. We have had multiple years,  
 16 multiple seasons in Tuktoyaktuk in the North  
 17 West Territories operating for both Shell and  
 18 BP. We have other divisions working in Peru,  
 19 and again that's a support, albeit in the VFR  
 20 division for oil and gas onshore. We talked  
 21 about -- we've worked in Angola, and also in  
 22 Taiwan. We're doing some heavy lifting  
 23 operation under the VIH Aviation Group in  
 24 Taiwan as well.  
 25 MS. FAGAN:

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1 Q. Thank you, and we have a couple of slides on  
 2 the -- on how the company is organized, and  
 3 you need not spend too much time on that. I  
 4 know you didn't intend to, so could you just  
 5 explain this slide and then move into the next  
 6 one?  
 7 MR. BURT:  
 8 A. Sure. I think the points of this slide would  
 9 -- we've talked about the operating companies,  
 10 the companies that fly aircraft, the HNZ  
 11 Cougar now in Australia, Cougar Helicopters.  
 12 VIH Cougar is the US company, and VIH  
 13 Helicopters is the utility or VFR company.  
 14 What we didn't touch on here is that  
 15 underneath this group of companies we also  
 16 have VIH Aerospace, very significant, this is  
 17 a repair and overhaul entity in Victoria,  
 18 British Columbia, where all of our aircraft  
 19 can go in there and get overhauled, deep  
 20 overhaul, and we also develop our kits,  
 21 specialized kits, for aircraft, and this is  
 22 pretty high tech leading edge capability of  
 23 designing kits that are tailored to our  
 24 business and proliferating our core business.  
 25 An example of that is that we would put a

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1 forward looking infrared radar into our  
 2 aircraft and we would build that capability  
 3 into an aircraft and have it certified. So  
 4 it's a key element, and we're also now moving  
 5 on to extensive repair and overhaul of major  
 6 components and moving towards the S-92  
 7 overhaul capability.  
 8 MS. FAGAN:  
 9 Q. When you say "certified", the forward looking  
 10 infrared --  
 11 MR. BURT:  
 12 A. Yes.  
 13 MS. FAGAN:  
 14 Q. Who would certify that type of device on the  
 15 aircraft?  
 16 MR. BURT:  
 17 A. Our engineering department, based upon the  
 18 operation's needs, would say we need to  
 19 operate this equipment in Canada or the United  
 20 States, or internationally, for that matter,  
 21 and we would seek the certification in either  
 22 Transport Canada or the FAA, which most of  
 23 them are always certified, and then  
 24 internationally in some cases we would go to  
 25 the European area and have them certified

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1 under that authority under EASA because you do  
 2 have to have them individually certified under  
 3 the countries that you do fly. So we seek  
 4 those certifications and we receive them.  
 5 It's quite an onerous process, but we've got  
 6 some very capable people as we've learned how  
 7 to do that.  
 8 MS. FAGAN:  
 9 Q. Thank you. The next slide is senior management  
 10 team, and I think it helps explain some of the  
 11 reporting, who reports to who, and in  
 12 particular, the Director of Safety and the  
 13 Manager of Safety, how do they fit into the  
 14 reporting schedule?  
 15 MR. BURT:  
 16 A. Sure. Again from a VIH Aviation Group, the  
 17 President and CEO is Ken Norie, and underneath  
 18 him sits a number of Senior Vice Presidents,  
 19 including myself, and those group of people  
 20 provide the vision and business development  
 21 strategy and the corporate overview of the  
 22 organization. We have decided and the way we  
 23 structured, all of our operating companies  
 24 have general managers, and in the case of Hank  
 25 Williams here for Cougar, and those people are

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1 responsible for the commercial business  
 2 development, logistics, financial operations  
 3 of those entities. Now one reason -- a very  
 4 important reason we have put the Director of  
 5 Safety and Quality, Mr. Banks. His position  
 6 is on the slide because all aspects and all  
 7 levels of all of our org charts, you will see  
 8 that this position is crucial. Rick has --  
 9 Mr. Banks has a responsibility to report  
 10 directly to the accountable executive, and  
 11 that's Mr. Ken Norie. So you'll see that on  
 12 everyone of our org charts. He has a  
 13 reporting line as well to myself, as the  
 14 Senior Vice President of Offshore Oil and Gas,  
 15 but again his responsibility is strictly to  
 16 the President and the CEO with a direct line.  
 17 MS. FAGAN:  
 18 Q. So your Director of Safety reports directly to  
 19 the top or the head of the company?  
 20 MR. BURT:  
 21 A. To my boss.  
 22 MS. FAGAN:  
 23 Q. Okay, thank you. Now that is the VIH Aviation  
 24 Group, but as you've said, a part of that  
 25 group is Cougar Helicopters, and you've given

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1 some of the information with respect to  
 2 Cougar. Could you move to the next slide and  
 3 just hit upon some of the high points where  
 4 there is significant events because many of  
 5 these events you've spoken to or touched upon  
 6 earlier?  
 7 MR. BURT:  
 8 A. Sure. Now we're speaking about Cougar  
 9 Helicopters itself. Cougar was formed  
 10 actually in 1984 in Halifax and one of the key  
 11 dates there, of course, is when we started  
 12 flying offshore in Halifax on a long-term job  
 13 and that was 1990 with Lasmo, later becoming  
 14 PanCanadian EnCana, and the only other one I'd  
 15 like to sort of stop on there is that we were  
 16 awarded the first Canadian civilian search and  
 17 rescue contract in Yarmouth, Nova Scotia and  
 18 we performed that work from 1991 to 1994. It  
 19 was there we really cut our teeth and we gave  
 20 sort of birth to this search and rescue  
 21 expertise, and that's where it started,  
 22 because we'll be speaking about that later on.  
 23 MS. FAGAN:  
 24 Q. So when you -- do you mean to say that this  
 25 was the first Canadian -- the first time a

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1 civilian SAR operation was awarded to a -- in  
 2 Canada, it was a civilian, not a military?  
 3 MR. BURT:  
 4 A. That's correct, yes, and we were very  
 5 successful, had a number of quite tangible  
 6 rescues on that operation. One job alone we  
 7 saved ten lives on that operation.  
 8 Of course, the award of the Hibernia  
 9 contract for us was a major, major development  
 10 for our company in 1995, and then we talked  
 11 about several awards of the Petro-Canada, now  
 12 Suncor, contract and Husky and then lately, in  
 13 1992, we introduced the S-92 to the market and  
 14 in 2005 to present, we started our operations  
 15 in the Gulf of Mexico and for us, that was our  
 16 first venture on an international basis as we  
 17 moved abroad, and as I talked about earlier  
 18 on, we've also now gone into the Australian  
 19 business. We have proliferated our St. John's  
 20 business presence here, of course, with other  
 21 operators, such as Chevron and Statoil and  
 22 we've recently just introduced the S-92 to the  
 23 Gulf of Mexico and that was, for us, a major  
 24 development there as well.  
 25 Maybe the last little check on the box

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1 was we recently brought under our umbrella the  
 2 BC Air Ambulance, the Bell 222 aircraft that's  
 3 supplying the medical services in that  
 4 province as well.  
 5 MS. FAGAN:  
 6 Q. Thank you. Now the Cougar Helicopters  
 7 operation, what is the current fleet size and  
 8 the type of service you provide? And I  
 9 understand you're going to touch a little bit  
 10 on the type of SAR, search and rescue, you  
 11 provide.  
 12 MR. BURT:  
 13 A. Right. As I mentioned, we have -- currently  
 14 have 15 heavy helicopters, eight S-92s, six S-  
 15 61s and one S-76. They're all Sikorsky  
 16 aircraft. The 76 is a medium size aircraft,  
 17 so just to be clear. The rest are large and  
 18 this is a medium aircraft that we have in  
 19 Halifax. Our primary role is to provide, as  
 20 we talked about this, IFR offshore service to  
 21 the oil and gas industry. If you will, it's  
 22 similar to an airline service that we would  
 23 supply offshore. A transport category it's  
 24 called, airline category of operations. Very  
 25 structured, scheduled trips, and we use a lot

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1 of the same types of systems you'll see in an  
 2 airline. We do primarily crew changes of  
 3 offshore workers that go on a rotation  
 4 offshore back and forth and we do, however, in  
 5 some locations provide search and rescue. Now  
 6 we do it in a dedicated fashion in some  
 7 locations. That's all we do. We'll also do a  
 8 hybrid where we'll do search and rescue and  
 9 passengers. So it depends on what location  
 10 we're working in. But more often than not,  
 11 the search and rescue component is being  
 12 required.  
 13 We do have a bullet here on offshore  
 14 aerial construction. It is a niche business  
 15 and we'll speak to that a little bit later on  
 16 when we talk about synergies of the company,  
 17 but that essentially is lifting flare tip  
 18 units, and this is the tip that goes on the  
 19 oil rig that flares off gas. It has to be  
 20 changed out. We do that specialty change  
 21 ourselves using the VIH helicopters, aerial  
 22 construction specialists, combined with the  
 23 Cougar people, and as I say, we can touch on  
 24 that a little bit more later on.  
 25 We talked about our operating regions.

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1 Right now, it's basically global, but east  
 2 coast Canada, Gulf of Mexico, Arctic Rim and  
 3 northern Australia.  
 4 The search and rescue, I think it's  
 5 important to understand how this has become a  
 6 core part of our business, and essentially you  
 7 almost have to roll in another part of that.  
 8 So what we focused on is what are we good at  
 9 as a company. It was very important for us to  
 10 understand that. And what we are good at is  
 11 flying long distances in challenging  
 12 environments, harsh weather environments, cold  
 13 weather and high winds. That has really sort  
 14 of defined us. In fact, we were invited to go  
 15 to the Gulf of Mexico to provide those  
 16 services after one of the major hurricanes  
 17 there, as they were looking for a harsh  
 18 weather specialist to provide search and  
 19 rescue services.  
 20 Now in that service, it's not just that  
 21 we would go out with a hoist on an aircraft  
 22 and rescue people and search and rescue  
 23 people, but we also provide a medical, a  
 24 medical evacuation, emergency medical  
 25 evacuation service as well, where we would go

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1 out, pick up an injured worker, sick or  
 2 injured worker. We have stretchers on board  
 3 our aircraft. We have support equipment to  
 4 effect that extraction and some specialists on  
 5 board. We do work with our own teams.  
 6 Somewhere in the world we also have our own  
 7 paramedics and we also work here like in St.  
 8 John's with AOMS where they bring their  
 9 specialists on board and we do effect those  
 10 rescues as well.  
 11 MS. FAGAN:  
 12 Q. If you had to give a percentage or breakdown  
 13 of this business, how much of this business  
 14 would involve flying over water?  
 15 MR. BURT:  
 16 A. Our over water flying would probably  
 17 compromise about -- be comprised, I should  
 18 say, of about 97 percent of all the flying we  
 19 do. Yeah, we don't get to sightsee too much.  
 20 MS. FAGAN:  
 21 Q. Okay, thank you.  
 22 MR. BURT:  
 23 A. But we do see a lot of whales.  
 24 MS. FAGAN:  
 25 Q. We have a slide here which is the -- I guess

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1 just a breakdown of Cougar Helicopters and I  
 2 would just like you to explain this slide  
 3 briefly and then we have another organization  
 4 chart that deals with the reporting for  
 5 Cougar.  
 6 MR. BURT:  
 7 A. Sure. This just gives some insight to the  
 8 operating companies that make up Cougar. The  
 9 VIH Aviation Group, we've talked extensively  
 10 about that. Well, Ken Norie is the director  
 11 and president. He's also the 100 percent  
 12 owner of this company and that's the parent  
 13 holding company. Cougar Aviation is the  
 14 holding company of Cougar Helicopters and Ken  
 15 Norie is the director and president of that  
 16 entity. Cougar, as we spoke about, Cougar  
 17 Helicopters, again Ken is the director and  
 18 president. We're the commercial air carrier.  
 19 We do the flying, and again, as just part of  
 20 the way we do our business, we also have a  
 21 company called Cougar Properties and it's a  
 22 real estate holding company. For example, our  
 23 facility here in St. John's is owned by Cougar  
 24 Properties and that's Ken Norie as the  
 25 director and president of that entity.

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1 MS. FAGAN:  
 2 Q. Thank you.  
 3 MR. BURT:  
 4 A. You're welcome.  
 5 MS. FAGAN:  
 6 Q. Now the next slide, which is a reporting  
 7 slide, can you go through the significance of  
 8 this slide? And I note at the bottom, it has  
 9 a reference to Transport Canada reporting  
 10 responsibility. So I understand in the  
 11 aviation world, an aviation company is a  
 12 specialized company. It's regulated by  
 13 Transport Canada and there are certain  
 14 reporting requirements and I believe that's  
 15 why you've put this slide in, so that we can  
 16 understand how you're regulated and how some  
 17 of these positions, such as Mr. Banks, is  
 18 significant from maintaining your compliance  
 19 under the regulations. So can you go through  
 20 this slide and explain how all that works?  
 21 MR. BURT:  
 22 A. Sure. You're absolutely correct. The  
 23 aviation business is a highly regulated  
 24 business. Transport Canada is very specific  
 25 about the positions that they require for an

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1 operator to hold an air operator certificate.  
 2 They actually not only cite that they are  
 3 important, but they will describe what those  
 4 positions must do. They then will ensure that  
 5 whoever fills them passes the proper test, the  
 6 career years experience and an interview to  
 7 get those positions.  
 8 MS. FAGAN:  
 9 Q. So who conducts the interview and the test or  
 10 exam?  
 11 MR. BURT:  
 12 A. The interview, of course, is with Transport  
 13 Canada. It's a very -- a great deal of  
 14 oversight, especially when you're determining  
 15 who's going to be the key entities, and those  
 16 entities are who's going to be the director of  
 17 maintenance, which is a Transport Canada  
 18 stipulated position, the director of flight  
 19 operations and also the director of safety or  
 20 the company aviation safety officer, as  
 21 Transport Canada would describe it. Those are  
 22 the key positions, but even the positions  
 23 below them are Transport Canada mandated  
 24 positions, such as the chief pilot, and I  
 25 myself have gone through interviews for these

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1 positions with the chief pilot and director of  
 2 flight operations, and again, you have to  
 3 provide a CV with the years in the business.  
 4 You have to sit with the inspector, write an  
 5 exam, do an oral exam, and make sure that you  
 6 have a thorough understanding of the Canadian  
 7 Aviation Regulations to achieve these  
 8 positions.  
 9 So it's very important for the general  
 10 public, somebody who's not involved in our  
 11 business, to understand these positions are  
 12 absolutely mandated by Transport Canada and  
 13 highly specified as to what they do. So one  
 14 of the things I would like to point out about  
 15 this, however, is that the president, Mr. Ken  
 16 Norie, is designated as what Transport Canada  
 17 would call the accountable executive, and he  
 18 is the person responsibility for the  
 19 organization, ultimate responsibility, and in  
 20 the case of Mr. Banks, he has a direct  
 21 reporting. His position again is a Transport  
 22 Canada position. He has a direct line  
 23 reporting to the accountable executive. That  
 24 person, that go-to person, and I think it's  
 25 quite significant. On this description,

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1 you'll sort of see that little sidebar, that  
 2 little business description, how I would fit  
 3 into it, and Mr. Williams would fit into it,  
 4 but the key message on this slide is to  
 5 understand the Transport Canada relationship  
 6 and the requirements of a highly regulated  
 7 industry.  
 8 MS. FAGAN:  
 9 Q. So I see from this slide that the director of  
 10 safety and the director of flight operations  
 11 and the director of maintenance all report  
 12 directly to, or have a direct line to the  
 13 accountable executive?  
 14 MR. BURT:  
 15 A. That's absolutely correct.  
 16 MS. FAGAN:  
 17 Q. Okay, thank you. And this is the last slide  
 18 in this segment, and I would just like you to  
 19 explain this. This is the corporate values,  
 20 and I think it also brings in how you've  
 21 divided your company's business. Could you  
 22 explain this slide?  
 23 MR. BURT:  
 24 A. This is a dynamic practical slide that we use  
 25 in our organization and as we have taken the

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1 two divisions, the IFR and the VFR, brought  
 2 them together and made sure that we weren't  
 3 pushing a square peg into a round hole, but  
 4 where there's value added and common sense and  
 5 synergies, we have found great opportunities  
 6 in the two companies coming together.  
 7 Specifically that we both have a very strong  
 8 safety culture and we've combined that. Every  
 9 year, if not multiple times through the year,  
 10 our safety divisions and their leadership get  
 11 together and will look at those best  
 12 practices, systems, reporting systems,  
 13 commonalities. We do fly large aircraft in  
 14 the VFR division that are the same type in the  
 15 IFR, the S-61 for example, and the engine runs  
 16 the same way here as it runs over here. So  
 17 we're not going to miss a learning opportunity  
 18 here over on this division. So we've made  
 19 sure that those communication lines are very,  
 20 very clear, and that's an example of how those  
 21 cultures have really complemented each other.  
 22 I will also point out that we have  
 23 learned to share best practices from each  
 24 division. We've realized that everybody has  
 25 something quite valuable to offer, and you

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1 know, we speak about what we specialize in,  
 2 the IFR and VFR, but as a large organization,  
 3 we're drawing upon a lot of complimentary  
 4 strengths, and besides what you see here, it's  
 5 also a great attraction to new employees to  
 6 say "look, this is a broad-based company.  
 7 It's a company I can enter here and go all the  
 8 way to the other end of the market here." So  
 9 it provides a great stability for people  
 10 coming to the company, staying in the company  
 11 and retaining, you know, that workforce.

12 MS. FAGAN:  
 13 Q. Thank you. I think that overview is very  
 14 helpful in setting up the context for the  
 15 segments when we actually get into the  
 16 departments and the next portion of the  
 17 presentation is going to be with the St.  
 18 John's base and I understand Mr. Williams is  
 19 going to lead us through the section on the  
 20 St. John's base, which is what transports the  
 21 workers to the east coast of Canada, which is  
 22 our mandate, the offshore of Newfoundland and  
 23 Labrador. So Mr. Williams, can you move  
 24 through the slides and explain the St. John's  
 25 base?

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1 MR. WILLIAMS:  
 2 A. Okay. As Rick has just described very well, I  
 3 think, you know, all of our corporate  
 4 operations, international and globally, but  
 5 I'm going to be, you know, very specific on  
 6 exactly what we do in St. John's, Newfoundland  
 7 and we always say we're very proud of what we  
 8 do in St. John's, Newfoundland and I would --  
 9 I think I can safely say it's the flagship of  
 10 our operation and what we do. A lot of our  
 11 systems were developed here and transported to  
 12 our other divisions, so we're very proud of  
 13 what we do in St. John's.

14 MS. FAGAN:  
 15 Q. Okay, thank you.

16 MR. WILLIAMS:  
 17 A. Okay. This, of course, this slide here shows  
 18 our facility. It's been my home for the last  
 19 13 years. I can remember walking into that  
 20 place when it was a bit of steel, and that  
 21 goes back to a lot of what I want to say  
 22 upfront about our core activity in St. John's  
 23 is moving passengers offshore. In the 13  
 24 years we've been doing that, I think about how  
 25 many times I go down and I walk in amongst the

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1 passengers in this facility. So we're not  
 2 just transferring people. We're transferring  
 3 a lot of my friends and my family, these  
 4 people offshore, and this has been my home and  
 5 I'm sure a lot of people that entered into the  
 6 oil industry for the first time, as I did in  
 7 1997, did it through these doors right here.  
 8 So it's -- anyway, the facility was  
 9 constructed in 1996. We did a fairly  
 10 expensive expansion in 2007 where we added a  
 11 lot of items that took care of our  
 12 administrative functions, but a couple of key  
 13 components that we built into our operation in  
 14 2007 was the construction and development of  
 15 our OCC, our operational control centre, which  
 16 we will get into a little later on down. We  
 17 also did some expansion to our arrivals and  
 18 departures area.

19 So the facility itself, Rick spoke about  
 20 the volume of helicopters we have in our  
 21 operation. This facility alone, when we refer  
 22 to the hangar, I mean that is where the  
 23 aircraft are kept. It can accommodate four  
 24 large aircraft, and when I say four large  
 25 aircraft, I'm talking about the S-92 or the S-

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1 61 variety.  
 2 Our current fleet in St. John's consists  
 3 of four S-92s currently and an S-61 that  
 4 arrived there -- that left, I think, Victoria,  
 5 B.C. right over Christmas, New Year's and  
 6 arrived here in St. John's in the first part  
 7 of January. As you can see, the registration  
 8 numbers here depict and each of those  
 9 aircraft, each of our oil companies -- for  
 10 example, Hibernia would have under contract  
 11 one of those S-92s. Husky would have one of  
 12 those S-92s. Suncor, one of those S-92s and  
 13 currently ConocoPhillips operates one of the  
 14 S-92s.

15 MS. FAGAN:  
 16 Q. The S-61 is that currently under contract and  
 17 why was that brought in? You say it was just  
 18 brought in in the last month or so?

19 MR. WILLIAMS:  
 20 A. Yeah.

21 MS. FAGAN:  
 22 Q. And so why was that helicopter -- where did it  
 23 come from and why do we have it here in St.  
 24 John's?

25 MR. WILLIAMS:

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1 A. Okay. As part of our business process, we  
 2 very frequently get together and discuss fleet  
 3 planning and as Rick had said, we have  
 4 helicopters that sometimes are under contract  
 5 or not under contract. We had a discussion  
 6 probably back in October, November, where we  
 7 had an S-61 sitting in our Victoria facility  
 8 that was not currently under any existing  
 9 contract. So I asked Rick and the management  
 10 team if I could bring that aircraft here to  
 11 St. John's, bring it here pretty well on spec  
 12 for want of better words. It's not under any  
 13 official long-term contract. To have it here  
 14 available if an oil company or an operator  
 15 wanted to use it, either in a search and  
 16 rescue capacity or a passenger carrying  
 17 capacity. The S-61 that's currently here is  
 18 fully fitted for a search and rescue service,  
 19 as well as passenger carrying offshore and I'm  
 20 not sure of the actual number of days, but  
 21 this aircraft have been used since January by  
 22 our existing customers here on an as-need  
 23 basis. So it's not on any long-term contract  
 24 as we speak.  
 25 MS. FAGAN:

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1 Q. Okay, thank you. You've mentioned your  
 2 customers, so I think the next slide will take  
 3 us to who they are.  
 4 MR. WILLIAMS:  
 5 A. Okay.  
 6 MS. FAGAN:  
 7 Q. And we've seen something similar to this.  
 8 MR. WILLIAMS:  
 9 A. Yeah, you've probably seen some of this  
 10 before, but anyway, our St. John's base, of  
 11 course, 1997 was when we started operations  
 12 for Hibernia. The first flight offshore, June  
 13 the 4th, 1997. So you know, we started out  
 14 with Hibernia as one single customer here in  
 15 St. John's. In 1999 is when we started flying  
 16 offshore for Petro-Canada at the time, now  
 17 Suncor, of course. 2002 is where we entered  
 18 into activity for Husky Energy on a long-term  
 19 basis. I think prior to that there may have  
 20 been some sporadic production wells that we  
 21 did for Hibernia back in 1999-2000 area. So  
 22 Hibernia, Suncor and Husky are our three long-  
 23 term core-based customers here in our St.  
 24 John's base. Currently, as we sit here today,  
 25 ConocoPhillips is here on the Laurentian Basin

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1 drilling a well and is due to complete that  
 2 well sometime maybe around June/July. So  
 3 that's four customers that we currently  
 4 operate out of our St. John's base.  
 5 MS. FAGAN:  
 6 Q. Thank you. Now how was Cougar selected by the  
 7 oil operators? Now we heard from the  
 8 presentation by the oil operators about the  
 9 selection process. So could you just describe  
 10 how it came about that you ended up with these  
 11 contracts?  
 12 MR. WILLIAMS:  
 13 A. Yeah. Well, Rick, I think Rick alluded to  
 14 Hibernia went to an RFP, a request for  
 15 proposal process where Cougar was able to  
 16 enter a bid and were successful in winning  
 17 that bid and became the client to Hibernia.  
 18 Similar for Suncor and Husky, both of those  
 19 operators issued an RFP where Cougar had the  
 20 opportunity to go through a bidding process  
 21 and became the successful carrier for those  
 22 both companies as well. So all three of our  
 23 main core customers went through the same  
 24 process of acquiring a contract under issuance  
 25 of an RFP and then a bid process.

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1 MS. FAGAN:  
 2 Q. Okay. We have already had presented to us by  
 3 the oil operators the contracts with Cougar  
 4 and what's in as exhibits is excerpts of the  
 5 ExxonMobil contract which deals with HMDC, and  
 6 that's 132, and the Suncor contract has been  
 7 marked 140, and the Husky contract has been  
 8 marked 148. Are you satisfied to deal with  
 9 those exhibits, if there's any need to  
 10 reference contracts, or do you want to put in  
 11 separate or we're going to go with what's  
 12 already been entered as the contracts?  
 13 MR. WILLIAMS:  
 14 A. Yes, we're fine with what's in, absolutely.  
 15 MS. FAGAN:  
 16 Q. Okay, thank you. The next slide speaks to the  
 17 POB, and you indicated that when you started  
 18 that was your first contribution really is  
 19 developing the personnel on board system. Who  
 20 are you or how many are you currently  
 21 transporting?  
 22 MR. WILLIAMS:  
 23 A. Okay, and POB or personnel on board is a very  
 24 important component. When we think of -- when  
 25 we say we're supplying services to a facility,



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1 how much service do we really need or capacity  
 2 we need is totally contingent on the POB, how  
 3 many people is on board that need to be  
 4 changed. These numbers I have here represents  
 5 the max POB capacity, which all of these may  
 6 hit at any given time. It doesn't represent  
 7 the current for today.

8 MS. FAGAN:  
 9 Q. Okay.

10 MR. WILLIAMS:  
 11 A. So from an Hibernia -- on the Hibernia  
 12 Platform, we can go as high as, you know, 250  
 13 POB out there at some points in time. Suncor,  
 14 with their Terra Nova FPSO, can reach 120  
 15 personnel on board. Husky Energy currently  
 16 has three operating facilities that we are  
 17 flying to: the GSF, the drilling rig, 125 POB;  
 18 their SeaRose FPSO, their production unit, 100  
 19 POB; and again, the Henry Goodrich, another  
 20 drilling rig, with 120; and the Stena Carron  
 21 on the Laurentian Basin, up to as high as 180  
 22 POB. So on any given day, that offshore  
 23 population could reach 800, you know, 895- 900  
 24 POB. So it's a very, you know, huge number.  
 25 It's a lot of communities in Newfoundland --

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1 we have a population offshore that represents  
 2 a lot of communities in Newfoundland, and for  
 3 the most part, the service to those POB are on  
 4 21-day rotations that allow us to carry the  
 5 bulk of those people back and forth on a 21-  
 6 day rotations.

7 MS. FAGAN:  
 8 Q. Okay, thank you. We have the -- we've had the  
 9 next chart in, which I believe is the  
 10 locations. I don't know though if a lot of  
 11 time had been spent on the last three. So for  
 12 the record, could you go through the locations  
 13 to which you're now flying?

14 MR. WILLIAMS:  
 15 A. Okay. I'd like to speak to what we refer to,  
 16 of course, as the Jeanne D'Arc Basin and  
 17 that's where our three core customers are  
 18 residing with their activities. ExxonMobil is  
 19 the Hibernia field. It's the closest to our  
 20 heliport, 171 nautical miles from St. John's.  
 21 Suncor Energy operating the Terra Nova field,  
 22 188 nautical miles from St. John's, and the  
 23 White Rose field, the Husky Energy project,  
 24 200 nautical miles. These are the areas that  
 25 we fly to called the Jeanne D'Arc Basin where

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1 they're all in very close proximity to each  
 2 other. In those areas, we do -- you know,  
 3 there may be activities where there's actually  
 4 shared flights, where we could have flights  
 5 going that people are going to all those  
 6 facilities, they're all in the general  
 7 vicinity.

8 But I'd also like to speak to  
 9 ConocoPhillips which is, you know, down off  
 10 the coast, off of the Burin Peninsula, 196  
 11 miles from St. John's, that we currently fly  
 12 to, and I've also put the Flemish Pass on this  
 13 slide because it represents the furthest area  
 14 of flying that we've done since we've been  
 15 here in 1997, roughly 196 nautical miles from  
 16 St. John's, and we all look forward to the  
 17 Hebron Ben Nevis, of course, which is right in  
 18 the Jeanne D'Arc Basin activity as well.

19 MS. FAGAN:  
 20 Q. Now the Flemish Pass is 274, is it?

21 MR. WILLIAMS:  
 22 A. 274.

23 MS. FAGAN:  
 24 Q. 274, and for the Flemish Pass, can you reach  
 25 the Flemish Pass, the 274 nautical miles,

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1 without stopping? I mean, can you go and come  
 2 back or do you have to stop at one of the rigs  
 3 and refuel?

4 MR. WILLIAMS:  
 5 A. Yeah. The typical requirement to fly to the  
 6 Flemish Pass would be the S-92's capabilities  
 7 with one auxiliary fuel tank. Depending on  
 8 winds and weather, we may require two  
 9 auxiliary fuel tanks, but the S-92 will  
 10 require the provision of an auxiliary fuel  
 11 tank to reach that destination of the 274  
 12 nautical miles. So we do go direct from St.  
 13 John's, but it's with the S-92 and the aux  
 14 tank fuel requirements.

15 MS. FAGAN:  
 16 Q. Okay. So at least one auxiliary fuel tank and  
 17 you can get there and -

18 MR. WILLIAMS:  
 19 A. Correct, one and sometimes -

20 MS. FAGAN:  
 21 Q. - without a stop.

22 MR. WILLIAMS:  
 23 A. One and sometimes two, depending on winds and  
 24 weather.

25 MS. FAGAN:

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1 Q. Okay. You mentioned sharing. We can see from  
 2 the chart that the ConocoPhillips operation is  
 3 quite a distance from the other three main  
 4 contracts, so is there any sharing? I mean,  
 5 if you're going to go to the Laurentian Basin,  
 6 it's a direct flight and back. There's no  
 7 sharing or stopping at the other facilities.  
 8 Would that be fair?  
 9 MR. WILLIAMS:  
 10 A. No, no, the ConocoPhillips program operates  
 11 totally with dedicated flights with strictly  
 12 ConocoPhillips passengers that we would be  
 13 carrying to that facility.  
 14 MS. FAGAN:  
 15 Q. Okay, thank you. Now you have also provided  
 16 an outline of your departments and could you  
 17 just go through those departments because once  
 18 we move into the video segment, we will  
 19 actually be having videos that deal with each  
 20 one of these departments.  
 21 MR. WILLIAMS:  
 22 A. Okay. As I said earlier, St. John's is the  
 23 flagship of our operation and a lot of our  
 24 department heads reside in St. John's. I'll  
 25 just go briefly through the various

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1 departments. Of course, as Rick already  
 2 mentioned too, our maintenance department,  
 3 controlled under the director of maintenance,  
 4 has areas and people employed in quality  
 5 assurance, people engaged in the HUMS  
 6 activity, health and usage monitoring systems  
 7 which Rick will get into a little later as we  
 8 go down, and of course, stores and parts and  
 9 all that activity required to support our  
 10 aircraft from a maintenance perspective.  
 11 Our director of flight operations also  
 12 resides in St. John's and his department  
 13 responsible for all the training requirements  
 14 of flight crews, the dispatch centre which  
 15 operates out of our operational control  
 16 centre, and again, we'll get into that a  
 17 little later on in more detail, and HFDM,  
 18 helicopter flight data monitoring, which is  
 19 another very important aspect of flight  
 20 operations, reside in our St. John's operation  
 21 as well.  
 22 I mentioned our operational control  
 23 centre a few times now. That operational  
 24 control centre is located in our St. John's  
 25 facility, staffed not only to support St.

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1 John's but to support a lot of the global  
 2 operations that Rick mentioned. So we have --  
 3 if an aircraft is departing out of Australia,  
 4 it goes through our dispatch centre for all  
 5 the dispatch criteria.  
 6 MS. FAGAN:  
 7 Q. So are you saying that the centre that's in  
 8 this building that's in this picture, in St.  
 9 John's, is not only managing the east coast  
 10 flights, you know, offshore Newfoundland and  
 11 Labrador, but it's also managing flights in  
 12 some of those locations that Mr. Burt pointed  
 13 out on that chart?  
 14 MR. WILLIAMS:  
 15 A. Yeah, for Cougar Helicopters.  
 16 MS. FAGAN:  
 17 Q. For Cougar Helicopters?  
 18 MR. WILLIAMS:  
 19 A. For Cougar Helicopters, correct, and it's a --  
 20 and I look forward to getting in there too,  
 21 because it's -- we're very proud of that OCC  
 22 and what it does there. And of course, the  
 23 passenger movements department, that's our  
 24 specialty. That's what we do. That's what  
 25 we're here for. We're here to move

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1 passengers. Traffic coordination, very  
 2 important. POB management, and when I say POB  
 3 management, I mean our systems that we use to  
 4 manage the passenger movements department is  
 5 the primary system in the event of an  
 6 emergency. Tells us who's on board what rig,  
 7 how long they've been there, and it monitors  
 8 and controls all the pre-requisites for  
 9 getting there. If someone does medical or  
 10 survival training is outdated, these systems  
 11 do the monitoring and the controls on that,  
 12 and that falls under our passenger movements  
 13 department. Our passenger movements  
 14 department, of course, also takes care of  
 15 passenger security, another key component,  
 16 which we will get into later.  
 17 Search and rescue department, which we  
 18 spoke of, and our safety department, which Mr.  
 19 Banks heads up, our aviation safety, our HSE,  
 20 our health safety environment and all of our  
 21 ISO programs, International Standards  
 22 Organization programs. Of course, we couldn't  
 23 run a base without our finance departments.  
 24 We all need those. And information  
 25 technology, we have a very in-depth IT team in

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1 our facility that support our operations and  
 2 have contributed a lot towards a lot of the  
 3 systems we use in our safety programs.  
 4 MS. FAGAN:  
 5 Q. Okay, and then just -- we don't -- we have  
 6 another slide here which gives the staffing.  
 7 I don't necessarily need all the numbers.  
 8 What I'd like you to highlight really is how  
 9 many people there are in the -- say, the  
 10 pilots, the aircraft maintenance, a few of the  
 11 main departments. I know all the departments  
 12 are important.  
 13 MR. WILLIAMS:  
 14 A. Yeah.  
 15 MS. FAGAN:  
 16 Q. But if you could just give us a sense of the  
 17 size.  
 18 MR. WILLIAMS:  
 19 A. Yeah. The numbers will vary in these  
 20 departments, all depending on the volume of  
 21 aircraft we have here. If aircraft depart or  
 22 aircraft arrive, there's subsequent pilots and  
 23 engineers that will come to support that  
 24 program. Currently, as we sit here today,  
 25 we're operating with 31 pilots in our St.

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1 John's base and we have 36 engineers in our  
 2 facility, aircraft engineers, inclusive of our  
 3 avionics team as well, and I'd like to speak  
 4 about our rescue specialists. We have 12  
 5 dedicated rescue specialists located in our  
 6 St. John's facility as well, and of course,  
 7 there's some other numbers there, like our  
 8 passenger movements makes up about 18  
 9 personnel. I won't go through all of them,  
 10 but dedicated personnel to St. John's that  
 11 support our operations today is around 158  
 12 personnel.  
 13 MS. FAGAN:  
 14 Q. Okay, thank you. And the final slide in this  
 15 section is an overview of how much you've  
 16 moved. So can you just give us the 12-year  
 17 operational performance and the precise  
 18 numbers are here, but could you just round  
 19 them up or down?  
 20 MR. WILLIAMS:  
 21 A. Sure. Okay, the numbers here depict from  
 22 starting in June the 4th 1997 and up to  
 23 January 2010. From a flight hours  
 24 perspective, the amount of hours we've spent  
 25 in the sky is close to 60,000 hours since we

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1 started in 1997. We have moved in excess of  
 2 275,000 passengers since 1997. Offshore  
 3 trips, and the definition of an offshore trip  
 4 is when an aircraft leaves St. John's and when  
 5 it returns back to St. John's. We've done  
 6 over 16,000 of those. From a cargo  
 7 transferred, and I want to be clear on cargo.  
 8 Cargo is a combination of passengers' baggage,  
 9 newspapers and any other freight that we would  
 10 have carried. We've exceeded a million pounds  
 11 of cargo since we've started in 1997.  
 12 MS. FAGAN:  
 13 Q. So does cargo include passengers?  
 14 MR. WILLIAMS:  
 15 A. No.  
 16 MS. FAGAN:  
 17 Q. No?  
 18 MR. WILLIAMS:  
 19 A. No, cargo is anything other than passengers  
 20 that we carry.  
 21 MS. FAGAN:  
 22 Q. Other than the passengers?  
 23 MR. WILLIAMS:  
 24 A. Yeah.  
 25 MS. FAGAN:

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1 Q. Their baggage and then any other type of -  
 2 MR. WILLIAMS:  
 3 A. Baggage, newspapers.  
 4 MS. FAGAN:  
 5 Q. Any other type of items?  
 6 MR. WILLIAMS:  
 7 A. Smaller pieces of freight, yes.  
 8 MS. FAGAN:  
 9 Q. Now we're about to go to the break, so the  
 10 next section is the selection of the S-92. So  
 11 I think it will be a nice time to break.  
 12 COMMISSIONER:  
 13 Q. Yes, we'll take the break now then.  
 14 MS. FAGAN:  
 15 Q. Thank you.  
 16 (BREAK)  
 17 MS. FAGAN:  
 18 Q. Okay, the next section is going to be with  
 19 respect to the selection of the S-92, which is  
 20 the helicopter that's being used, and Mr. Burt  
 21 is going to take us through this section and  
 22 then we'll start moving into the videos.  
 23 MR. BURT:  
 24 A. Okay.  
 25 MS. FAGAN:

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1 Q. So could you please explain -- I understand  
 2 you have a slide that deals with the selection  
 3 and the transition, because you didn't always  
 4 operate S-92s, so can you take us through your  
 5 transition slide? Thank you.

6 MR. BURT:

7 A. The selection process of the S-92, first of  
 8 all, I was directly involved in this process  
 9 and I was directly involved with Petro-Canada.  
 10 Petro-Canada was a key player as we started  
 11 this analysis of aircraft transition, and our  
 12 contracts are operating contracts and Petro-  
 13 Canada's particularly envisioned, right from  
 14 when they were let, that there was a clause,  
 15 an article that said that there was a  
 16 provision for the new technology and  
 17 implementation of new aircraft technology. So  
 18 there was always a vision that eventually we  
 19 would look at a new technology aircraft.

20 In this transition, the first S-92  
 21 arrived on the scene here April 7th, 2005, and  
 22 in that selection process we went through, we  
 23 looked at a number of factors. Together with  
 24 Petro-Canada, we looked at capacity, growth.  
 25 Growth meaning capability of growth in gross

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1 weight, in performance of the aircraft and  
 2 also in certification. Was it designed to the  
 3 latest standards? Cabin size, cargo carrying  
 4 capability, in the case of the S-92 with the  
 5 back ramp was also significant. And then  
 6 commercially, the seat, cost per seat mile was  
 7 also important in that evaluation.

8 We also had discussion about support.  
 9 It's very key. Of course, here in St. John's  
 10 as to where we'd like the aircrafts best  
 11 supported from. What was a good support  
 12 stationing? Was it European support as the  
 13 Eurocopter product or the Connecticut support  
 14 out of the Sikorsky product?

15 MS. FAGAN:

16 Q. Now when you mean support, this would be from  
 17 the manufacturer? Who's going to provide  
 18 parts and -

19 MR. BURT:

20 A. Right.

21 MS. FAGAN:

22 Q. - updates and direction with respect to the  
 23 aircraft?

24 MR. BURT:

25 A. Yes, of course. So as we go through an

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1 attrition of parts and maintenance,  
 2 specialized tool, specialized support  
 3 services, you know, from the manufacturer,  
 4 that's essentially what we're referring to.

5 MS. FAGAN:

6 Q. Okay.

7 MR. BURT:

8 A. The evaluation of the aircraft, also a  
 9 fundamental part of that, we had to bring in  
 10 the simulator. Our business, Cougar's  
 11 mandate, is we've always employed the highest  
 12 end simulator training in our organization,  
 13 whether it was required or not. We led the  
 14 industry in 1989. We started training on  
 15 flight simulators. In fact, we certified the  
 16 first three in Canada together with Transport  
 17 Canada. So for us, bringing a new aircraft  
 18 type in, a discussion of whether there was an  
 19 approved flight simulator was very important,  
 20 and in this case, the S-92 had a flight  
 21 simulator that was going to be certified prior  
 22 to the start of us receiving the aircraft. In  
 23 the EC225, there was not a simulator  
 24 available.

25 MS. FAGAN:

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1 Q. So what is the significance of having the  
 2 simulator certified before the aircraft is in  
 3 service versus having the simulator after you  
 4 have the aircraft?

5 MR. BURT:

6 A. Well, in the case of the EC225, you would have  
 7 to either train in the aircraft or a model of  
 8 the Eurocopter product which was dissimilar to  
 9 the EC225. So it's kind of negative based  
 10 training. You know, we always say in the  
 11 business, you train as you fly and you fly as  
 12 you train. And for us, we also had very  
 13 specialized operational limitations that are  
 14 approved and certified in the simulator. In  
 15 other words, the ability to land here at this  
 16 airport with a reduced approach minima,  
 17 letting us land in bad weather. We receive  
 18 that certification based upon a yearly --  
 19 initial and a yearly certification in an  
 20 approved flight simulator. Without that  
 21 simulator, we lose these privileges. So  
 22 there's a training aspect and there's a  
 23 capability aspect that we would lose, and for  
 24 us, when we selected the aircraft, there was  
 25 no tolerance in that. We do not train in the

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1 aircraft. We train in the simulator, because  
 2 even training in the aircraft, you have to  
 3 kind of fudge or simulate that type of  
 4 training, but truly the simulator provides  
 5 that realistic training.

6 MS. FAGAN:  
 7 Q. Okay.

8 MR. BURT:  
 9 A. And as we went on through that selection  
 10 process, we also had presentations from each  
 11 operator and from that, Cougar made a  
 12 recommendation to Petro-Canada and that was  
 13 accepted to go with the S-92. And as you'll  
 14 see here on the slide, the transition process  
 15 is something I'd like to speak about. For us  
 16 it was very important. It was a methodical  
 17 approach through a management of change  
 18 process, which is a term that means something  
 19 in our business, of course, that every aspect  
 20 of changing a fundamental aspect of our  
 21 business has to be managed. It has to be  
 22 documented, analyzed and we'll go through it  
 23 in a very well structured process.

24 The second S-92 arrived in August 1st of  
 25 2006. Of course, this is in excess of a year

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1 of the first one. And it replaced the second  
 2 Super Puma. The third one came in in June 1st  
 3 of 2007. So you see a trend here. It's  
 4 almost one per year, and that certainly helped  
 5 us in this transition. It was well done. We  
 6 had no flags that were raised during this  
 7 process and for our crews, it was quite  
 8 important. We had to provide training for our  
 9 engineers, our flight operations people.  
 10 Because the S-92 effectively carried twice as  
 11 many people as the Super Puma, it also had a  
 12 knock-on effect, as Mr. Williams was telling  
 13 you, on our POB. So our normal trip, instead  
 14 of being 9 or 10 passengers now was turning  
 15 into 16 to 17 passengers. Therefore, our  
 16 capability had to change at our passenger  
 17 movements facility. So you can see the effect  
 18 that has to be managed of doing that. All the  
 19 way down to making sure that we had the lines  
 20 on our ramp painted to reflect the S-92 as  
 21 versus the Super Puma.

22 MS. FAGAN:  
 23 Q. Now this next slide deals with the features.  
 24 I don't want you to go through every single  
 25 point. If you could deal with some of the

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1 high points and for those that would like more  
 2 information, the Cougar Helicopters has  
 3 provided, and they've been marked as exhibits,  
 4 a number of pamphlets and there is a pamphlet  
 5 on the S-92 which has a lot of information, as  
 6 well as the S-61, and they are at Exhibit 164  
 7 and 165. On occasion, the panellists will  
 8 refer to some of these pamphlets because  
 9 they're a nice tool and aid in describing some  
 10 of the aspects, but many of the other items  
 11 that will be talked about over the next day  
 12 and a half are in these pamphlets. So I'll  
 13 just ask you to touch upon the high points.

14 MR. BURT:  
 15 A. Sure.

16 MS. FAGAN:  
 17 Q. And if somebody wants to have more information  
 18 on the S-92, they can look to the exhibits  
 19 which are on the website.

20 MR. BURT:  
 21 A. Right.

22 MS. FAGAN:  
 23 Q. Okay.

24 MR. BURT:  
 25 A. And I'll give you some insight. 80 percent of

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1 these points here are embodied in the new  
 2 technology certification, what we call the  
 3 FAR/JAR 29. That is the section of the  
 4 Federal Aviation Regulations and the Joint  
 5 Aviation Regulations that stipulate how an  
 6 aircraft is to be designed under the current  
 7 criteria. So this aircraft was designed under  
 8 that criteria. 80 percent of these points  
 9 that you'll see here are elements out of the  
 10 FAR/JAR 29 compliance, built standard, and so  
 11 that's why they're out here. Things like bird  
 12 strike protection now has a new criteria, what  
 13 you must be able to sustain with a bird  
 14 strike. You may be flying in full flight and  
 15 have a seagull, for example, be able to have  
 16 that seagull impact the aircraft on any  
 17 critical part of the structure, any control  
 18 structure, any of the rotors, the tail rotor,  
 19 main rotor, the windscreen, and fully survive  
 20 that bird strike, and that's a very stringent  
 21 design requirement to the aircraft, just to  
 22 give you an example of some of the  
 23 requirements.

24 But practically, again, some of the  
 25 criteria that we've seen in the S-92 is that

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1 all the seating configuration of the aircraft  
 2 is lined up with a window. Every row of  
 3 seating has a window. There's no mixing as in  
 4 other aircraft. And that was important to us.  
 5 The cabin was the largest in class. That was  
 6 important as well. The back ramp was a very  
 7 interesting application because we didn't have  
 8 to go through the cabin to put baggage in or  
 9 interfere with passengers and we just lower  
 10 the back ramp and put our baggage in. So  
 11 these are some practical applications.

12 MS. FAGAN:  
 13 Q. So the baggage or cargo, as I understand it,  
 14 is in a separate compartment?

15 MR. BURT:  
 16 A. That's absolutely correct.

17 MS. FAGAN:  
 18 Q. And what you're saying is you don't have to go  
 19 through the passenger cabin. You actually  
 20 access this compartment through a separate  
 21 point on the aircraft?

22 MR. BURT:  
 23 A. Right, and it's -- from an ergonomic point of  
 24 view, you know, there's no bending or people  
 25 that are arched around with back supports.

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1 It's a very approachable area where the back  
 2 ramp is just lowered. There's a cargo bin and  
 3 you just place the cargo in there. So  
 4 ergonomically, it was quite different than the  
 5 other products.

6 MS. FAGAN:  
 7 Q. I note here they have crashworthy seats. Can  
 8 you describe what a crashworthy seat is versus  
 9 a non-crashworthy seat?

10 MR. BURT:  
 11 A. Sure. First of all, the crashworthy is that  
 12 the seat would take an impact, a crash impact  
 13 of up to 20 Gs, and it would collapse under a  
 14 engineered and designed manner. The seat  
 15 would compress, structures would compress and  
 16 dissipate that crash impact on a point where  
 17 it offloaded those impacts as much as  
 18 possible. For example, to have that seat work  
 19 that way, our seats in the aircraft you can't  
 20 put anything underneath them because part of  
 21 the what we call stroking of the seat down is  
 22 required, and so that's a part of the  
 23 certification of this seat, and that's both  
 24 flight crew and passengers, and that's the  
 25 highest design standard that exists right now.

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1 MS. FAGAN:  
 2 Q. I notice here you got lightning strike  
 3 protection. We've heard about weather from  
 4 the oil operators' presentations. Is  
 5 lightning an issue? Is weather an issue? I  
 6 notice as well deicing. Is this the type of  
 7 thing that comes on all helicopters or is this  
 8 unique to the S-92?

9 MR. BURT:  
 10 A. Well, the certification for lightning strike  
 11 is, again, it's the latest design  
 12 certification. So the aircraft has to go  
 13 under a -- this is in a controlled environment  
 14 where they subject it to a lightning, a  
 15 certain amount of joules. The aircraft has a  
 16 lot of new and modern systems which are  
 17 electronically controlled, such as the engine  
 18 control systems. A lot of the cockpit flight  
 19 management systems are all electronic. They  
 20 have to not only survive a lightning strike or  
 21 a static discharge, which sometimes you can  
 22 get in flying, but they have to stay integral  
 23 throughout that process. So that is -- you  
 24 know, they're subjected to that and they're  
 25 tested under the authority's eyes and they

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1 have to pass that.  
 2 But from a rotor craft icing point of  
 3 view, although the Super Puma came in 1986  
 4 with a certification for rotor craft icing  
 5 protection, it was on the late '80s -- I mean,  
 6 late '70s or early '80s, I'm not sure of the  
 7 exact date, standard. So the standard for  
 8 rotor craft icing then was quite different  
 9 than it was in the late '90s as with this  
 10 latest design criteria. So the S-92 came with  
 11 that latest design criteria and its icing  
 12 system was certified under that, which was  
 13 quite a bit more stringent, as you would  
 14 imagine, after some 15-20 years.

15 MS. FAGAN:  
 16 Q. Okay. In the beginning, they talk about high  
 17 intensity field protection and enhanced ground  
 18 proximity warning systems.

19 MR. BURT:  
 20 A. Right.

21 MS. FAGAN:  
 22 Q. And what feature, how does that assist in  
 23 safety?

24 MR. BURT:  
 25 A. The HIRFP, as we call it, the HIRFP

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1 protection, high intensity radiated field  
 2 protection, is flying around high tension  
 3 wires, high voltage wires. Even around those  
 4 areas, they do have an EM signature which can  
 5 affect electronic equipment. So again, even  
 6 some of the rigs have some pretty high  
 7 radiating stuff, such as satellite dishes and  
 8 that stuff, and this has to pass all of those  
 9 fields. So that's what HIRFP is.  
 10 And enhanced ground proximity warning  
 11 systems are typically from an airline lineage.  
 12 These systems are very dynamic and they  
 13 actually come out in form of a voice and the  
 14 voice will tell you "too low" or, you know,  
 15 "glide slope is too low" or "terrain" and it  
 16 will actually take an algorithm. It'll  
 17 calculate the height, the speed of the  
 18 aircraft, do an algorithmic calculation and  
 19 say "if you keep on this trend" you know,  
 20 "there's terrain ahead." And it will actually  
 21 tell you verbally, "terrain, terrain" and so  
 22 all those systems are implemented into the S-  
 23 92.  
 24 MS. FAGAN:  
 25 Q. Okay. We're going to hear quite a bit about

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1 the health and usage management systems, HUMS.  
 2 MR. BURT:  
 3 A. Right.  
 4 MS. FAGAN:  
 5 Q. So I understand this helicopter has this  
 6 feature.  
 7 MR. BURT:  
 8 A. Yes.  
 9 MS. FAGAN:  
 10 Q. You can either describe it now or we can deal  
 11 with it in detail later, but I do note it's  
 12 one of the features.  
 13 MR. BURT:  
 14 A. Sure. I can describe it now, that's fine.  
 15 MS. FAGAN:  
 16 Q. Okay, sure.  
 17 MR. BURT:  
 18 A. The health and usage monitoring system in the  
 19 aircraft is a system which collects data from  
 20 literally hundreds of collection points  
 21 throughout the aircraft. It's a little bit  
 22 difficult to explain in some cases to the  
 23 general public, but I go back to my Star Trek  
 24 lineage, and you seen a person lay down on  
 25 that bed in Bones' office and you see all

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1 these things in the background saying health  
 2 rate, blood pressure and everything. It's  
 3 kind of like that. It takes all these sensory  
 4 pieces of information such as temperatures,  
 5 vibrations, even a door open light and all  
 6 these different things, all the indications in  
 7 the cockpit, and it brings those into a data  
 8 collection unit. That information is  
 9 downloaded after every flight and the software  
 10 in the aircraft and at the base station is set  
 11 to certain acceptable criteria as established  
 12 by the manufacturer and us as the operator,  
 13 together with the manufacturer. In other  
 14 words, if the sensor for the main rotor  
 15 vibration system senses that the vibrations as  
 16 they measure in inches per second is a little  
 17 higher than acceptable, then it will trigger  
 18 off a set point and say "you need to look at  
 19 this." It is on a trend. It is above what  
 20 you would call your normally accepted level  
 21 and you need to look at it in a proactive  
 22 manner. And we'll take that data and it'll be  
 23 analyzed and that'll give us a signal. So  
 24 that's an example of how we use the health and  
 25 usage monitoring system data.

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1 Now interesting for our organization and  
 2 the S-92 and Sikorsky in generally, actually,  
 3 is that hats off to the manufacturer. They  
 4 have asked and even embedded it in some of  
 5 their agreements that the information we  
 6 gather on the S-92 and the fleet wide  
 7 information that is gathered from the S-92s  
 8 throughout the world is downloaded daily and  
 9 it goes to a control centre in Sikorsky in  
 10 Connecticut. That information is analyzed in  
 11 and of itself and also right across the whole  
 12 group of the S-92 operators. So you have the  
 13 manufacturer looking at this every day. We  
 14 look at it ourselves on every flight, and we  
 15 have a dedicated person in our organization  
 16 that's responsible for looking at that  
 17 information.  
 18 So in other words, as I say, you can't  
 19 manage what you can't measure and this is a  
 20 primary example. You know, if we know what's  
 21 going on, then we can manage it in a proactive  
 22 manner and this is why this is such a great  
 23 initiative.  
 24 MS. FAGAN:  
 25 Q. Okay. When you mentioned the fleet, so what

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1 you're saying is not only are you sending your  
 2 data that's collected every day -  
 3 MR. BURT:  
 4 A. Right.  
 5 MS. FAGAN:  
 6 Q. - that other owners around the world of the S-  
 7 92 are also sending their data to the  
 8 manufacturer every day. So approximately --  
 9 and it mightn't be the entire fleet.  
 10 MR. BURT:  
 11 A. Sure.  
 12 MS. FAGAN:  
 13 Q. But do you know the approximate size of the  
 14 fleet? I mean, how many S-92s are there?  
 15 MR. BURT:  
 16 A. There's approximately -- the latest count I  
 17 have are about 115 to 120 aircraft are  
 18 deployed globally now.  
 19 MS. FAGAN:  
 20 Q. What other service are you aware of that  
 21 they're used for? I mean, you use S-92s and  
 22 you've indicated that the Cougar operation  
 23 deals with offshore transported workers and  
 24 SAR. Are you aware of other -- and not every  
 25 type of usage -

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1 MR. BURT:  
 2 A. Sure.  
 3 MS. FAGAN:  
 4 Q. - but generally, do you know how the other 80  
 5 or whatever the number is -  
 6 MR. BURT:  
 7 A. The S-92, again, quite prolific in the  
 8 offshore aviation business. However, one of  
 9 the markets, I think, that has even surprised  
 10 Sikorsky is that there's a lot of heads of  
 11 state that have ordered this aircraft, a lot  
 12 of areas where you'll have even just a head of  
 13 state flying in the aircraft as is, somewhat  
 14 in the configuration we have today, and the  
 15 aircraft is even configured in countermeasures  
 16 for some heads of state who may want a little  
 17 more security, but you know, I'm talking about  
 18 for countermeasures for missiles and things  
 19 like that, you know, as you would have a head  
 20 of state who'd want to have that security. So  
 21 that's actually quite a big market.  
 22 The private market for the aircraft,  
 23 private people have ordered them, these  
 24 aircraft as well. But those are the two other  
 25 major markets, as we see them right now, and

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1 they currently are moving towards a pseudo  
 2 military and even a military role.  
 3 MS. FAGAN:  
 4 Q. Okay. I think that -- oh, I had one question  
 5 before you move to the next. What other --  
 6 when the S-92 was being selected, what other  
 7 aircraft, if any, were available? Like what  
 8 would have been the competition? Did you  
 9 consider anything other than the S-92 before  
 10 you selected the S-92? And if you did  
 11 consider other aircraft, what were they, and,  
 12 you know, why didn't you pick the competition?  
 13 MR. BURT:  
 14 A. The two aircraft that fit the criteria of a  
 15 new generation aircraft in the large category  
 16 was the Eurocopter EC225, and that was  
 17 basically the end of the line for the Super  
 18 Puma aircraft, and the other one was the  
 19 Sikorsky S-92. As I mentioned earlier, I  
 20 described the process we went through. We had  
 21 them give us presentations on each aircraft  
 22 and their capabilities, their support, where  
 23 they were supported from, and what that might  
 24 look like, and the cost of the aircraft and  
 25 the support that came into that. Once we had

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1 that information, we also, again, put a heavy  
 2 weighing on things such as, you know, will you  
 3 have a simulator available, and there was a  
 4 simple yes, no. No, the Eurocopter product  
 5 was not going to have a simulator ready for  
 6 some two years. Yes, the S-92 was ready to go  
 7 day one. So these are significant measures  
 8 for us. North American support, simulator  
 9 ready to go, the aircraft in its goodness and  
 10 its specifications met what we wanted as an  
 11 organization and Cougar came out firmly and  
 12 confidently recommending the S-92.  
 13 MS. FAGAN:  
 14 Q. Okay, thank you. Now your last chart has some  
 15 of the specifications. These particulars are  
 16 here and they're also in the pamphlet, which  
 17 is an exhibit. I just have a couple of areas  
 18 that I'd like you to cover. How many  
 19 passengers, and the range and speed, gross  
 20 weight, could you cover those four topics?  
 21 MR. BURT:  
 22 A. Sure. It has a capability of carrying up to  
 23 19 passengers and two crew. The range of the  
 24 aircraft, it says here, you know, nautical  
 25 miles is 750, but let me put it in terms of



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1 probably a little more practical for you. The  
 2 aircraft has a capability in zero wind, as we  
 3 generally talk in specifications, of leaving  
 4 St. John's, going offshore some 200 miles,  
 5 returning back to St. John's and having the  
 6 applicable 30 minute reserve fuel.  
 7 MS. FAGAN:  
 8 Q. So you have to have 30 minutes reserve after  
 9 your -  
 10 MR. BURT:  
 11 A. After that point.  
 12 MS. FAGAN:  
 13 Q. - when your trip is finished?  
 14 MR. BURT:  
 15 A. Right.  
 16 MS. FAGAN:  
 17 Q. Okay.  
 18 MR. BURT:  
 19 A. So that's the basic tanks, the basic fuel  
 20 tanks on the aircraft to do that. Now here in  
 21 Newfoundland, we don't have zero wind that  
 22 often. So just to let you know, once you get  
 23 up to 20 knots, it's quite likely that, you  
 24 know, your range may actually quite easily  
 25 come back to 190 or 185. So you know, even

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1 though, yes, zero wind, that's what you can  
 2 do. As you get higher winds, because of the  
 3 mass that's required in flying in winds,  
 4 you'll need to -- you'll burn more fuel. So  
 5 you'll see that your range does start to  
 6 shorten up in an environment like ours.  
 7 As you know, we've developed the  
 8 auxiliary fuel tank. So it's quite relevant  
 9 to our discussion. One of our tanks can give  
 10 you an extended 45 minutes or the equivalent  
 11 of going out another 50 miles and back another  
 12 50. So we can go, in zero wind, up to 250  
 13 nautical miles out and come back and have that  
 14 30 minute reserve.  
 15 MS. FAGAN:  
 16 Q. So we've heard from Mr. Williams the distances  
 17 to the various facilities and the Husky, I  
 18 believe, is 200.  
 19 MR. BURT:  
 20 A. Yes.  
 21 MS. FAGAN:  
 22 Q. And then the other two are slightly less than  
 23 the 200. So can you apply -- and I didn't ask  
 24 the amount of time. I understand a trip, a  
 25 round trip, how long is a round trip, and can

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1 you take this range fuel capacity and then  
 2 apply it to say the 200, the 200 nautical  
 3 mile, which is the long -- the furthest of the  
 4 three main customers?  
 5 MR. BURT:  
 6 A. Right. The range of the round trip will take  
 7 about 3.4-3.3 hours, like Hibernia and then  
 8 extend up to closer towards 4 hours for Husky,  
 9 and let me give you even a more practical  
 10 application. The need for at least one  
 11 auxiliary fuel tank for Hibernia, Terra Nova  
 12 and White Rose respectively would be described  
 13 as low, medium and high reliance on at least  
 14 one tank. So quite a high probability we will  
 15 always need a tank just to do Husky. We have  
 16 a medium time, maybe 35-40 percent, that we'll  
 17 need it for Terra Nova, and fairly low because  
 18 of its distance that the main tanks, we can  
 19 get to Hibernia. But when we're talking 274,  
 20 like we're in the Flemish Pass, not only one  
 21 but sometimes two tanks are required. If we  
 22 have a 50 knot wind, as happens quite often,  
 23 we may have to put a tank in just for that.  
 24 Without the auxiliary fuel tanks, we're not  
 25 getting our business done on the east coast of

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1 Canada.  
 2 MS. FAGAN:  
 3 Q. Okay. So the 20 or 30 nautical miles between  
 4 the -- you know, the distance, these margins,  
 5 when you look at them on the chart, well, it's  
 6 only another 10 miles. It's only another 20  
 7 miles. But -  
 8 MR. BURT:  
 9 A. You got -  
 10 MS. FAGAN:  
 11 Q. - that is significant in light of the wind?  
 12 MR. BURT:  
 13 A. And you got to come back.  
 14 MS. FAGAN:  
 15 Q. The fuel capacity, you got to come back and  
 16 you got to have your reserve?  
 17 MR. BURT:  
 18 A. Every ten out is ten more back, so it's 20  
 19 nautical miles.  
 20 MS. FAGAN:  
 21 Q. And do you have -- does the reserve have to  
 22 also -- does your reserve also increase?  
 23 MR. BURT:  
 24 A. The farther we go out, the pilot has a  
 25 requirement to make sure that he takes care of

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1 all contingencies. So the farther you go out  
 2 and the weather system, depending on what it  
 3 is, he may actually carry more contingency  
 4 fuel. So it may have an effect beyond the  
 5 pure flight planning value of the winds that  
 6 day. Depending on the system and the  
 7 distance, the pilot may actually increase his  
 8 contingency fuel because of the range, the  
 9 ultimate range of that flight.

10 MS. FAGAN:  
 11 Q. Would it be fair to say, you know, fuel is  
 12 critical? You can't underestimate your fuel.

13 MR. BURT:  
 14 A. Yeah, it's been -- I mean obviously fuel is --  
 15 the east coast here of Canada is a unique  
 16 place. Our prevailing winds are westerly. So  
 17 when you go offshore, you go offshore and you  
 18 do an approach to a platform which, as we  
 19 know, the weather here -- for example, in the  
 20 months between May and August, 50 percent of  
 21 the time, the weather is reported that it's  
 22 actually below our legal approach limits.  
 23 Give you an idea, 50 percent of the time, you  
 24 know, we can't even land there. So when we go  
 25 offshore here, we go to do an approach, and

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1 when we -- if we land on the rig and then we  
 2 refuel and come home. If we have to do a mis-  
 3 approach, which does happen, if we can't see  
 4 the rig, we do a mis-approach and come back  
 5 home. Coming back home, we're coming into a  
 6 prevailing head wind and it has its  
 7 challenges. So absolutely, to answer your  
 8 question, fuel is everything here and that's  
 9 why even some of our operators say that when  
 10 you fly in this region, you must have east  
 11 coast experience. You don't see that in too  
 12 many contracts. This region is a very unique  
 13 region. It's where we cut our teeth. It's  
 14 what we do and that's where we say, you know,  
 15 we'd have our harsh weather capabilities. So  
 16 yes, fuel is critical obviously.

17 MS. FAGAN:  
 18 Q. Okay. What's the speed and do you -- the  
 19 speed is recorded here as 135. It says  
 20 typical crews speed.

21 MR. BURT:  
 22 A. Right.

23 MS. FAGAN:  
 24 Q. I understand there's a maximum and then  
 25 there's a general speed that you may use.

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1 MR. BURT:  
 2 A. Right. In the limitations section, there's a  
 3 velocity not to exceed of 167 knots, but of  
 4 course, there's different -- there's a maximum  
 5 range and that basically will get to the  
 6 maximum distance, and there's a maximum  
 7 endurance, what will keep you in the air the  
 8 longest. You may not have the maximum range,  
 9 but we use those two. Practically, because of  
 10 our distances here and the weather conditions,  
 11 we always fly at the maximum range speed of  
 12 about 134 to 137 knots, depending what the  
 13 weight of the aircraft is at that time. So  
 14 coming back, where it's not that critical, we  
 15 may be as high as 140 or 142. So the  
 16 acceptable normal range is about 134 knots to  
 17 about 142 knots.

18 MS. FAGAN:  
 19 Q. Okay, and you've mentioned the weight. The  
 20 maximum gross weight, can you explain that  
 21 term? What is it and why is that significant?  
 22 How does that factor in?

23 MR. BURT:  
 24 A. Well, that's the maximum all up gross weight  
 25 as the aircraft has been certified to, and

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1 that means that, in this case, we cannot be --  
 2 with all fuel, passengers and everything on  
 3 board, we cannot be above 26,500 pounds when  
 4 those wheels come off the ground, and that's  
 5 essentially all that means.

6 MS. FAGAN:  
 7 Q. Okay. That's all the questions I have. The  
 8 other specifications are there and those that  
 9 are interested, they'll have a chance to  
 10 question you if they have other issues with  
 11 this particular slide.

12 MR. BURT:  
 13 A. Okay.

14 MS. FAGAN:  
 15 Q. If there's nothing else that you'd like to add  
 16 with respect to the selection process, we'll  
 17 move on to the maintenance section. Do you  
 18 have anything else for this section?

19 MR. BURT:  
 20 A. The only thing else I would say is that I  
 21 personally was involved in the process and saw  
 22 it right through and I have no problem in  
 23 shamelessly name dropping that I was the first  
 24 one to fly the S-92 and land it here in St.  
 25 John's and that was a -- we were very proud of

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1 that event.

2 MS. FAGAN:

3 Q. Okay.

4 COMMISSIONER:

5 Q. One thing that I might ask before you leave

6 the subject. When you speak of knots, of

7 course, we know that in marine matters and

8 flying, knots are the -

9 MR. BURT:

10 A. Right.

11 COMMISSIONER:

12 Q. But most people today -- a couple of

13 generations ago in Newfoundland, everybody

14 would understand knots, but today most people

15 think in terms of kilometres.

16 MR. BURT:

17 A. Right.

18 COMMISSIONER:

19 Q. Could you translate your figures in knots to

20 kilometres so that people who are watching

21 this may have a better idea?

22 MR. WILLIAMS:

23 A. It's on the chart there.

24 MR. BURT:

25 A. Our chart here, the 750 nautical miles is --

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1 the equivalent would be 1389 -- I'm sorry, the

2 nautical miles of 750 nautical miles is 1389

3 kilometres.

4 COMMISSIONER:

5 Q. Okay.

6 MR. BURT:

7 A. Outside of that -

8 UNKNOWN SPEAKER:

9 Q. Speed?

10 MS. FAGAN:

11 Q. The speed.

12 MR. BURT:

13 A. I don't know if our distance to the Hibernia

14 platform, if we have the kilometres, for

15 example, to that.

16 COMMISSIONER:

17 Q. I think it's 315.

18 MR. BURT:

19 A. Right, yeah. So I guess the thing there is

20 that the nautical mile certainly is longer

21 even than a statute mile.

22 COMMISSIONER:

23 Q. Yes.

24 MR. BURT:

25 A. And understanding that, I realize, it's

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1 certainly not even as driving your vehicle,

2 whether it's statute or nautical -- or

3 kilometres. This is quite a farther measure.

4 COMMISSIONER:

5 Q. Yeah.

6 MS. FAGAN:

7 Q. And the speed itself, you spoke of 135 knots.

8 If we were in our car, we'd be looking at the

9 kilometre gauge. So for the record, what is

10 that in kilometres?

11 MR. BURT:

12 A. Yeah, it's 250 kilometres per hour.

13 COMMISSIONER:

14 Q. So it is quite a difference?

15 MR. BURT:

16 A. Dramatic difference, yes, yeah. That's a good

17 point.

18 COMMISSIONER:

19 Q. Okay, thank you, because I think some people

20 are just not familiar with knots any more.

21 MR. BURT:

22 A. And that's a bit of a handicap. We use these

23 terms all the time in the aviation business as

24 if it's a normal discussion, but you're quite

25 right. It is quite a unique description of

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1 distance and speed.

2 COMMISSIONER:

3 Q. Yeah. Yeah, okay, thank you.

4 MS. FAGAN:

5 Q. Thank you. The next section is going to deal

6 with aircraft maintenance, and how we're going

7 to deal with the next six sections is Cougar

8 has prepared a video. The videos run about

9 eight minutes and each video basically is a

10 demonstration of the departments which Mr.

11 Williams spoke about earlier. So we're going

12 to take it from aircraft maintenance and move

13 our way through the departments at the St.

14 John's base, and I'd ask the technical people

15 here to play the video, which is 156 sub 1,

16 and it takes a minute to load, and then we

17 will speak about some of the maintenance

18 department.

19 (VIDEO PLAYED)

20 Cougar Helicopters provides

21 transportation for offshore oil industry

22 workers in Newfoundland and Labrador. Since

23 1997, we have flown more than 13,000 flights

24 bringing more than 270,000 passengers to and

25 from their locations offshore. During that

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1 time, our pilots have logged more than 60000  
 2 hours of airtime. Managing several offshore  
 3 flights each day, and doing it safely,  
 4 requires preparation, planning and  
 5 communication between all departments of  
 6 Cougar Helicopters, as well as with our  
 7 offshore clients and service providers. This  
 8 video will highlight the procedures and  
 9 regulations adhered to by Cougar in planning  
 10 and executing every flight offshore.

11 Maintenance. It's the last flight of the  
 12 day at Cougar Helicopters. Passengers  
 13 disembark, having finished another offshore  
 14 rotation. They follow their escort to the  
 15 heliport while the pilot stays on board to  
 16 shut down the aircraft.

17 The end of flight operations for the day  
 18 signals the beginning of the maintenance work  
 19 day for the engineers and technicians who  
 20 maintain the fleet of four Sikorsky S- 92  
 21 helicopters. For every one hour of flying  
 22 time, there are three hours of maintenance  
 23 performed on the aircraft.

24 This work begins on the tarmac as soon as  
 25 the helicopter has cooled down, with a

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1 thorough engine cleaning. Cougar's  
 2 helicopters fly over the ocean and are exposed  
 3 to corrosive salt spray and other foreign  
 4 matter, especially during offshore landings  
 5 when the aircraft fly at a lower altitude.

6 Once they have been cleaned, they are  
 7 started and run long enough to dry the engine.  
 8 Once cooled down, the helicopter is towed into  
 9 the hangar.

10 Before the beginning of every shift, the  
 11 maintenance team meets for the toolbox talk.

12 At the beginning of every shift, the  
 13 maintenance engineers get together in the  
 14 office and have a chat about what work is  
 15 scheduled for tonight, what inspections to do,  
 16 what components to change, and also what  
 17 defects may have been on the aircraft, as in  
 18 snags the pilots may have identified during  
 19 their flight that need to be corrected  
 20 tonight, before the aircraft leaves tomorrow.

21 Following the toolbox talk, every  
 22 engineer logs onto the network to review and  
 23 complete the read and sign requirement for  
 24 maintenance staff. This process ensures that  
 25 each maintenance team member is aware of any

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1 new technical publications or changes in  
 2 bulletins revising existing manuals. The  
 3 engineers will then consult the appropriate  
 4 manuals with detailed schematics which are  
 5 often printed and taken to the aircraft. All  
 6 maintenance personnel are equipped with  
 7 personal protective equipment or PPE, which  
 8 include protective eye wear and footwear,  
 9 gloves, coveralls and high visibility  
 10 clothing.

11 The aircraft is given an airworthiness  
 12 limitations manual by the manufacturer. This  
 13 manual tells us what maintenance has to be  
 14 done at what specific intervals, whether it be  
 15 on an hourly interval or on a calendar  
 16 interval, by months, days, years and hours.

17 Servicing stands are put in place to  
 18 enable access to the aircraft and cord bridges  
 19 are placed over power cords to eliminate trip  
 20 hazards. The Cougar maintenance facility in  
 21 St. John's is clearly not a typical mechanical  
 22 shop.

23 The hangar is almost classified as a  
 24 sterile environment. You can't have things  
 25 that are flying around the hangar or any dirt

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1 or anything that may get into parts or seals  
 2 or anything that may cause damage to the  
 3 aircraft.

4 The engineers and technicians who work  
 5 here are highly trained professionals. An  
 6 example of this professionalism is the Cougar  
 7 tool control program which is a vital part of  
 8 the ongoing quality and safety program within  
 9 the company. Before beginning work on the  
 10 aircraft, each drawer of the toolboxes is  
 11 inspected carefully to ensure that no tools  
 12 are missing. All tools are stored in custom  
 13 cut foam inserts within the drawers, which  
 14 allow for efficient visual inspection to  
 15 ensure all tools are present and accounted  
 16 for.

17 At the end of the shift, an employee will  
 18 review the toolbox to ensure that all the  
 19 tools are back in. If the tools are all back  
 20 in the toolbox, as it was when the box was  
 21 opened, that employee will close the toolbox,  
 22 lock it and sign out the sheet for the date  
 23 and time at which it was signed. If, for some  
 24 reason, a tool is not in the toolbox that was  
 25 there at the beginning of the shift, then

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1 everything stops until that tool is found.  
 2 Whether it be on an aircraft, in somebody's  
 3 pocket, in the desk drawer, in on the desk, on  
 4 the floor, wherever it is, it has to be found  
 5 before the aircraft are released and let go  
 6 outside. We cannot have aircraft flying  
 7 around with tools on them that may cause  
 8 issues in operation.  
 9 On board every Cougar S-92 is a health  
 10 and usage monitoring system or HUMS. This  
 11 system provides a wealth of information about  
 12 the helicopter's mechanical, electrical and  
 13 avionics systems and may flag an issue that  
 14 requires maintenance or repair. The HUMS data  
 15 is downloaded to the HUMS ground station where  
 16 it is analyzed and then archived. Every day  
 17 this data is also forwarded to the aircraft  
 18 manufacturer for their review and comparison  
 19 with the global fleet of S-92s.  
 20 Every night, technicians perform a  
 21 thorough inspection of each aircraft using  
 22 flashlights and probes. A variety of  
 23 connections, hoses, lines, bolts and latches  
 24 are inspected, tested and verified as properly  
 25 functioning. This exhaustive and highly

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1 detailed inspection looks for anything out of  
 2 the ordinary and is in addition to any  
 3 regularly scheduled maintenance.  
 4 Safety is very important to the  
 5 maintenance because we know what we're doing.  
 6 We know the work that we have to do and what's  
 7 affected by our work. You know, they spend a  
 8 lot of time working on these aircraft to  
 9 ensure that everything is in its right place  
 10 and is perfect and is safe, so it's not, you  
 11 know, push the aircraft in the hangar and  
 12 close the doors like you would with your car  
 13 in a garage and then drive it out tomorrow  
 14 morning. There's a lot of work goes on after  
 15 the aircraft are finished flying for the day.  
 16 To ensure quality, all maintenance or  
 17 repair work is subject to a dual inspection by  
 18 an engineer or technician who was not involved  
 19 in the original work. The purpose of this is  
 20 to certify that work was done correctly and  
 21 components reassembled properly. This is an  
 22 extra layer of oversight and a part of the  
 23 Cougar integrated safety management system.  
 24 Every replacement part for the aircraft must  
 25 be certified as meeting quality control

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1 standards and is approved for use on the  
 2 Sikorsky S-92.  
 3 Depending on the type of maintenance  
 4 performed, the helicopter may require ground  
 5 running. A number of our maintenance team are  
 6 qualified to perform this specialized duty,  
 7 which involves starting and running the  
 8 engines and turning the rotors. This saves  
 9 operational time by ensuring the aircraft are  
 10 flight ready before pilots start their day.  
 11 Finally, all maintenance and repair  
 12 documentation is reviewed and signed off.  
 13 We have a saying in the business that the  
 14 paperwork is not completed -- or the aircraft  
 15 is not ready to fly until the paperwork equals  
 16 or exceeds the gross weight of the aircraft.  
 17 We produce paperwork for the guys to do their  
 18 work, which we call work spec sheets, which  
 19 are issued to the floor every day. We have  
 20 log books that have to be completed and signed  
 21 out. They're multi-sheets. We have build  
 22 sheets that we use to do major component  
 23 changes, and all this paperwork has to go  
 24 down, be signed out and brought back in again.  
 25 (VIDEO ENDED)

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1 MS. FAGAN:  
 2 Q. That is a good oversight over how your  
 3 aircraft maintenance department works. We  
 4 were tempted to bring the toolbox in, but we  
 5 thought a picture would be easier and this  
 6 video is a little easier to demonstrate some  
 7 of the processes, but I'd just like to take  
 8 you through a few of the things that we did  
 9 see in the video and some things that were not  
 10 covered in the video, and the first issue I'd  
 11 like you to cover is the approved maintenance  
 12 organization, and we heard from Michael  
 13 Stephenson from Transport Canada and he had  
 14 told the Inquiry that an aircraft operator  
 15 must use an approved maintenance organization,  
 16 and I would just ask you to explain -- and Mr.  
 17 Stephenson did indicate in his evidence that  
 18 Cougar has an approved maintenance  
 19 organization, and for the group here, at  
 20 Exhibit 158 is the certificate by Transport  
 21 Canada of Cougar Helicopters as an approved  
 22 maintenance organization. So we need not get  
 23 into that part. We know you're an approved  
 24 organization and we have the certificate as a  
 25 record. But could you describe when Cougar

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1 Helicopters first became an approved  
 2 maintenance organization and briefly go  
 3 through that process and how that continues  
 4 today?  
 5 MR. BURT:  
 6 A. Sure. Any air operator wishing to have an  
 7 approved maintenance organization has to,  
 8 number one, understand what the criteria is  
 9 with Transport Canada, and then they have to  
 10 have the person responsible for maintenance,  
 11 in our case, a director of maintenance in the  
 12 organization, and apply for that. If you are  
 13 accepted, as we were -- in 1994 is when we  
 14 received our certificate as an approved  
 15 maintenance organization, and we've held that  
 16 certificate intact to our business ever since  
 17 that point.  
 18 Now it just doesn't stay there in and of  
 19 itself. It is a dynamic certification because  
 20 an organization grows. It adds certain  
 21 elements and services to its maintenance  
 22 organization. In our case, we added other  
 23 bases. We added other aircraft. Those have  
 24 to be reflected in one of your key documents,  
 25 which is your maintenance control manual.

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1 That is the bible. In fact, we do have  
 2 regulations that said you must. However, in  
 3 your maintenance control manual, we embody all  
 4 of those requirements and in some cases, some  
 5 more onerous requirements which we say we will  
 6 comply with. Once that maintenance control  
 7 manual is certified, that is our ultimate  
 8 guideline, our ultimate -- not even a  
 9 guideline. It's actually our ultimate bible.  
 10 That is the rule.  
 11 So as we as an organization have  
 12 developed, we've added some other complements  
 13 and other capabilities in our business, such  
 14 as we have people that are now on board that  
 15 can work on structures, the airframe, the  
 16 metal of the aircraft, sheet metal. They can  
 17 actually -- are certified to work. They are  
 18 approved maintenance engineers. But we have  
 19 to embody that in our approved maintenance  
 20 organization and our MCM. We have avionics,  
 21 and of course, this is all the instrumentation  
 22 you'll see up in the front of the aircraft and  
 23 the electrical as well. That is a specialty  
 24 in and of itself and that has to be  
 25 recognized. So there's some growth in that,

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1 but for us, we've received and maintained our  
 2 AMO since 1984.  
 3 MS. FAGAN:  
 4 Q. Okay. I would ask the Registrar to bring up  
 5 Exhibit 172, which is the maintenance control  
 6 manual. Now what -- this is a confidential  
 7 exhibit and what we've -- because it's  
 8 proprietary, it is a Cougar document, and what  
 9 we've put forward here is the table of  
 10 contents. It's not the entire manual, because  
 11 I think that kind of detail, we can review it,  
 12 but it's not necessary for this data  
 13 collection phase. And if you could go to the  
 14 second page of this manual? You just -- okay,  
 15 and if you scroll down, I believe this is your  
 16 reference to -- we see there a stamp. So  
 17 would it be fair to say -- who is the stamp  
 18 and the process that Transport Canada goes  
 19 through with respect to this manual?  
 20 MR. BURT:  
 21 A. Right. I mean, it's a Transport Canada stamp  
 22 certifying its certification, and again, just  
 23 point out that when we have changes in our  
 24 maintenance control manual, every time we have  
 25 an effective or material change, it gets re-

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1 certified and restamped. So again, we've had  
 2 this integral all the way from 1984, but this  
 3 is the seal of Transport Canada approving our  
 4 organization.  
 5 MS. FAGAN:  
 6 Q. Okay. So the next page, if the Registrar or  
 7 you can -- I don't know who's going to control  
 8 the mouse here. This lists effective pages.  
 9 Would this be the changes to the manual?  
 10 MR. BURT:  
 11 A. That's correct.  
 12 MS. FAGAN:  
 13 Q. Okay, and then the types of issues that are  
 14 covered in the manual are in the next few  
 15 pages after we get past all the Transport  
 16 Canada stamps.  
 17 MR. BURT:  
 18 A. Correct.  
 19 MS. FAGAN:  
 20 Q. Okay. So what types of issues and topics are  
 21 covered by the maintenance control manual?  
 22 Because I understand this is the bible or the  
 23 overarching document for maintaining that  
 24 department. Would that be fair?  
 25 MR. BURT:

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1 A. That's correct, yeah. The document  
 2 essentially will explain how we do things in  
 3 our maintenance organization, who does them,  
 4 whose responsibility it is. It'll detail  
 5 training aspects and it'll go into our  
 6 paperwork, how it's to be completed, and our  
 7 different types of maintenance schedules. In  
 8 other words, we have a progressive maintenance  
 9 schedule system. It'll speak to that, and all  
 10 aspects, you know, to those tasks.

11 MS. FAGAN:  
 12 Q. Okay.

13 MR. BURT:  
 14 A. It also, as you can see here, it has a number  
 15 of policies that are embodied in the document  
 16 and it is a very specific and a document that  
 17 is used. It just doesn't sit on a shelf. So  
 18 it's quite a living document when it comes to  
 19 the use of the -- not only the management, but  
 20 the staff.

21 MS. FAGAN:  
 22 Q. Okay.

23 MR. BURT:  
 24 A. Our staff have to be trained. All of our  
 25 staff have to be trained in the use of this

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1 document and the knowledge that it carries  
 2 within, and even that, that examination of  
 3 their knowledge of this manual is embodied in  
 4 what they have as a aircraft certification  
 5 authority. Our maintenance organization will  
 6 issue them an ACA after they have been taught  
 7 and tested on the content of this document.

8 MS. FAGAN:  
 9 Q. Okay. There are a number of other maintenance  
 10 documents and we have not put forward all of  
 11 the maintenance documents. I don't want to go  
 12 through the rest, but just for information,  
 13 the Maintenance Policy Manual, the Table of  
 14 Contents, is also included in the exhibit  
 15 list, and the company Maintenance Procedure  
 16 Manual, there's also a list of a number of  
 17 manuals, and I don't think it is necessary to  
 18 go through all of these manuals. What we want  
 19 to know is how you run your business, how you  
 20 operate, and how you maintain control and  
 21 safety. So those records are there for those  
 22 that wish to view them. I'd now like you to  
 23 move back to the PowerPoint or the slide  
 24 presentation and we should be at slide 30, and  
 25 move to slide 30 which deals with the training

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1 because you did touch upon the fact that your  
 2 engineers have to be trained and certified to  
 3 use these manuals and processes. So can you  
 4 go through the training regime at Cougar  
 5 Helicopters for your aircraft maintenance  
 6 engineers.

7 MR. BURT:  
 8 A. Sure. First of all, Transport Canada are the  
 9 issuing authority for these licences, and  
 10 again the engineers have to complete a test  
 11 and do that, and the experience that our crews  
 12 have are anywhere from one to 35 years  
 13 experience. To give you a high level run  
 14 through of what it takes to become an approved  
 15 maintenance engineer, they need to graduate  
 16 from a Transport Canada approved training  
 17 institute, in this case, Gander is an approved  
 18 institute. They do need to complete an  
 19 apprenticeship with an approved maintenance  
 20 organization, and we have done that and do  
 21 that on a regular basis, and they'll come on  
 22 board and be mentored and overseen by a  
 23 certified engineer. The total experience that  
 24 they have to log is the equivalent of 48  
 25 months prior to issuing of that licence, which

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1 is quite onerous when you look at that, and  
 2 then they have to successfully complete a  
 3 technical exam and again that's a Transport  
 4 Canada exam that they have to pass. They need  
 5 to complete a very aircraft specific training  
 6 course and that training course could be put  
 7 on by the manufacturer, or if it's approved,  
 8 it could be put on by the operator. In our  
 9 case, we send them to the manufacturer, with  
 10 the S-92, for example.

11 MS. FAGAN:  
 12 Q. So where is the manufacturer? I believe you  
 13 said Connecticut.

14 MR. BURT:  
 15 A. The manufacturer has a training representative  
 16 called Flight Safety International, and  
 17 they're in West Palm Beach, Florida.

18 MS. FAGAN:  
 19 Q. Okay. So that's where you send your aircraft  
 20 maintenance engineers?

21 MR. BURT:  
 22 A. Correct.

23 MS. FAGAN:  
 24 Q. Okay.

25 MR. BURT:

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1 A. And I will add that in the aviation business,  
 2 the engines are always regarded as a separate  
 3 component, so they're actually sent to a  
 4 separate course in Cincinnati, for GE. It's a  
 5 GE engine. So they go on an engine course and  
 6 an aircraft course. It's just the dynamic of  
 7 the aviation business.

8 MS. FAGAN:  
 9 Q. Okay.

10 MR. BURT:  
 11 A. And then after that they need to complete the  
 12 company initial training requirements, and  
 13 what I mean by that is orientation into  
 14 procedures, how to use the manuals, how to use  
 15 the paperwork, the protective equipment  
 16 policies, the tool control policies, and the  
 17 like. All that has to be gone through, and  
 18 then, as I said before, once that's done, that  
 19 training is done, they are issued an ACA and  
 20 that's an Aircraft Certification Authority by  
 21 the Cougar approved maintenance organization.  
 22 Without that ACA, they're not allowed to work  
 23 on our aircraft.

24 MS. FAGAN:  
 25 Q. Okay. Approximately how many aircraft

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1 maintenance engineers does Cougar have in the  
 2 east coast, and what would be the total number  
 3 of aircraft maintenance engineers?

4 MR. BURT:  
 5 A. On the east coast we've got about 36 or 38  
 6 engineers here.

7 MS. FAGAN:  
 8 Q. Okay, thank you.

9 MR. BURT:  
 10 A. And we've got a total of just over 50  
 11 engineers in our organization.

12 MS. FAGAN:  
 13 Q. Now the maintenance manuals, I don't want to  
 14 pull out any more manuals, and we've heard  
 15 from the video -- in that video it identified  
 16 the speaker as being the director of your  
 17 maintenance department, Mr. Bob Parady, is that  
 18 correct?

19 MR. BURT:  
 20 A. That's correct.

21 MS. FAGAN:  
 22 Q. Okay, and he did go through the types of  
 23 records that the maintenance engineers have to  
 24 keep. Could you give us an indication as to  
 25 how many manuals the maintenance department

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1 deals with or uses in maintaining the S-92? I  
 2 mean, what we have as exhibits are three  
 3 overarching control manuals or policy manuals,  
 4 but they're not the manuals for the equipment,  
 5 is that correct?

6 MR. BURT:  
 7 A. That's correct. I mean, there's illustrated  
 8 parts catalogues, there's component manuals,  
 9 there's instructions for repair of the  
 10 aircraft specifics, like, every work action  
 11 that we take on the aircraft. For example,  
 12 changing out a fuel control will come with a  
 13 complete list of directions from the  
 14 manufacturer, and then all the other ancillary  
 15 equipment such as a radar, or a satellite  
 16 communications system, or an emergency locator  
 17 transmitter, all those have to come with  
 18 manuals from their manufacturers which the  
 19 Engineer Department does hold and they do use  
 20 in the maintenance of the aircraft, and those  
 21 are in the order of -- it's almost reaching  
 22 over 50/60 manuals just for those ancillary  
 23 pieces of equipment, and then dozens and  
 24 dozens of other support manuals to effect the  
 25 work and complete the job. Again there's

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1 literally thousands of pages. I know that the  
 2 Engineering Department would like for me to be  
 3 very specific that there's an extreme amount  
 4 of information, but I sort of boil it down to  
 5 say that they don't call it a maintenance  
 6 library for nothing, because it's literally a  
 7 full wall of manuals, and additional  
 8 electronic manual database as well, which is  
 9 becoming more prolific actually and we've  
 10 embodied that in our organization in how we do  
 11 our work.

12 MS. FAGAN:  
 13 Q. So when you have an electronic manual system,  
 14 what benefits does that bring? I mean, we all  
 15 know the paper is there, but every time  
 16 there's a change, you're going to have to get  
 17 a new piece of paper.

18 MR. BURT:  
 19 A. Yes, correct.

20 MS. FAGAN:  
 21 Q. So how does the electronic manual system at  
 22 Cougar work?

23 MR. BURT:  
 24 A. Well, we operate from whatever manual we're  
 25 using at the time, however, when revisions



1 come in, the revisions go through our Quality  
 2 Assurance Department and our Technical Records  
 3 Department, and those updates are issued  
 4 electronically in our system, and that  
 5 includes the laptops that the engineers will  
 6 use out of their workstations and that's  
 7 verified by our Quality Assurance. The  
 8 benefit there is that we're not replacing some  
 9 200 pages and all the errors that might  
 10 introduce. This is a document that comes  
 11 through, it's vetted through, one document  
 12 from the manufacturer. So there's a lot of  
 13 integrity in that for us when we're doing  
 14 amendments.

15 MS. FAGAN:

16 Q. Okay. How do you implement your maintenance,  
 17 and in particular, can you describe the  
 18 maintenance intervals, what is a maintenance  
 19 interval?

20 MR. BURT:

21 A. Sure. I think it would be important to take  
 22 it right from the practical. You saw in the  
 23 video -- I think it well describes some of the  
 24 intervals all the way from you would start  
 25 from a flight when it goes offshore and comes

1 we'll have a 1250 hour inspection, which is  
 2 quote an onerous inspection. The aircraft  
 3 could be down for seven days until it's  
 4 completed. They'll look at airframe components  
 5 and everything else. In many organizations  
 6 like ours, we do what's called "progressive  
 7 maintenance", and that is an approved  
 8 Transport Canada certified method of  
 9 completing those items in that 1250 hour  
 10 inspection in intervals all the way through so  
 11 the aircraft doesn't go down for seven days.  
 12 We can take it, say, for two days on a weekend  
 13 here, one day here, two more days here, where  
 14 it doesn't affect the operation, so it's  
 15 spread out, and we find that more effective  
 16 and more compliments the capacity and a  
 17 practical line environment. That's how we do  
 18 it. That's all specified, laid out, and  
 19 certified by the regulatory authority to  
 20 complete all those interval type of  
 21 inspections.

22 MS. FAGAN:

23 Q. Okay. The next issue is the alert service  
 24 bulletins because what you've described is the  
 25 regular known preplanned maintenance, but I

1 back. If we have a second flight, we'll do a  
 2 turnaround check and that's actually  
 3 stipulated in our maintenance control manual  
 4 that we will do a turnaround. They'll open up  
 5 the cowlings, look at the aircraft. The  
 6 aircraft when it comes in after the end of the  
 7 day will come into the hangar and it has a  
 8 very specific daily inspection. All those  
 9 steps are specified in our Maintenance Control  
 10 Manual or the supporting manuals, and we have  
 11 to do a daily inspection. Then on top of  
 12 that, depending on if there's any snags that  
 13 came back, you know, that my window was  
 14 leaking or the radar, part of this thing  
 15 wasn't working correctly, those snags have to  
 16 be registered in the journey log which is a  
 17 document that goes with the aircraft, and then  
 18 transcribed over to the technical log which  
 19 the engineers will have. So they'll take that  
 20 and they'll work on that snag. On top of  
 21 that, we also have a work spec sheet or  
 22 specified work intervals that make sure the  
 23 aircraft has scheduled regular maintenance  
 24 done. Now there's two ways that that can be  
 25 done. It can be done at -- in this case,

1 understand that on occasion you can receive an  
 2 alert service bulletin, or you can receive an  
 3 airworthiness directive. So I'd like you to  
 4 take us through the service bulletin first,  
 5 explain what that is. Now we heard some of  
 6 this from Mr. Stephenson for Transport Canada,  
 7 but it is a significant and important aspect  
 8 of maintenance, so I'd like you to review the  
 9 alert service bulletin and then the  
 10 airworthiness directive, and in particular,  
 11 since you're the one flying our workers  
 12 offshore, I'd like to know how does Cougar  
 13 Helicopters deal with those notices when they  
 14 receive them?

15 MR. BURT:

16 A. Right. Alert service bulletins and  
 17 airworthiness directives are standard in the  
 18 aviation business, whether you're flying fixed  
 19 wing, helicopters, or any aspect of how you  
 20 fly. It is a standard part of our business.  
 21 Alert service bulletins and ADS are usually  
 22 raised when there's an issue in the aircraft,  
 23 primarily to do with a safety related issue,  
 24 and an alert service bulletin is an essential  
 25 requirement. It's issued by the manufacturer.

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<p>1 MS. FAGAN:</p> <p>2 Q. Okay, I understand you have a slide, so we'll</p> <p>3 move to slide 31, and I don't want you to go</p> <p>4 through all of the --</p> <p>5 MR. BURT:</p> <p>6 A. Sure.</p> <p>7 MS. FAGAN:</p> <p>8 Q. You can just point out the high points and</p> <p>9 explain this in your own terms.</p> <p>10 MR. BURT:</p> <p>11 A. Right. So again as we pointed out, this slide</p> <p>12 here does speak to the elements we're</p> <p>13 discussing. We talked about items affecting</p> <p>14 safety. Compliance for an alert service</p> <p>15 bulletin is essential, and it provides</p> <p>16 instructions. So it'll tell you this is what</p> <p>17 we want done, the manufacturer, and it will</p> <p>18 specify the instructions, the timeline to</p> <p>19 effect that work, and that timeline could be</p> <p>20 flight hours, it could be calendar, three</p> <p>21 months, and that's the compliance period.</p> <p>22 When we receive an alert service bulletin or</p> <p>23 an AD, for that matter --</p> <p>24 MS. FAGAN:</p> <p>25 Q. So do you want to explain what an AD is?</p>	<p>1 MR. BURT:</p> <p>2 A. So for clarify sake, I think it's important to</p> <p>3 understand those. When a manufacturer issues</p> <p>4 an ASB, it is to all operators of that</p> <p>5 equipment right across the board.</p> <p>6 MS. FAGAN:</p> <p>7 Q. Okay.</p> <p>8 MR. BURT:</p> <p>9 A. And again the AD is a legal binding</p> <p>10 requirement by the regulatory authority.</p> <p>11 MS. FAGAN:</p> <p>12 Q. Okay. So a AD issued by Transport Canada,</p> <p>13 because you're a certified operator in Canada,</p> <p>14 you would have to comply with an AD from</p> <p>15 Transport Canada?</p> <p>16 MR. BURT:</p> <p>17 A. That's correct.</p> <p>18 MS. FAGAN:</p> <p>19 Q. But what is EASA? You have it here, E-A-S-A,</p> <p>20 what's that?</p> <p>21 MR. BURT:</p> <p>22 A. EASA is the certifying authority for Europe.</p> <p>23 MS. FAGAN:</p> <p>24 Q. Okay.</p> <p>25 MR. BURT:</p>
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<p>1 MR. BURT:</p> <p>2 A. An AD --</p> <p>3 MS. FAGAN:</p> <p>4 Q. And then perhaps move to the next slide which</p> <p>5 is 32 and you can explain an AD, and then the</p> <p>6 implementation of those?</p> <p>7 MR. BURT:</p> <p>8 A. The difference is the AD versus the ASB is</p> <p>9 that an airworthiness directive is issued by</p> <p>10 the regulatory authority, in our case</p> <p>11 Transport Canada, and that is a privilege and</p> <p>12 a mechanism they have to -- in some cases,</p> <p>13 they'll issue an AD on top of the same ASB,</p> <p>14 and put a regulatory stamp and say this is a</p> <p>15 legal binding requirement by this regulatory</p> <p>16 authority that you comply with this ASB or the</p> <p>17 contents. So they're quite different. One is</p> <p>18 issued by the manufacturer, the ASB; the other</p> <p>19 one by the regulator. Now understand that we</p> <p>20 are a Transport Canada certified organization,</p> <p>21 and other places like the FAA in the states,</p> <p>22 or EASA in Europe, do issue ADs and they apply</p> <p>23 to those regions, not to us per se.</p> <p>24 MS. FAGAN:</p> <p>25 Q. Okay.</p>	<p>1 A. Just like Transport Canada is for Canada.</p> <p>2 MS. FAGAN:</p> <p>3 Q. So if the European certifying authority issued</p> <p>4 a directive, it would apply to operators who</p> <p>5 are registered from Europe?</p> <p>6 MR. BURT:</p> <p>7 A. Correct.</p> <p>8 MS. FAGAN:</p> <p>9 Q. Not you as a Canadian operator?</p> <p>10 MR. BURT:</p> <p>11 A. The same as the FAA in the States, if they</p> <p>12 issued an AD, that would be for US operators.</p> <p>13 MS. FAGAN:</p> <p>14 Q. Okay. What about the type certificate, the</p> <p>15 original manufacturer, if the authority that</p> <p>16 certified the aircraft -- like, the S-92 was</p> <p>17 certified by the FAA, which is the</p> <p>18 manufacturer. So if they issued ADs because</p> <p>19 they're the original type certifying</p> <p>20 authority, does that apply to the S-92s?</p> <p>21 MR. BURT:</p> <p>22 A. Yes, because it's the country of manufacture.</p> <p>23 MS. FAGAN:</p> <p>24 Q. Okay. So it's because it's the country of</p> <p>25 manufacture that sort of applies?</p>

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1 MR. BURT:  
 2 A. Yes.  
 3 MS. FAGAN:  
 4 Q. Versus you're not registered to operate out of  
 5 the United States, but you're operating a  
 6 aircraft that was originally manufactured in  
 7 the United States?  
 8 MR. BURT:  
 9 A. That is a difference of what we're talking  
 10 about here. The same thing with ASBs, you  
 11 know, they're raised by the manufacturer, but  
 12 under the guise of the country in which the  
 13 aircraft is manufactured. That's an important  
 14 point when you're talking about these  
 15 documents.  
 16 MS. FAGAN:  
 17 Q. Now both of these documents basically are a  
 18 set of directions. Whether it's an AD or an  
 19 ASB, it's directions on how to maintain or  
 20 what to do with the aircraft. How does Cougar  
 21 Helicopters treat these documents, in that  
 22 when you get an AD or when you get an ASB,  
 23 what do you do with it? Do you treat them  
 24 differently, and if so, you know, what's the  
 25 different chain, and if you treat them the

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1 same; fine, say so, and then tell us how you  
 2 deal with it? Take it through the steps from  
 3 the minute you get it, what do you do with it.  
 4 MR. BURT:  
 5 A. Sure. The two of them are treated the same.  
 6 MS. FAGAN:  
 7 Q. Okay.  
 8 MR. BURT:  
 9 A. They come in to our organization, and in our  
 10 organization we have a very specific Transport  
 11 Canada required Quality Assurance Department  
 12 and Manager that will receive that ASB or AD,  
 13 they'll review it for applicability. For  
 14 example, we may get an ASB for the S-92 that  
 15 speaks to a piece of equipment that we don't  
 16 even have because there's a wide range of  
 17 equipment that may go on the aircraft, so we  
 18 review it, number one, for applicability, does  
 19 it apply to this aircraft, do we have this  
 20 piece of equipment they're referring to, and  
 21 if it does, then it gets -- the document gets  
 22 further reviewed for what compliance timelines  
 23 are in there, if it's months or hours, and the  
 24 Quality Assurance Department will take the  
 25 responsibility to make sure that that is

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1 logged into their system and that they have  
 2 the oversight of that. The document then is  
 3 forwarded to our Maintenance Planning or the  
 4 Chief Engineer for that aircraft, and from  
 5 that point on the content, the maintenance  
 6 action that's to be taken is put into our work  
 7 specification plan, our planned maintenance,  
 8 and if required, parts will be requisitioned  
 9 through our stores department at the direction  
 10 of our maintenance planner at that time as  
 11 well. Once that happens, those directions  
 12 will go down to the floor and we talked about  
 13 these work specification sheets that the  
 14 engineers receive every night when they come  
 15 down, and it will tell them that -- obviously  
 16 they'll need parts to do it, but it will tell  
 17 them that there's a maintenance action to be  
 18 done relative to this alert service bulletin  
 19 and here's the directions to do it. Once that  
 20 work is complete, that information will go  
 21 back up to the Quality Assurance Department  
 22 through the mandated reporting process, and  
 23 they will log a record of compliance. In  
 24 other words, that they have complied to that  
 25 ASB or that AD, and that closes the loop on

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1 that requirement.  
 2 MS. FAGAN:  
 3 Q. Okay. I understand from what you're saying  
 4 that quite often the AD or the ASB will have a  
 5 time, a compliance time. You had indicated it  
 6 might be three months, it might speak in terms  
 7 of days, or it might speak in terms of flight  
 8 hours.  
 9 MR. BURT:  
 10 A. Uh-hm.  
 11 MS. FAGAN:  
 12 Q. If you get -- if you get an AD or an ASB and  
 13 it says, you know, complete within 90 days,  
 14 how do you deal with it? I mean, when do you  
 15 act on it? Do you wait until day 89?  
 16 MR. BURT:  
 17 A. Well, certainly first of all we understand the  
 18 context of what is that compliance period,  
 19 number one. How we handle it and how we  
 20 handle all of our ADs and ASBs is that they're  
 21 implemented right away, we don't hesitate, and  
 22 that goes into our system immediately and  
 23 they're always completed before the end of the  
 24 term. That's just the way that we do it,  
 25 that's the way our company performs these ADs.

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1 We don't wait until the last day, they're done  
 2 as soon as possible, and in some cases, like I  
 3 said, if we have to order the parts, we'll  
 4 have to wait for the parts and we'll make sure  
 5 that we're tracking that, that they arrive in  
 6 a timely fashion and as soon as they arrived,  
 7 that maintenance work is completed, but it's  
 8 important to understand because we're given a  
 9 time period, our organization and other  
 10 organizations -- good organizations would do  
 11 that, effect that maintenance right away.  
 12 MS. FAGAN:  
 13 Q. The presentation that was put forward by the  
 14 oil operators in their presentation, they did  
 15 indicate that there were a number of changes  
 16 effected at Cougar Helicopters after the March  
 17 12th, and the first item that they indicated  
 18 as a change was that the bolts were changed.  
 19 MR. BURT:  
 20 A. Uh-hm.  
 21 MS. FAGAN:  
 22 Q. Now the issue of the cause of the crash is for  
 23 the TSB, so I just want to keep this very  
 24 narrow, and in particular, how did you apply  
 25 this process to the changing of the bolts, in

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1 particular the time, you know, what was the  
 2 timing?  
 3 MR. BURT:  
 4 A. Well, the specific ASB came in. It was, as I  
 5 say, reviewed by our Quality Assurance  
 6 Department, reviewed for applicability, it was  
 7 applicable, and at that time it was brought to  
 8 the Maintenance Planning Department, and the  
 9 Maintenance Planning Department throughout  
 10 that process put that into their work spec  
 11 sheet program and ordered the parts to effect  
 12 the maintenance action of that ASB right away.  
 13 MS. FAGAN:  
 14 Q. Okay, and what would your definition -- in  
 15 that particular case, what was right away?  
 16 MR. BURT:  
 17 A. I believe that the -- actually, I'm sure that  
 18 the parts were ordered -- after the ASB  
 19 arrived, they were ordered six days later.  
 20 MS. FAGAN:  
 21 Q. Okay.  
 22 MR. BURT:  
 23 A. The compliance time period for this particular  
 24 ASB was one year or 1250 hours, whatever comes  
 25 first.

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1 MS. FAGAN:  
 2 Q. And when -- and I understand that this was  
 3 complied with before Cougar resumed  
 4 transporting passengers after March 12th, is  
 5 that correct?  
 6 MR. BURT:  
 7 A. Yes, that's correct. We had to wait for the  
 8 full arrival of all the parts, and when they  
 9 got there, we effected that ASB right away.  
 10 When that was complete, that record of  
 11 compliance went back up and those aircraft  
 12 were deemed airworthy at that point. They  
 13 were deemed airworthy again by Transport  
 14 Canada.  
 15 MS. FAGAN:  
 16 Q. Now you noted the arrival of the parts. Do you  
 17 have any indication as to when the parts  
 18 arrived or what the --  
 19 MR. BURT:  
 20 A. Sure. We were starting to get some parts as  
 21 early as March 13th.  
 22 MS. FAGAN:  
 23 Q. Okay.  
 24 MR. BURT:  
 25 A. And again the requirement of this ASB said we

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1 had to comply with that ASB before the next  
 2 flight. So that was actually enhanced through  
 3 an AD as well.  
 4 MS. FAGAN:  
 5 Q. Okay, that wasn't the original --  
 6 MR. BURT:  
 7 A. Correct.  
 8 MS. FAGAN:  
 9 Q. Originally you had 1200 hours?  
 10 MR. BURT:  
 11 A. That's correct, yes.  
 12 MS. FAGAN:  
 13 Q. And when you had 1200 hours, you ordered it  
 14 within six days?  
 15 MR. BURT:  
 16 A. That's correct.  
 17 MS. FAGAN:  
 18 Q. Now the last section, the video did deal with  
 19 the health usage monitoring system, so I don't  
 20 think we need to go through that. The video  
 21 dealt with it and you did explain that aspect  
 22 when we were talking about the features of the  
 23 S-92. So the only other area I would like to  
 24 cover under the Maintenance Department is chip  
 25 lights, and I'd just like you to explain what

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1 is a chip light. We've already heard that  
 2 chip lights go off in the S-92, and the  
 3 process -- I mean, what is a chip light, what  
 4 happens when a chip light is detected?  
 5 MR. BURT:  
 6 A. Sure, and to give you some background, I mean,  
 7 chip lights, ever since I started flying in  
 8 1979 had been part of flying helicopters, so  
 9 it's a very common system in a helicopter.  
 10 Chip lights exist in the tail rotor gearbox,  
 11 in the intermediate tail rotor gearbox, main  
 12 rotor gearbox, the input section, typically  
 13 where you have gears and moving parts. These  
 14 chips -- chip detectors are literally plugs  
 15 that sit into those sump, sort of bottoms of  
 16 those main gearbox oil reservoirs and they're  
 17 made to detect and pick up any ferrous  
 18 materials because they are magnetic. They're  
 19 called mag plugs, they pick them up. They'll  
 20 bring in that ferrous material to the magnet  
 21 and if the material crosses over from one pull  
 22 to the other, it will turn a light on. Now  
 23 before it does that, there's actually some  
 24 delays in that where instead of getting a  
 25 little bit of fuzz that could cause an

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1 immaterial light, they do have an ability to  
 2 wash away or even what they call fuzz burn,  
 3 it'll actually just burn the little bit of  
 4 fuzz off. So they'll only leave something  
 5 that's material, literally and figuratively,  
 6 on that chip detector saying that there's  
 7 something here and, you know, in your gearbox  
 8 and you need to pay attention to it. So it  
 9 will put a light on in the cockpit saying that  
 10 you have a chip light, and again the benefit  
 11 of this system is that it's a -- for us, it's  
 12 a very proactive tool that we use to make sure  
 13 that we know what's going on with the  
 14 aircraft. In many cases, it will pick up  
 15 small little slivers, again with all that  
 16 metal going around there. It could even be -  
 17 in some cases in the past, there's been oil  
 18 cans that have been opened up and a little  
 19 sliver from the oil can when they were pouring  
 20 the oil went in, and even little things like  
 21 that are picked up, but again it's a very --  
 22 it's a proactive tool that we use from the  
 23 engineering side of the business.  
 24 MS. FAGAN:  
 25 Q. What happens when a chip light is detected,

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1 what's the process?  
 2 MR. BURT:  
 3 A. Right. If the aircraft is, you know, say, to  
 4 give you an example, flying offshore, if they  
 5 get a chip light, our crews are trained to  
 6 conduct the abnormal checklist. There is an  
 7 abnormal checklist, how to handle that, once  
 8 it's assessed and the flight will turn around  
 9 and advise Transport Canada, come back to St.  
 10 John's maintenance base and bring the aircraft  
 11 in and have the Maintenance Department look at  
 12 it. They'll pull the chip plug, look at  
 13 whatever is on the chip plug indicator, the  
 14 material, and from that point on they have a  
 15 series of procedures and maintenance manual  
 16 procedures to deal with that, including even  
 17 engaging the manufacturer should that be  
 18 required.  
 19 MS. FAGAN:  
 20 Q. So you wouldn't -- if you have a chip light,  
 21 you wouldn't necessarily know what the  
 22 situation was until your maintenance engineers  
 23 physically got at the machine and had a look?  
 24 MR. BURT:  
 25 A. That's correct.

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1 MS. FAGAN:  
 2 Q. Would that be fair?  
 3 MR. BURT:  
 4 A. That's correct.  
 5 MS. FAGAN:  
 6 Q. Okay, and you've noted that chip lights are  
 7 not new. You said that in your early days  
 8 there were chip lights. Is a chip light  
 9 indicator common in all helicopters or is this  
 10 a rare --  
 11 MR. BURT:  
 12 A. Well, you know, as I say, I've been flying now  
 13 over 30 years and it is part of doing our  
 14 business, and it's a proactive tool and it is  
 15 something that is standard throughout the  
 16 business, and, of course, yes, it does happen  
 17 and I'm glad we have that tool in our toolbox.  
 18 MS. FAGAN:  
 19 Q. Okay, thank you. The next section is dispatch  
 20 and that will involve another video before we  
 21 get into dispatch. I'm not sure exactly how  
 22 long the video is. Commissioner, I would look  
 23 for some direction. I know that I timed most  
 24 of the videos, some were six minutes and some  
 25 were eight minutes, so I don't know if we have

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1 time to look at the video, but there are a lot  
 2 of questions that go with the video. So it's  
 3 perhaps best to deal with the video and then  
 4 have the questions together.  
 5 COMMISSIONER:  
 6 Q. Better not to separate, I think, the video  
 7 from the questions.  
 8 MS. FAGAN:  
 9 Q. Yes, I agree.  
 10 COMMISSIONER:  
 11 Q. So probably we should adjourn.  
 12 MS. FAGAN:  
 13 Q. I know it's five minutes early, but --  
 14 COMMISSIONER:  
 15 Q. Probably we should. One question before -- we  
 16 will adjourn and show the video after. One  
 17 question occurs to me, not in our context here  
 18 in Newfoundland and Labrador, but you recall  
 19 there was a Super Puma which crashed in the  
 20 North Sea about two weeks after the accident  
 21 and the crash here. Now my reading on that,  
 22 from a preliminary report that was made some  
 23 time ago actually, was that in that case a  
 24 chip or a spall, they used the expression,  
 25 same thing, a piece of metal was found and

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1 they took apart the gearbox and they searched  
 2 to see where it might have come from and they  
 3 couldn't find any place where it might have  
 4 come from.  
 5 MR. BURT:  
 6 A. Uh-hm.  
 7 COMMISSIONER:  
 8 Q. So they pondered this and thought about it,  
 9 and they put it all back together, refilled it  
 10 with oil, and gave a certain amount of time in  
 11 hours and days or months, whatever, weeks  
 12 perhaps, the helicopter could be flown, and,  
 13 of course, unfortunately in that time frame  
 14 the helicopter went down. How does a  
 15 maintenance department protect itself from  
 16 catastrophic events like that?  
 17 MR. BURT:  
 18 A. I'll try to answer as best I can. Our  
 19 organization would take any chip that it got  
 20 and we would do our own analysis, and  
 21 obviously we would not assume anything. We'd  
 22 engage the manufacturer. That is our first  
 23 thing to do on any such chip, especially of  
 24 any kind of any significance of any size, and  
 25 we would ensure that -- we want to make sure

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1 we knew where that chip was coming from,  
 2 that's for sure, whether it was introduced  
 3 from the manufacturer, like, it might have  
 4 been from the initial manufacturer of that  
 5 gearbox, but from the material and metal  
 6 analysis of that chip, we're quite confident  
 7 that we would be able to determine whether it  
 8 was part of that gearbox or not part of the  
 9 gearbox.  
 10 COMMISSIONER:  
 11 Q. I see, okay.  
 12 MR. BURT:  
 13 A. In that particular case, and again I'm only  
 14 going from the readings, I haven't officially  
 15 been briefed on it, but my readings of it as  
 16 well is that aircraft had a system of magnetic  
 17 detectors as well that didn't report anything,  
 18 but it held chips away, and it was part of the  
 19 gearbox, and that particular system was  
 20 removed from all those gearboxes. Again to  
 21 hold metal away and not report it is probably  
 22 not a good thing, and they've since stopped  
 23 doing that. So this just feeds into the  
 24 picture. I would say, and I think I can speak  
 25 quite confidently for our Director of

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1 Maintenance, that we would not have our  
 2 aircraft flying if it had a chip light and not  
 3 knowing where it came from. At the end of the  
 4 day, I know that Mr. Parady has made his  
 5 unilateral decision to actually have a gearbox  
 6 replaced when there's any question as to where  
 7 that chip may have come from, and I think  
 8 that's correct, Bob.  
 9 MR. PARADY:  
 10 A. Yes.  
 11 MS. FAGAN:  
 12 Q. For the record, Mr. Parady is here to assist.  
 13 COMMISSIONER:  
 14 Q. Okay, thank you for that.  
 15 MR. BURT:  
 16 A. Hopefully that answers your question.  
 17 COMMISSIONER:  
 18 Q. Yeah. Okay then, we'll adjourn now.  
 19 (RECESS)  
 20 MS. FAGAN:  
 21 Q. We're going to start now with the video  
 22 presentation on dispatch. It'll take a minute  
 23 or so to load, but once it plays, then we'll  
 24 do the questions.  
 25 COMMISSIONER:

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1 Q. Okay.

2 (VIDEO PLAYED)

3 Dispatch. The end of the maintenance work

4 day signals the beginning of the operational

5 work day at Cougar Helicopters, and a team of

6 specialized personnel is already developing

7 the days flight plans. Cougar employees and

8 Transport Canada Type B operational control

9 system or co-authority, which is a standard

10 requirement in the airline industry. Cougar's

11 use of co-authority exceeds regulatory

12 requirements and is the first four rotary wing

13 operator anywhere in the world. Co-authority

14 gives the pilot and dispatcher on the ground

15 shared authority on critical decisions

16 regarding flight operations. In other words,

17 the flight crews are not isolated when they

18 leave the ground. They have an extra set of

19 eyes monitoring every aspect of their flight.

20 Co-authority means the dispatcher can actually

21 turn the aircraft back, for example, if

22 weather conditions offshore are deteriorating.

23 The co-authority dispatch systems are not

24 typical for helicopter operators. Actually,

25 Cougar Helicopters is the only rotary wing

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1 operator in the world that does a co-authority

2 system. Actually, there's only three

3 countries in the world that do co-authority

4 dispatch, period, and that's Canada, the US,

5 and China.

6 The flight dispatchers are also

7 responsible for flight planning.

8 Doing a flight planning process usually

9 commences two hours prior to scheduled

10 departure of a flight. The dispatcher will

11 start at that point looking at factors that

12 are going to impact or could possibly impact

13 that flight, and they could be anything from

14 booked passenger load because if you have an

15 increase of three passengers, that's more

16 weight, that affects your flight plan. You're

17 looking at weather systems, you're looking at

18 winds aloft, icing conditions, low level jet

19 streams, turbulence, airport suitability. You

20 could have snow covered runways, you could

21 have outages of different navigational aids

22 that you have to take into consideration, and

23 then beyond point "A" to point "B" flight

24 planning you're doing, you have to have

25 somewhere to go just in case you can't land at

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1 point "B", so here's point "C" being brought

2 into it. So now you're analysing weather for

3 another area of operation for your alternate

4 airport. Now you have to keep in mind that

5 that airfield has to be suitable for landing

6 as well.

7 The flight dispatcher briefs the pilot

8 and the flight plan is reviewed carefully to

9 ensure the pilot agrees with the dispatcher's

10 calculations. It's another example of co-

11 authority in action. The pilot will also

12 complete a risk assessment matrix.

13 When they check in in the mornings, they

14 go through a process, what they call a risk

15 assessment matrix, and they take into

16 consideration weather offshore, winds, whether

17 this is the first flight of the day or not,

18 all sorts of different factors and at the end

19 of the sheet, they total up the score and once

20 they hit a certain number, it triggers them to

21 say, hey, our risk assessment is a little on

22 the high side. It doesn't preclude them from

23 going flying. What it does, it says what

24 should we really pay attention to today, we

25 feel that our risk is too high here, so we're

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1 going to put the brakes on.

2 The flight dispatcher is a highly skilled

3 individual who undergoes extensive training.

4 The candidates must pass Transport Canada

5 exams in air regulations and meteorology. Once

6 hired, they undergo comprehensive training in

7 company operations, meteorology, human

8 factors, aircraft technical training, 300

9 hours of on the job training and more. Finally

10 they must be monitored for a complete shift

11 and orally tested by a Transport Canada

12 inspector. If successful, the flight

13 dispatcher certificate is awarded by Transport

14 Canada, and they can begin their work. Even

15 then the dispatcher must be tested every year

16 by Transport Canada to renew their

17 certificate. This training is so intensive

18 because the flight dispatcher is responsible

19 with the flight crews for making critical

20 operational decisions. Their primary function

21 is to help protect the safety of our

22 passengers and flight crews. Safety at Cougar

23 is a multi-layered process and co-authority

24 adds another layer in that comprehensive

25 safety blanket. Another key function in this

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1 department is the radio operator.  
 2 He's tracking the flight, making sure  
 3 position reports are coming in on a timely  
 4 basis, he's relaying key information to out  
 5 stations such as oil platforms with estimated  
 6 times of arrival, keeping our flight schedule  
 7 up to date. You name it, if it's got to do  
 8 with communication, the radio operator is the  
 9 guy that's handling the communication.  
 10 They all work together in the operational  
 11 control centre, or OCC, a sophisticated well  
 12 equipped facility that is staffed 24/7 to  
 13 service Cougar operations in Newfoundland,  
 14 North West Territories, Nova Scotia,  
 15 Greenland, Australia, and Alaska. The OCC is  
 16 equipped with multiple viewing screens, touch  
 17 screen communications consoles, VHF radios,  
 18 and satellite phones. One projection screen  
 19 tracks our aircraft and east coast support  
 20 vessels. Another toggles between current and  
 21 planned flight schedules, regional satellite  
 22 and radar imagery, airport operational details  
 23 and regional weather forecasts. As well,  
 24 every Cougar helicopter is tracked in flight  
 25 by an automated situational display called

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1 Blue Sky.  
 2 What it is, there's basically a  
 3 transponder on every aircraft, and actually  
 4 they're on the offshore vessels here on the  
 5 east coast of Canada as well, and at certain  
 6 time periods it sends back a position report,  
 7 reporting its altitude, its speed, its current  
 8 latitude and longitude. The helicopters  
 9 generally report once every five minutes. If  
 10 they're flying at lower altitude, like, say,  
 11 2000 feet above sea level, that rate increases  
 12 to about three minutes, every three minutes we  
 13 get a position report, and, of course, it does  
 14 have an emergency button in the cockpit. If  
 15 the crews depress this emergency button, which  
 16 we take as a mayday call, it will increase a  
 17 greater position report to once every fifteen  
 18 seconds, so we have really, really good data  
 19 on position.  
 20 The OCC maintains a visual watch over our  
 21 bases using closed-circuit television. At a  
 22 glance, we can see if a aircraft is out of the  
 23 hangar in Louisiana, or if it is landed at  
 24 Long Pond, where we maintain a fully  
 25 functioning helipad as an alternative landing

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1 site. Our first priority is safety. So any  
 2 aircraft in the air receive our undivided  
 3 attention. Changing conditions can affect  
 4 safety and may require flight plan changes  
 5 literally on the fly. Flight dispatchers and  
 6 flight crew never let down their guard and are  
 7 continuously sharing information with each  
 8 other. This process is called flight watch.  
 9 We maintain constant communication with our  
 10 aircraft using Sat Comm and VHF radio and  
 11 utilize voice over internet protocol VHF radio  
 12 systems to communicate with our bases  
 13 elsewhere in the world. The OCC also has a  
 14 dedicated emergency response area with access  
 15 to accurate immediate situational information.  
 16 (VIDEO ENDED)  
 17 MS. FAGAN:  
 18 Q. Now a couple of questions on the dispatch  
 19 system. This video showed how it works. Can  
 20 you explain how the co-authority dispatch is  
 21 different from a self-dispatch, because we  
 22 heard that this is the only rotary operated  
 23 air operator that uses the co-dispatch? So  
 24 what are all the other rotary operators using?  
 25 MR. BURT:

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1 A. Well, all the other operators are using pilot  
 2 self-dispatch. The pilot is responsible for  
 3 doing the flight planning and all the aspects  
 4 of the flight, and monitoring the weather, et  
 5 cetera. The history behind this is important  
 6 as well. The gentleman you heard talking  
 7 about it, our chief dispatcher, Mr. Pinsent.  
 8 I worked with him at Air Nova when I was  
 9 flying for the airline, and saw that as a best  
 10 practice. I flew it, I understood it, he  
 11 worked there for 16 years with Air Canada, and  
 12 when I came back to Cougar, it was one of the  
 13 things that I wanted to implement in Cougar,  
 14 and had the opportunity finally here in St.  
 15 John's with a very sophisticated team that  
 16 could help me do that. The difference is, and  
 17 what I saw, was the added layer of safety and  
 18 oversight a co-dispatch system offers an  
 19 operator. When you have somebody that is  
 20 trained and certified to monitor and help to  
 21 plan a flight, look at the weather, help the  
 22 flight crew conduct it, there's that wonderful  
 23 added layer of oversight to the crew. So  
 24 that's why we did it, and that's how it works.  
 25 It works as a co-authority. So now we have a



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1 certified dispatcher trained in the  
 2 performance of the aircraft, trained in  
 3 meteorology, and taking all that information  
 4 and together with the aircraft captain coming  
 5 together and making that decision. As the  
 6 flight progresses, you've got the dispatcher  
 7 there working in concert with the flight crew.  
 8 MS. FAGAN:  
 9 Q. I understand that flight plans have to be  
 10 filed with the air traffic controller, is that  
 11 correct, or the airport, the air authority?  
 12 MR. BURT:  
 13 A. Yes, with the Transport Canada, yes.  
 14 MS. FAGAN:  
 15 Q. So is the -- with a co-authority dispatch, who  
 16 is involved in that? I mean, you've said that  
 17 they're both involved in planning the flight.  
 18 MR. BURT:  
 19 A. Right.  
 20 MS. FAGAN:  
 21 Q. You used the word "authority". Who has the  
 22 sort of say in whether you're going to fly or  
 23 not? How does it work?  
 24 MR. BURT:  
 25 A. Both do.

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1 MS. FAGAN:  
 2 Q. Okay.  
 3 MR. BURT:  
 4 A. Again the dispatcher will bring the  
 5 information, he'll do all the calculation of  
 6 the flight planning again with the experience  
 7 he has, present it to the flight crew as you  
 8 saw at the counter, and they'll discuss it  
 9 together. If the captain of the aircraft sees  
 10 an anomalies or has an insight as an aircraft  
 11 captain to say, you know, I see what you're  
 12 saying, but it's been my experience that we  
 13 might consider to take an extra 20 minutes of  
 14 fuel because this has been the trend I've seen  
 15 at that airport, if we're going to use this as  
 16 an alternate landing and plan to, when the  
 17 winds are in this direction, it can change  
 18 quickly. The dispatcher will say that's  
 19 really good information, and they'll take that  
 20 together and make a final decision. More  
 21 often than not, the pilot validates what the  
 22 dispatcher has done and there's very few  
 23 changes done to that, and they move on. So  
 24 that's practically how it works. The flight  
 25 plan is filed by the dispatcher, to answer

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1 your first question.  
 2 MS. FAGAN:  
 3 Q. Okay. Do they both have to agree that the  
 4 flight is going to take place? What if one  
 5 says I think you can go, and the other one  
 6 says, no, I don't think we should go?  
 7 MR. BURT:  
 8 A. That's a good question. There's a formalized  
 9 process or arbitration in our manuals and in  
 10 the whole concept of dispatch. That then is  
 11 taken to the Flight Operations Department and  
 12 the Flight Operations Department will act as  
 13 an arbitrator in that dispute, and again it's  
 14 a good question because it's well thought out  
 15 and part of the basis of a dispatch certified  
 16 system.  
 17 MS. FAGAN:  
 18 Q. Okay. Now this is certified. We've heard  
 19 that there's three places in the world that  
 20 use co-authority, and at the same time we  
 21 heard that Cougar is the only rotary operator  
 22 that's using co-authority. So would it be  
 23 fixed wing? I mean, is it the airlines --  
 24 MR. BURT:  
 25 A. Yes.

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1 MS. FAGAN:  
 2 Q. It says three places, and then Cougar is the  
 3 only one, so can you explain what's going on  
 4 in the other?  
 5 MR. BURT:  
 6 A. It's Canada and the United States that use  
 7 this co-dispatch authority.  
 8 MS. FAGAN:  
 9 Q. Is that for airlines or for helicopters?  
 10 MR. BURT:  
 11 A. It's for airlines.  
 12 MS. FAGAN:  
 13 Q. All right.  
 14 MR. BURT:  
 15 A. When we started this process there was no  
 16 standard. There is no rotor craft standard  
 17 for this, and that wasn't a good enough answer  
 18 for us, it's just in our nature not to accept  
 19 why they don't do that here. We said, well,  
 20 what we'll do is we'll create it. So together  
 21 arm in arm with Transport Canada, who by the  
 22 way was quite excited about this in their  
 23 regulatory world, together with us locked arms  
 24 and said, fine, we agree with you, this is a  
 25 best practice, why not have it in a heavy

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1 helicopter airline business, and they helped  
 2 us walk hand in hand and developed the  
 3 standards for this and it was a great process,  
 4 and they were as excited about it as we were.  
 5 MS. FAGAN:  
 6 Q. So was it ultimately certified by Transport  
 7 Canada?  
 8 MR. BURT:  
 9 A. Transport Canada did certify it through our  
 10 operations manual and our procedures. Again  
 11 they don't have any standards in the Canadian  
 12 Aviation Regulations, but they did certify it  
 13 through certifying our operational manual.  
 14 MS. FAGAN:  
 15 Q. Okay. We did hear on the video that there are  
 16 a number of locations that are monitored, so  
 17 the dispatchers in that centre look at more  
 18 than just what's going on in the east coast  
 19 and over the Atlantic. What activities are  
 20 they monitoring? I mean, we heard that  
 21 they're keeping track of the helicopter. Are  
 22 they keeping track of anything else?  
 23 MR. BURT:  
 24 A. They're keeping track of our aircraft assets,  
 25 obviously, in different locations; the Gulf of

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1 Mexico, could be the North West Territories,  
 2 and in -- the other things that they're  
 3 tracking obviously is the departure point  
 4 weather, the destination, and you've heard  
 5 this term, the "alternate", the insurance  
 6 location, and all the weather in between, as  
 7 well as from that regulatory authority there's  
 8 a thing called a Notice to Airmen. If a  
 9 navigation aid goes down during that process  
 10 or before, they're also aware of that, and  
 11 they'll bring all that information to bear.  
 12 MS. FAGAN:  
 13 Q. Okay. Who does the Cougar helicopter  
 14 dispatcher communicate with? Does the  
 15 dispatcher communicate with the pilot, do they  
 16 communicate with Air Traffic Control, do they  
 17 communicate with the oil rig, who talks to  
 18 who?  
 19 MR. BURT:  
 20 A. Well, typically the dispatcher will be pretty  
 21 well in touch with almost every aspect. He  
 22 could be talking to maintenance in the morning  
 23 clarifying whether there's a limitation on the  
 24 aircraft through the minimum equipment list,  
 25 he could make sure that the aircraft is ready

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1 for dispatch on time, he could be talking to  
 2 the refueller, for that matter. Besides all  
 3 the aspects of speaking to Environment Canada,  
 4 getting the valid weather forecast and the  
 5 actual weather, and then calling to the rig  
 6 and making sure that we have the Environment  
 7 Canada weather that is on the platform. That  
 8 information is brought in, plus some  
 9 additional information, such as the status of  
 10 their helideck, whether they have sufficient  
 11 fuel on board the vessel as well, and that  
 12 their navigation and communication aids are  
 13 all fully functional for the time the flight  
 14 departs and when it's supposed to arrive.  
 15 That's the wide group. Typically, he won't  
 16 have to talk with air traffic control. That's  
 17 a flight -- more of a flight function where  
 18 the flight crew will talk with ATC, but he has  
 19 full right to call them if he has any question  
 20 regards to that flight. There's really no  
 21 limitation from a dispatcher's point of view  
 22 who he can speak to, but that typically is who  
 23 he will speak with.  
 24 MS. FAGAN:  
 25 Q. Okay, thank you. You have a slide here, slide

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1 37, which outlines the training, because we  
 2 did hear on the video that they are trained,  
 3 but we didn't get the details -- we got some  
 4 details, but I think there's a little bit more  
 5 to the training than was necessarily discussed  
 6 on the video. So could you go through the  
 7 training and certification of the dispatcher,  
 8 please?  
 9 MR. BURT:  
 10 A. Sure. I think again this is quite important  
 11 point to realize when you hear the term  
 12 "dispatcher", people can have a different  
 13 understanding or connotation. In this case,  
 14 ultimately a dispatcher is a Transport Canada  
 15 certified licensed position. They have to go  
 16 through and write a Transport Canada exam,  
 17 pass it, obviously, and Transport Canada  
 18 issues them a dispatcher licence. With that,  
 19 they have to have the standard radio operator  
 20 licence, and from a company point of view,  
 21 they have to be familiar with our procedures.  
 22 In fact, the dispatcher will go into a  
 23 mandatory detailed and purpose course  
 24 developed for them on aircraft performance.  
 25 So they'll actually learn about the aircraft,

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1 and this is sometimes the surprising part, how  
 2 the systems work, what are basic limitations  
 3 of the aircraft. So this is actually quite a  
 4 process they'll go through. They will talk  
 5 about in our business the human factors and  
 6 cockpit resource management, and all these  
 7 things are very important to our business, as  
 8 well as some of the ancillary stuff like the  
 9 control of dangerous goods in an aircraft.  
 10 These are rules that they are also responsible  
 11 and to speak into. Specifically here on the  
 12 east coast, we have a very detailed winter  
 13 training program which we go through every  
 14 year with our pilots, and our dispatchers are  
 15 well aware of what the sensitivities are of  
 16 flying in the winter conditions; icing, snow,  
 17 high winds, ice on the ramp, and starting up  
 18 and such. So the -- and as we talked about  
 19 earlier, they went through -- they go through  
 20 a long process of training, and once they are  
 21 certified, again there's a recurrent.  
 22 Transport Canada will come in every year,  
 23 observe them dispatching a live flight, and  
 24 then recertify them if they successfully  
 25 conduct that process.

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1 MS. FAGAN:  
 2 Q. And I note here they say there's recurrent  
 3 every three years, so there must be some type  
 4 of education --  
 5 MR. BURT:  
 6 A. Right.  
 7 MS. FAGAN:  
 8 Q. Is that a refresher?  
 9 MR. BURT:  
 10 A. The ground school portion of it, yes.  
 11 MS. FAGAN:  
 12 Q. Human factors and crew resource management  
 13 training, could you just describe that? Like,  
 14 what is human factors?  
 15 MR. BURT:  
 16 A. Well, it really goes into a lot of the  
 17 psychology of command and control, and it's  
 18 very important when you're operating in a  
 19 multi-crew cockpit to understand although  
 20 you've got positions of authority, the  
 21 aircraft commander, the captain, and a first  
 22 officer, that the ultimate goal there is to  
 23 safely operate that aircraft and do it in a  
 24 very clear and defined manner. What this does  
 25 it proactively addresses the issue that we

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1 have two people that have to work together and  
 2 that there are human dynamics that we want to  
 3 face up front. I might be an "A" type, he may  
 4 be a "B" type, this is my position, and it  
 5 really gets into the psychology of making the  
 6 best decision and identifying, look, I may  
 7 have the propensity to want to put my finger  
 8 on this and control the cockpit, and the best  
 9 thing in a cockpit is that everybody realizes  
 10 it's the safety of the aircraft that's number  
 11 one. So get into a little bit of detail, but  
 12 it is important to understand that that human  
 13 element is a key element when you're flying an  
 14 aircraft.  
 15 MS. FAGAN:  
 16 Q. And so your dispatchers have some training in  
 17 this area so that they understand that human  
 18 dynamic because they're following this flight?  
 19 MR. BURT:  
 20 A. That's correct, and they also arrange the crew  
 21 and they fly with each other, and if there are  
 22 signs that a pilot may be stressed or  
 23 whatever, they're trained to pick those things  
 24 up because they are material when that flight  
 25 leaves that they do that.

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1 MS. FAGAN:  
 2 Q. Okay, thank you. You have another slide with  
 3 respect to the radio operator flight follower  
 4 training, because in the video we heard about  
 5 a radio operator, and I didn't realize until  
 6 we were preparing for all this that, you know,  
 7 the dispatcher and the radio operator are  
 8 different people, different skills, and  
 9 different roles. So could you go through  
 10 their training.  
 11 MR. BURT:  
 12 A. Sure.  
 13 MS. FAGAN:  
 14 Q. And, you know, how they're different?  
 15 MR. BURT:  
 16 A. Sure, and outside of a radio licence, the  
 17 radio operator is an asset at the -- for the  
 18 dispatcher to perform those functions. So the  
 19 radio operator will track the flight on the  
 20 Blue Sky System. That provides us with a  
 21 situational awareness of the aircraft. He  
 22 will speak to the aircraft, if they have any  
 23 needs. For example, if they said, you know,  
 24 can you give us the latest weather for the  
 25 FPSO, or whatever the case, they can request

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1 that and receive it, or whether it's, look,  
 2 I'm just wondering do we have a second flight,  
 3 et cetera, et cetera. They are an asset at  
 4 the disposal of the dispatcher and such.  
 5 MS. FAGAN:  
 6 Q. And what type of training do they receive?  
 7 MR. BURT:  
 8 A. Well, obviously, they'll be briefed on the  
 9 procedures in the dispatch system and the  
 10 rules of the aircraft going offshore. Radio  
 11 operations are emergency response plan should  
 12 an event happen. These are the frontline  
 13 people that will recognize it on the Blue Sky  
 14 System, so they're trained in this emergency  
 15 response manual, and a flow chart will go down  
 16 through. If you have this, you go down  
 17 through, and they need to know who to call and  
 18 what to do immediately. These are our  
 19 frontline people that are watching the flight.  
 20 MS. FAGAN:  
 21 Q. And I believe the Cougar Helicopter Emergency  
 22 Response Manual is in full as an exhibit for  
 23 those that want to refer to the actual manual.  
 24 MR. BURT:  
 25 A. That's correct.

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1 MS. FAGAN:  
 2 Q. As well, you've mentioned dangerous goods.  
 3 What are dangerous goods and, you know, how  
 4 does -- why does the radio operator need to  
 5 know about dangerous goods?  
 6 MR. BURT:  
 7 A. Well, again it's being fully aware of what's  
 8 being carried on the aircraft and the context  
 9 of what's being carried on it. In some cases,  
 10 an aircraft will be restricted as to where he  
 11 can fly and what he can carry, and because  
 12 he's involved to the monitoring of that  
 13 aircraft, he should be aware of what that  
 14 means on a flight if you are carrying  
 15 dangerous goods, and act accordingly,  
 16 especially again if you have an emergency  
 17 response exercise, to understand what that may  
 18 mean.  
 19 MS. FAGAN:  
 20 Q. Okay, thank you. Now you touched upon some of  
 21 the information that a dispatcher has in  
 22 making the flight plan. Your next slide, 39,  
 23 I believe, covers the flight planning criteria  
 24 and then we get into limits, landing limits.  
 25 MR. BURT:

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1 A. Uh-hm.  
 2 MS. FAGAN:  
 3 Q. So if you could go through what is the  
 4 planning criteria when deciding on a flight.  
 5 MR. BURT:  
 6 A. Okay. As they start out in the morning, again  
 7 the video did a good job referring to this  
 8 actually, that they are responsible to make  
 9 sure that we have a serviceable airworthy  
 10 aircraft to present to the flight crew. They  
 11 do check the weather both from Environment  
 12 Canada, the basic terminal forecast for the  
 13 departure point, St. John's, and also get the  
 14 hourly weather and the forecast from oceans  
 15 offshore, and it's important for them to  
 16 understand that because we do have approach  
 17 limits offshore. We do have criteria when we  
 18 go offshore that we need to be able, at a  
 19 certain height and a certain distance from the  
 20 rig, to be able to see it to land. So  
 21 therefore, it's quite important for the  
 22 dispatcher to understand that.  
 23 Winds are always -- as we touched on  
 24 earlier why they have a big effect on flight  
 25 planning. They can make a big difference on

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1 how much fuel you need and they can make a  
 2 difference on whether you can actually even  
 3 effectively go do the flight. There is a  
 4 point where you can land on an offshore  
 5 platform, but it is -- it gets quite risky for  
 6 a passenger to get outside of that. So it's  
 7 quite relevant to understand that. There is a  
 8 wind limit start up on the aircraft, no matter  
 9 where they are, and again, that has to be  
 10 monitored and make sure the flight crew know  
 11 about that as well, and I said start up, but  
 12 as well shutdown. You still have that same  
 13 limit.  
 14 Destination condition, and this is also  
 15 on route, if you will, because freezing  
 16 precipitation is extremely important to us.  
 17 While we're certified for flight into known  
 18 icing conditions, we are not allowed to fly in  
 19 freezing rain. There is a difference between  
 20 that. And we have to make sure that we know  
 21 that not only the destination but the on route  
 22 and what's called the area forecast, that  
 23 information is well known. I mean, the flight  
 24 crew -- maybe at the destination may be  
 25 reasonably good weather. At the departure

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1 point may be reasonable and there may be a  
 2 front, as we quite often see here in St.  
 3 John's on the east coast, that he has to go  
 4 through and to go through that, you're going  
 5 to go through a line of freezing rain, and  
 6 there's some cases that we just won't go.  
 7 That is a little difficult for folks that are  
 8 on a platform saying, you know, "it looks  
 9 great." Sitting back here, maybe even family  
 10 saying "why not?" and we have this barrier in  
 11 between. Well, it's our responsibility to say  
 12 this is -- you know, this is information we  
 13 need to know and we will not dispatch a flight  
 14 through that zone. So just to elaborate on  
 15 the importance of that.  
 16 Vessel motion. Well, that's our airport.  
 17 We have a very unique airport. We land on,  
 18 many cases, a moving vessel, a floating  
 19 vessel, what's called a mobile offshore  
 20 drilling unit, and Hibernia, we land on a  
 21 gravity base structure, and they're all quite  
 22 different. But those vessels that are moving  
 23 basically are like an aircraft carrier or in  
 24 some cases they move a little bit more, but we  
 25 have to make sure that we understand what it

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1 is they are doing, what their limits are  
 2 before we go, before we go offshore.  
 3 MS. FAGAN:  
 4 Q. And we've heard information about pitch, roll  
 5 and heave. Is that what you're getting at  
 6 when you speak of vessel motion?  
 7 MR. BURT:  
 8 A. That's correct, and it's also a rate of heave.  
 9 In the last ten years, it's become very  
 10 important, you know, so how much the heave  
 11 changes, you know, metres per second.  
 12 MS. FAGAN:  
 13 Q. And how do you get that information, as to the  
 14 pitch, roll and heave?  
 15 MR. BURT:  
 16 A. The information is sent to us from the  
 17 respective vessel. They have very  
 18 sophisticated equipment that reports that to  
 19 the captain and to the weather observer, and  
 20 then, of course, we have our own standards and  
 21 guidelines in our company that we refer to and  
 22 the pilots can refer to when heading offshore.  
 23 In other words, they can't land outside of  
 24 those parameter.  
 25 MS. FAGAN:

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1 Q. We had heard from the HMDC panel that on the  
 2 Hibernia Platform, the weather observer  
 3 provides weather information on the Platform,  
 4 the weather on the Platform, their  
 5 observations, back to Cougar Helicopters about  
 6 an hour and a half before.  
 7 MR. BURT:  
 8 A. Right.  
 9 MS. FAGAN:  
 10 Q. Is that the same for the FPSOs and the mobile  
 11 drilling units, and you just said that you get  
 12 the pitch, roll and heave for the mobile and  
 13 the FPSOs. How often do you get weather and  
 14 do you get weather from all of them?  
 15 MR. BURT:  
 16 A. First off, it is standard to get that  
 17 information about between an hour and an hour  
 18 and a half before. It all depends sometimes.  
 19 Somebody may be busy doing other things, but  
 20 yes, that's a standard. We do get that full  
 21 information package as soon as we speak to  
 22 them, typically at that point we'll be in  
 23 radio contact, and we'll get that piece of  
 24 information for them and help us format a plan  
 25 as we get ready for an approach, whether it's

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1 good weather or inclement weather, high sea  
 2 states or whatever. It all goes into that  
 3 picture that a pilot will put together in a  
 4 plan and the name of the game in our business  
 5 is that we always plan ahead. So we're never  
 6 just basically taking the information and then  
 7 going for it. It's always you have a plan,  
 8 get a plan and go ahead. So that's why it's  
 9 crucial to get that information. And I'm not  
 10 sure if there was another question in there.  
 11 MS. FAGAN:  
 12 Q. No, it was just what do you get, which is  
 13 weather and pitch, roll and heave, and how  
 14 often.  
 15 MR. BURT:  
 16 A. Yeah.  
 17 MS. FAGAN:  
 18 Q. And I understand you get it fairly often, but  
 19 at least an hour, an hour and a half before.  
 20 MR. BURT:  
 21 A. Right, and that they've got snacks and lunches  
 22 ready for us.  
 23 MS. FAGAN:  
 24 Q. Okay.  
 25 MR. BURT:

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1 A. That's another one that we got to cover off  
 2 there.  
 3 MS. FAGAN:  
 4 Q. On this criteria, you also mention alternate  
 5 landing site.  
 6 MR. BURT:  
 7 A. Right.  
 8 MS. FAGAN:  
 9 Q. And the video did cover it, and I think in  
 10 your fuel discussion on the specifications for  
 11 the S-92, we did talk about the fact that you  
 12 have to have fuel for the alternate landing  
 13 site.  
 14 MR. BURT:  
 15 A. Um-hm.  
 16 MS. FAGAN:  
 17 Q. But I don't know if you covered the  
 18 requirement, you know, what is this alternate  
 19 landing site and I understand it is a  
 20 requirement, and what are the alternate  
 21 landing sites?  
 22 MR. BURT:  
 23 A. Right. The alternate landing sites go back to  
 24 the discussion we had about instrument flight  
 25 rules, and they're a separate set of rules for

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1 an aircraft that would go and fly in clouds.  
 2 Fundamentally, the issue here is that you  
 3 leave an environment where you're looking at  
 4 the earth. You have no more reference to the  
 5 ground and you're now in the cloud or above  
 6 the cloud and you don't essentially, you know,  
 7 know where you are, what the weather is going  
 8 to be like. I shouldn't say you don't know  
 9 where you are. You can't see by looking at  
 10 the ground reference where you are. You have  
 11 to rely on your instruments for your position  
 12 and your navigation. And that's what we do.  
 13 We fly offshore and we may not actually see  
 14 anything until a half mile back from the rig.  
 15 We may fly an hour and a half and that's how  
 16 we do that flight.  
 17 Well, the regulator, Transport Canada  
 18 says if you are flying under those rules,  
 19 here's what you need to ensure the safety of  
 20 the passengers, and our mandate, again the  
 21 paying public, or that you must have fuel to  
 22 go to your destination and if you are  
 23 unsuccessful in landing there, you need to go  
 24 to an alternate landing site, an insurance  
 25 policy. And by the way, you must not only

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1 have fuel to go to that site, but we want that  
 2 weather to be forecasted to be at an  
 3 acceptable ceiling and visibility for your  
 4 time of arrival should you miss at your  
 5 destination.  
 6 So you can see they've got a lot of  
 7 goodness in the fact that yeah, that's fine.  
 8 You know, you're not looking at the ground any  
 9 more. You might miss there and you need to go  
 10 back somewhere where the weather is better at  
 11 the forecasted time you might have to go  
 12 there. That's an alternate landing site. I  
 13 regard it, sort of a layman's term, as the  
 14 insurance policy. Our intent is not to use  
 15 it. Very rarely do we use it, but we do use  
 16 it.  
 17 MS. FAGAN:  
 18 Q. And what are the alternates for Cougar  
 19 Helicopters flying offshore Newfoundland?  
 20 MR. BURT:  
 21 A. The practical alternates are St. John's  
 22 itself. So you can go offshore to a offshore  
 23 location and you can come back to St. John's.  
 24 Albeit, it's not the best weather place in the  
 25 world. So what we did, together with the

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1 operators, and again, this was pretty  
 2 innovative, but in the 80s, together with the  
 3 offshore oil and gas operators, we developed  
 4 our own alternate landing site in Long Pond,  
 5 Long Pond, Manuals. Earlier in the 80s, it  
 6 was Kelligrews. At one point, it was even  
 7 Argentina. But that gives us another area to  
 8 land and without getting into a protracted  
 9 story, but the weather in that area has a bit  
 10 of a microclimate. 60 percent of the time,  
 11 the study we did, shows that the weather is  
 12 acceptable as an alternate landing area where  
 13 St. John's is not, and that was a study that  
 14 the oil companies did do to validate whether  
 15 that was a -- you know, as we kind of felt  
 16 intuitively it was a good thing, they did  
 17 validate that. That's why we built it where  
 18 we built it, and it's about 12 kilometres --  
 19 12 nautical miles away, and it has served us  
 20 extremely well actually and it's both a  
 21 day/night all-weather facility which we built,  
 22 we control, we own and we recertify for  
 23 applicability every year.  
 24 MS. FAGAN:  
 25 Q. So who maintains this landing site?

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1 MR. BURT:  
 2 A. We do. We do, yes.  
 3 MS. FAGAN:  
 4 Q. And if you can't land in St. John's or Long  
 5 Pond, the other alternates would be where?  
 6 MR. BURT:  
 7 A. Any other airport that has, you know, weather  
 8 reported there and suitable approach aids,  
 9 such as Gander. We can use Deer Lake,  
 10 Stephenville, as long as we have the fuel to  
 11 go back that far.  
 12 MS. FAGAN:  
 13 Q. Okay, thank you. Now your next slide is  
 14 limits, and we'd heard about, you know,  
 15 weather information and the panels for the oil  
 16 operators all discussed various limits that  
 17 they have, sea state limits, and I understand  
 18 for the aviation, it's flight limitations and  
 19 flight limitations are different than some of  
 20 the other limitations. So could you --  
 21 because some of the factors that may be  
 22 relevant to the oil operation might not  
 23 necessarily apply to an aviation operation or  
 24 vice versa, and I understand at slide 40 and  
 25 41, you have described the landing limits for

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1 the helicopter. So can you explain what's in  
 2 these two slides?  
 3 MR. BURT:  
 4 A. Sure. These are landing limits set based upon  
 5 aircraft capability. It's also a function of  
 6 individual, in some cases, operator limits  
 7 because they may have some more restrictive  
 8 limits. In other words, we may have them set  
 9 here, but they say "that's great, we're just  
 10 going to bring it down a notch." I mean, that  
 11 is their prerogative to limit that. And when  
 12 we do land on a moving platform, we  
 13 categorize, you know, our limitations in two  
 14 areas, the daytime and the nighttime.  
 15 Nighttime is more restrictive because of the  
 16 lack of references and landing on a moving  
 17 vessel nighttime does have its own unique  
 18 challenges, which again will reduce the, in  
 19 some cases, the capability of landing  
 20 offshore. For example, we have a chart up  
 21 here that talks about pitch, roll and heave of  
 22 a vessel in terms of day and night and the  
 23 pitch, for example, on the S-92, daytime is  
 24 five degrees. We can handle five degrees of  
 25 pitch and five degrees of roll, left and

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1 right, and seven metres of heave. So again,  
 2 the heave is quite important too because you  
 3 realize your airport is going up and down  
 4 seven metres. But one thing, again the last  
 5 10-15 years has really opened up in our  
 6 business that rate of heave is just as  
 7 important as understanding that there's heave  
 8 at all, and that rate of heave say that it's -  
 9 - our limit is 1.5 metres per second daytime.  
 10 And all this information has been sent to us.  
 11 It's sent to us real time, even on approach,  
 12 and so we have that information to make sure  
 13 that we are landing under acceptable terms on  
 14 a moving vessel.  
 15 MS. FAGAN:  
 16 Q. Thank you. We can see from this chart that  
 17 the limits and numbers for the nighttime are  
 18 almost half. For the timing of the heave,  
 19 it's a third, but they're significantly  
 20 reduced if you're trying to land in the night.  
 21 MR. BURT:  
 22 A. Right.  
 23 MS. FAGAN:  
 24 Q. Now as I understand it, these are the  
 25 limitations for the helicopter. This is what

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1 the helicopter can land on.  
 2 MR. BURT:  
 3 A. That's correct.  
 4 MS. FAGAN:  
 5 Q. Each one of these helicopters. The oil  
 6 operators themselves may set different limits,  
 7 but as far as the capability of the  
 8 helicopter, this is the limit for the  
 9 helicopter.  
 10 MR. BURT:  
 11 A. The limit that we have set here is the limit  
 12 determined by Cougar Helicopters. That is our  
 13 own risk assessment and some of the oil  
 14 companies -- for example, somebody may come in  
 15 here that's not familiar with the east coast  
 16 of Canada and have some different limits which  
 17 are either more restrictive or more  
 18 conservative, and we will obviously educate  
 19 them to say that as an operator, we won't  
 20 operate past this limit and we've never had  
 21 any resistance to that. That's more of a form  
 22 of education, and if they want to be more  
 23 conservative, then obviously, yes, we will  
 24 respect that obviously, and that doesn't  
 25 happen that often, but it does.

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1 MS. FAGAN:  
 2 Q. Okay. Now there's another slide here. This  
 3 one is entitled basic offshore landing limits,  
 4 and slide 41 is the landing limits for the  
 5 Terra Nova FPSO, and I understand they're  
 6 different. Can you explain the difference and  
 7 why?  
 8 MR. BURT:  
 9 A. Well, it goes back to managing our business.  
 10 The FPSO Terra Nova has some very unique  
 11 dynamics by the nature and the structure of  
 12 its hull. It's a large vessel and what we've  
 13 learned is that although it does have a heave  
 14 value that it is a very, very slow rate of  
 15 change for heave, and so we have done our risk  
 16 assessment and you'll notice for the 92 that  
 17 our daytime limit is up to 12 metres of heave  
 18 but it is at one metre per second. So we've  
 19 taken the actual dynamics of our destination,  
 20 analyzed it and applied these limits  
 21 appropriately and I think that's a very  
 22 judicial way of managing our business. So  
 23 that's reflected in this specific chart.  
 24 MS. FAGAN:  
 25 Q. Okay. So the basic heave in the day for the

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1 S-92 is seven metres.  
 2 MR. BURT:  
 3 A. Yes.  
 4 MS. FAGAN:  
 5 Q. But it's a faster -- the limit is seven  
 6 metres, but at a much quicker rate and what  
 7 I'm hearing is because the FPSO Terra Nova has  
 8 a much slower rate -  
 9 MR. BURT:  
 10 A. Right.  
 11 MS. FAGAN:  
 12 Q. - you can take -- the helicopter can take more  
 13 of a heave, more distance, because it's such a  
 14 slow change?  
 15 MR. BURT:  
 16 A. Correct, and we specify that by one metre per  
 17 second. But you do notice, when it goes to  
 18 nighttime, and again, we're getting into the  
 19 details, it is a bow-mounted or front-mounted  
 20 helideck and there's some particular  
 21 considerations on reference and visual cues  
 22 that's taken into consideration and it's  
 23 actually reduced by, you know, right down to  
 24 six metres.  
 25 MS. FAGAN:

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1 Q. Okay. Thank you.  
 2 MR. BURT:  
 3 A. I think it's just a sign that we're managing  
 4 our business well.  
 5 MS. FAGAN:  
 6 Q. The next slide -- now before we move to this  
 7 slide actually, I have one more question and  
 8 it has to deal with night flights and then I'd  
 9 like to deal with the Blue Sky. So there's a  
 10 couple of questions on night flight, and we  
 11 heard a lot of discussion in the earlier  
 12 presentations about night flights, and I'd  
 13 just like to hear the night flight situation  
 14 from Cougar Helicopters' perspective. So how  
 15 many night flights has Cougar Helicopters  
 16 conducted, say, in the last year? And I don't  
 17 need a precise number. I just need a sense as  
 18 to how many night flights we're talking about.  
 19 MR. BURT:  
 20 A. Mr. Williams is going to be handling this  
 21 section.  
 22 MS. FAGAN:  
 23 Q. Yeah, okay.  
 24 MR. WILLIAMS:  
 25 A. Okay, in the last year, I would estimate an

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1 average of about five percent of our overall  
 2 flights is conducted at night.  
 3 MS. FAGAN:  
 4 Q. Okay, and what is considered a night flight?  
 5 Like what's the definition of a night flight?  
 6 MR. WILLIAMS:  
 7 A. Our definition of a night flight is a half  
 8 hour before sunset and a half hour before  
 9 sunrise.  
 10 MS. FAGAN:  
 11 Q. Who decides when a night flight is going to be  
 12 conducted or maybe tell me the decision  
 13 process?  
 14 MR. WILLIAMS:  
 15 A. Okay. For the definition of flying, as Rick  
 16 just outlined in the criteria, whether it's a  
 17 day flight, night flight, all that criteria  
 18 must be met from Cougar's perspective to fly a  
 19 night flight, meaning the weather is assessed,  
 20 the offshore locations and as Rick just  
 21 mentioned in his last two tables, taking into  
 22 consideration that there are lower limits at  
 23 the destination at night. Cougar has no  
 24 different flying procedures at night or day.  
 25 That's consistent across the board. But what



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1 has happened in our post return to flight,  
 2 since -- on May the 18th, is that the  
 3 operators have developed some of their own  
 4 criteria that they help manage their flights  
 5 and whether they want to fly at night. Cougar  
 6 will assess whether a flight can meet all the  
 7 criteria from a dispatch point of view and let  
 8 the operator know, yes, we can do this flight,  
 9 and then there's certain criteria that they  
 10 decide whether they want to avail of that  
 11 flight or not.  
 12 MS. FAGAN:  
 13 Q. Okay. So once you've looked at the criteria,  
 14 as Mr. Burt just laid out, what the dispatcher  
 15 goes through, once all of that has been met,  
 16 then you would, I guess, refer to the oil  
 17 operator and say "now, we're able to fly. Do  
 18 you want us to fly?"  
 19 MR. WILLIAMS:  
 20 A. Yeah. If there's a requirement for a night  
 21 flight, as I said, our dispatcher will  
 22 determine first if a flight can safely and  
 23 legally fly offshore. The operators have  
 24 asked us to take a look at a couple more items  
 25 as part of a check sheet. One is the

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1 availability -- not the availability as much  
 2 as the status of 103. Is 103 serviceable?  
 3 Are they on a mission? Are they training?  
 4 And we will report that back to the operator  
 5 of the status of 103. Another thing we've  
 6 done is we will always have an on-call crew  
 7 member at the facility any time our aircraft  
 8 is flying. Internally, which is not a part of  
 9 our business, each individual operator will  
 10 assess the need for that flight. Is it a  
 11 priority? What's the weather going to be like  
 12 in the next four or five days? So basically,  
 13 once Cougar has met all their criteria, our  
 14 traffic centre will deal with the logistics  
 15 individuals from each individual operator and  
 16 then they make a determination whether they  
 17 want us to proceed with the flight.  
 18 MS. FAGAN:  
 19 Q. Okay, thank you. The next slide is 42 and  
 20 this is a screen shot of the Blue Sky. We saw  
 21 this in the video, but it was a little grainy  
 22 and I think a little difficult to see the  
 23 figures on the screen. So what I would like -  
 24 - and I think Mr. Williams is going to take  
 25 care of this slide. Could you just describe

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1 for us what we're seeing on slide 42? What  
 2 information does the Blue Sky system provide?  
 3 MR. WILLIAMS:  
 4 A. Okay. As you saw in the video, this shot, the  
 5 screen shot you see here is part of the  
 6 display unit in the operational control  
 7 centre. Basically the Blue Sky system is an  
 8 iridium satellite communications network  
 9 and there's a transponder in all of our  
 10 aircraft as well as the supply vessels for the  
 11 oil companies. So it's giving us back  
 12 information such as position, altitude, speed,  
 13 heading, that type of information, and I think  
 14 our chief dispatcher, Danny Pinsent, reported  
 15 that we have certain criteria set up for  
 16 reporting. If an aircraft goes below 2,000  
 17 feet, it reports back every two minute  
 18 intervals, and I think one thing that's very  
 19 important about the screen, that in the OCC,  
 20 if there's a position report that's missed, we  
 21 call an inactive alert, that there's both  
 22 audible and visible actions that will pop up  
 23 on the screen that people can notice that,  
 24 take attention of that flight and you need to  
 25 follow it.

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1 MS. FAGAN:  
 2 Q. Okay. We have a white box in the middle of  
 3 the screen, and would that be information with  
 4 respect to a helicopter or a vessel?  
 5 MR. WILLIAMS:  
 6 A. Yeah, that is a helicopter, and in our  
 7 operational control centre, if you lay your  
 8 cursor of your mouse over any asset, basically  
 9 it will come up with a display box for you.  
 10 This display box you see here shows the  
 11 aircraft registration. It shows the speed,  
 12 the altitude, its destination, where it's  
 13 going, and the most important key function  
 14 that it displays is the lat and long of the  
 15 aircraft at that given time.  
 16 MS. FAGAN:  
 17 Q. It also has a fuel indicator and the arrival  
 18 time and the people on board. So the cursor  
 19 is placed on that and then you can see what's  
 20 going on with that asset?  
 21 MR. WILLIAMS:  
 22 A. With that asset.  
 23 MS. FAGAN:  
 24 Q. We also have a number of other little items on  
 25 the screen, different coloured items and

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1 unfortunately people who are viewing this over  
 2 their web may not be able to see this screen,  
 3 so can you describe what else is being  
 4 monitored? You know, we have the helicopter,  
 5 but is there anything else being monitored?  
 6 MR. WILLIAMS:  
 7 A. I guess, if I can say the services that Cougar  
 8 offers out of the OCC on behalf of the oil  
 9 companies is we track their assets. Their  
 10 assets being their people, their helicopters  
 11 and their support vessels. We have a  
 12 regulatory requirement for the flight  
 13 following or position of our helicopters at  
 14 all times, and that's what I described about  
 15 the position reports have come back. But in  
 16 conjunction with the operators, we thought it  
 17 was very prudent that we use the same system  
 18 to track the supply vessels. The supply  
 19 vessels, we're not tracking them because of  
 20 regulatory requirement. We're tracking them  
 21 on the basis of an emergency response  
 22 situation awareness tool and that's the other  
 23 areas you see there is the actual vessels for  
 24 the offshore oil companies.  
 25 MS. FAGAN:

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1 Q. Okay. Does Cougar Helicopters track other  
 2 commercial vessels? You mentioned the supply,  
 3 but other commercial vessels or fishing  
 4 vessels?  
 5 MR. WILLIAMS:  
 6 A. No, Cougar does not.  
 7 MS. FAGAN:  
 8 Q. Okay. What was used or how did Cougar  
 9 Helicopters keep track of where their  
 10 helicopters were before they had a flight  
 11 tracking system?  
 12 MR. WILLIAMS:  
 13 A. Before we had an automated flight tracking  
 14 system, again the regulatory requirement was  
 15 still there to report back a minimum of 15-  
 16 minute intervals. So we were using all of the  
 17 necessary telecoms on the aircraft, either VHF  
 18 radio, basically radio communication back to  
 19 dispatch centre.  
 20 MS. FAGAN:  
 21 Q. Okay, thank you. That is the end of the  
 22 questions for this. Now we have a video that  
 23 deals with flight operations and some  
 24 questions, and I think we have enough time to  
 25 play the video and at least get into the

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1 questions. We may not finish all the  
 2 questions, but we're not due to break for  
 3 almost 25 minutes. So if we could have the  
 4 video that deals with flight operations,  
 5 please?  
 6 (VIDEO PLAYED)  
 7 Flight operations. The helicopters have  
 8 now been towed from the hangar. Once the fuel  
 9 supply has been tested and each aircraft  
 10 fuelled, they are then ready to go to work.  
 11 After receiving their briefing from the flight  
 12 dispatcher and completing their pre-flight  
 13 risk assessment, the pilots are set to begin  
 14 their next flight.  
 15 Flying helicopters in the east coast  
 16 offshore is a demanding occupation. Most  
 17 pilots will have already earned their airline  
 18 transport pilot license or ATPL and their  
 19 instrument rating from Transport Canada before  
 20 coming to work with Cougar Helicopters. If  
 21 they haven't, these milestones must be  
 22 achieved during the early months of training.  
 23 The old saying applies where we believe  
 24 we can train most pilots to do most things,  
 25 but you know, the attitude is what he comes to

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1 the door with. So we'll hire a certain  
 2 attitude and provided there's a certain amount  
 3 of experience behind that, we can train in the  
 4 skill. So hire for attitude, training for  
 5 skills and we'll go from there. So we have  
 6 the two classifications, first officers and  
 7 pilot in command, or we call captain. All  
 8 pilots are hired as first officers first and  
 9 then they progress to captain, and depending  
 10 on where they are in their experience, they'll  
 11 progress quicker or slower. Our entry  
 12 requirements for first officers or co-pilots  
 13 is normally around 1,000 hours. More  
 14 important than the hours is exactly how he  
 15 achieved -- he or she achieved those hours,  
 16 whether that being all in one type of  
 17 operation, flying small helicopters or perhaps  
 18 flying a different kind of multi-crew  
 19 operation where there's two pilots, which is  
 20 very important to us. That'll carry more  
 21 weight. But that really represents a pilot's  
 22 career up to that point and it may be anything  
 23 from five to ten years for a pilot, depending  
 24 on how fortunate they are to get a high flying  
 25 job initially.

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1 No matter what their experience, all new  
 2 pilots start with a six to ten-day company  
 3 indoctrination focusing on Cougar processes  
 4 and procedures, followed by one month of  
 5 flight simulator training. Simulator training  
 6 puts the pilot in highly realistic situations  
 7 where they learn the fundamentals of  
 8 helicopter flight and how to respond  
 9 appropriately to a wide range of emergency  
 10 scenarios.

11 Simulator training allows us to put the  
 12 pilot in real situations. If we were to train  
 13 in the aircraft, we would absolutely just  
 14 simulate training. For instance, I would say  
 15 "pretend I am closing down one engine now" or  
 16 "pretend that light is on" and carry on with  
 17 the exercise and you kind of have to remember  
 18 the light is on. It doesn't show, but it's  
 19 on. It's just false. When you go into the  
 20 simulator, you don't have to say anything of  
 21 those things. You simply let the crew do  
 22 their thing and you actually turn on a light  
 23 or you fail an engine or you make it night or  
 24 you make it foggy or you make it icy, and they  
 25 have to deal with it and you can see how they

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1 deal with that, and one of the important  
 2 things as well is that there are certain  
 3 things that are simply too dangerous to do in  
 4 an aircraft and those would be a dual engine  
 5 failure, auto rotation down to the ground, and  
 6 actually land the aircraft, ditching, which we  
 7 practice all the time and be able to land the  
 8 aircraft following all the procedures into a  
 9 simulated ocean.

10 This is then followed by check rides and  
 11 flight tests and a week of survival training.  
 12 At this point, the pilot can now begin flying  
 13 with passengers as co-pilot under the  
 14 supervision of a training captain. Training  
 15 and experience is enhanced through an  
 16 alternating seating system in which the  
 17 captain and co-pilot trade seats after ever  
 18 flight.

19 The traditional role of a captain in a  
 20 fixed wing aircraft, you'll find him sitting  
 21 in the left-hand seat and the co-pilot sits on  
 22 the right-hand seat, and until you upgrade to  
 23 captain, you don't move out of that seat.  
 24 Having said that, I'm also aware that certain  
 25 helicopter companies operate that way. The

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1 amount of instrument approaches we do offshore  
 2 was probably -- they were probably the driver  
 3 behind it initially, where the captain wants  
 4 to be in a seat that gives him the best  
 5 opportunity to make a decision, stand back  
 6 from the situation a little bit, look at the  
 7 flight, look at what needs to happen and can  
 8 make a decision. It doesn't mean he actually  
 9 has to fly or she has to fly the helicopter,  
 10 and in many cases, that's actually a negative.  
 11 Hand flying part over to the first officer,  
 12 the captain makes the decision making part and  
 13 do the radio calls perhaps, and maybe that's  
 14 better for that day. It's not so every day.  
 15 In that regard, when some of the rigs that we  
 16 got to fly to, the offshore installations,  
 17 maybe that forces you into a seat that the  
 18 right-hand seat pilot has to land or tomorrow,  
 19 because of the wind, you may have to be in the  
 20 left-hand seat to do that landing. Well, that  
 21 lead us to the situation where a captain needs  
 22 to look at the flight before you go and say  
 23 "well, today's best success, I may have to end  
 24 up in the left on the right-hand seat" and we  
 25 just evolved with a system whereby we simply

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1 just change seats, unless there's a compelling  
 2 reason not to, because of the complexity of  
 3 the day's mission. The advantage of that is  
 4 the day that the captain gets -- or co-pilot  
 5 gets upgraded to a captain, he simply is so  
 6 used to that seat, there's no seat -- he know  
 7 how to fly from there. He knows how to look  
 8 out the window for landing and take off in  
 9 that seat and the instrumentation certainly  
 10 isn't different. So it works for us and I  
 11 think we get the benefit from that.

12 However, the training never ends, even  
 13 for a captain. Every year, all pilots must  
 14 take ground training and simulator training to  
 15 keep their skills sharp and ready to respond  
 16 to challenging situations.

17 The Sikorsky S-92 carries a highly  
 18 sophisticated multi-purpose flight recorder or  
 19 MPFR. The MPFR system records every detail of  
 20 each flight, including instrument readings,  
 21 control adjustments, voice data and external  
 22 factors like weather conditions. At the end  
 23 of every flight day, Cougar avionics downloads  
 24 the MPFR data and transfers it to the  
 25 helicopter flight data monitoring workstation,

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1 where it is processed and analyzed to identify  
 2 any standard operating procedure or SOP  
 3 exceedances during the flight.  
 4 The whole purpose is to measure how the  
 5 flight is flown and to make sure its within  
 6 the Cougar SOP, which is how Cougar wants the  
 7 helicopter to be flown, and there's specific  
 8 procedures for landing and take off and rig  
 9 landing and rig take off, and I would watch,  
 10 especially a rig landing, to make sure that  
 11 the air speed and altimeter and all the  
 12 instruments are within the SOP limits. One of  
 13 the benefits of HFDM is that any pilot can  
 14 come in and animate their flight. They come  
 15 to the HFDM office and we can analyze the  
 16 whole flight or a portion of and zoom in on  
 17 the approach and change the orientation or  
 18 angles just to give them a little more  
 19 information.  
 20 "Hi, Cat. You got a minute?" "Yeah,  
 21 sure." "Did a flight yesterday morning on  
 22 221. I just want to see if I can see the last  
 23 portion of it." "Okay." "That's the portion  
 24 I was looking for here, as we come in over the  
 25 deck. I just want to see what the noise did

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1 as we pitched down."  
 2 We use that data to do quality control of  
 3 the flight, of each flight. It's not a case  
 4 of somebody forgetting a small little detail.  
 5 Well, that light came on, or the wind blew us  
 6 a little bit off track and then I made that  
 7 correction. Now we can look at that and say  
 8 precisely how you dealt with that situation.  
 9 It is a tool to adjust our training. So when  
 10 we say quality control, we measure it against  
 11 our two standards, the flight manual, the  
 12 standard operating procedures. We look for  
 13 deviations. We feed those deviations back  
 14 into the training program and we adjust, and  
 15 so we go back to the simulator and say no,  
 16 adjust the training for this specific item  
 17 where we saw an anomaly and then we'll monitor  
 18 it again. So we close the loop on quality.  
 19 It gives us the comfort that we know precisely  
 20 how people are experiencing the aircraft and  
 21 the offshore environment.  
 22 Cougar Helicopters exceeds regulatory  
 23 requirements with the HFDM system, which is  
 24 not mandated by Transport Canada. HFDM was  
 25 adopted voluntarily by Cougar as another way

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1 of ensuring safety and quality.  
 2 (VIDEO ENDED)  
 3 MS. FAGAN:  
 4 Q. Okay, now I think Mr. Burt is going to start  
 5 with, at least the first few slides in any  
 6 event. The first thing I would like you to  
 7 cover is the air operator's certificate,  
 8 because this aspect really deals with your  
 9 ability to fly and I understand Cougar  
 10 Helicopters does have an Air Operator's  
 11 Certificate and the certificate has been  
 12 presented as an exhibit. Could you just tell  
 13 us when Cougar Helicopters had their initial  
 14 air operator certificate, has it continued and  
 15 the process?  
 16 MR. BURT:  
 17 A. Right, again contemporaneous with our AMO, our  
 18 maintenance one, our air operator's  
 19 certificate was achieved in 1984, and that  
 20 certificate, like the maintenance operation  
 21 evolved and matched our operation. For  
 22 example, in 1989 we upgraded the certificate  
 23 to include international and that's when we  
 24 went and flew offshore oil support in Spain, I  
 25 think, in 1990, so it did evolve and as we

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1 went on and on, it stayed intact, it's always  
 2 been intact, right since 1984, but we've made  
 3 amendments to the operations manual: what we  
 4 do, what aircraft we have, where we fly, some  
 5 very unique things, like our dispatch system  
 6 we spoke about and our operations limitations  
 7 and specifications in the manual.  
 8 MS. FAGAN:  
 9 Q. And this certificate is also issued by  
 10 Transport Canada, is that correct?  
 11 MR. BURT:  
 12 A. Absolutely and it's stamped as certified, as  
 13 you saw earlier as well.  
 14 MS. FAGAN:  
 15 Q. Thank you. Now the pilots, we heard some  
 16 information on the pilots but, like the  
 17 maintenance and the dispatch, they are key to  
 18 the operation, so we have a few slides here on  
 19 the pilot qualifications and the training, so  
 20 could you take us to slide 45 and Michael  
 21 Stephenson of Transport Canada did go through  
 22 some of the requirements to become a licensed  
 23 pilot, but could you look at this from  
 24 Cougar's requirements as to what Cougar would  
 25 consider on a resume or what you'd want to see

1 in hiring a pilot?  
 2 MR. BURT:  
 3 A. Right. These requirements again are required  
 4 by Cougar, but sometimes they are even  
 5 enhanced by some of the operators we fly for.  
 6 They do have some particular requirements,  
 7 they may vary this many hours, that many, but  
 8 this is the generic written one that would  
 9 answer your question. Flight crews that come  
 10 to us require what is called an airline  
 11 transport pilot license, ATPLH in this case,  
 12 for helicopter, or a commercial license with  
 13 the written exams complete.  
 14 MS. FAGAN:  
 15 Q. So what's the basic, because is there a level-  
 16 -an earlier level -  
 17 MR. BURT:  
 18 A. Yes, commercial is the basic and, of course,  
 19 that would only work for a first officer.  
 20 MS. FAGAN:  
 21 Q. Okay.  
 22 MR. BURT:  
 23 A. And not for a captain. They also as we go  
 24 back to that term "instrument", they need a  
 25 group 4 instrument rating. That instrument

1 we're having folks from Gander Rescue 103 or  
 2 Shearwater from the Sea King environment there  
 3 or air ambulance in this area are very, very  
 4 valuable for us.  
 5 MS. FAGAN:  
 6 Q. Okay, now once you accept a pilot at Cougar,  
 7 what is the training--and we've had some  
 8 information on the training, I think the video  
 9 did a pretty good job of going through the  
 10 training, but there's a few areas that were  
 11 not covered, so could you bring us through the  
 12 training?  
 13 MR. BURT:  
 14 A. Sure. Once a pilot is hired, obviously we go  
 15 through several different steps and they may  
 16 go out of order a little bit, depending on  
 17 where the person is and where they're coming  
 18 in, but they will have to go through a company  
 19 indoctrination training and that is a  
 20 familiarization of our operation's manual and  
 21 that's our Bible, all aspects of it. They'll  
 22 go through the familiarization of our standard  
 23 operating procedures, our winter training  
 24 procedures, special operating procedures that  
 25 we do have for approaches to oil rigs,

1 rating is achieved through certification, an  
 2 award by Transport Canada, they have to  
 3 complete a course, write exams, do a flight  
 4 test and they receive an endorsement on their  
 5 license by Transport Canada. I think on the  
 6 film we saw, the director of flight operations  
 7 mentioned that we have a minimum of a thousand  
 8 hours, that would be the minimum, we do get  
 9 some crew that come in at 10,000 and 12,000  
 10 hours, but that is certainly our minimum.  
 11 Then beyond that what we look for, from  
 12 enhanced capabilities, is a multi-crew, we  
 13 talked about the value of multi-crew  
 14 operations. Typically you'll find multi-crew  
 15 in multi-engine, typically, not as guaranteed  
 16 all the time. So the military, very good  
 17 source of multi-crew, the Sea King, the Rescue  
 18 103 on the Cormorant, for example, air  
 19 ambulance operations, again, are multi-  
 20 engined, multi-crew and both of those also  
 21 will come with that IFR or that instrument  
 22 experience as well. Offshore military  
 23 experience, as we talked about, is highly  
 24 favourable and then the harsh weather  
 25 environment, the east coast, so you can see

1 approaches in inclement weather,  
 2 familiarization with our personal protective  
 3 equipment, they're briefed on emersion suits,  
 4 there's special equipment that they have to  
 5 perform their job. And then, of course, they  
 6 will eventually have to go and take the  
 7 aircraft specific training and that means  
 8 going to the S-92 training facility. Now  
 9 there are, the primary one is in West Palm  
 10 Beach, but there is another one now in  
 11 Farmborough and also in the Gulf of Mexico.  
 12 But our primary training facility is in West  
 13 Palm Beach, they'll go there and they'll  
 14 perform a ground school of about two weeks  
 15 learning about all the systems in the aircraft  
 16 and integrated in that, they'll start doing  
 17 some flight simulator training. In most  
 18 cases, obviously we're talking about an  
 19 initial course and this initial course can  
 20 take up to 20 hours of flight training,  
 21 anywhere from 16 to 20 hours. In that  
 22 simulator training, it's quite extensive, by  
 23 the time we're all done, it's about three  
 24 weeks and you're basically doing a full ten  
 25 hour days in that facility. But obviously the

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1 type of training is also, for a pilot, it is a  
 2 pretty exciting opportunity. We go through  
 3 all the emergency procedures and understand  
 4 what is going on on those systems and we also  
 5 have at Cougar, as a reality of where we work,  
 6 some very special operating limitations here  
 7 that will allow us to fly in the weather that  
 8 we do. That requires specific ground and  
 9 flight training and those items are the low  
 10 visibility approaches and take off limits that  
 11 we have here for the St. John's airport. We  
 12 have a very specific offshore rig approach  
 13 that we fly and certify every year in the  
 14 simulator, and we have the global positioning  
 15 satellite system, the GPS approaches that we  
 16 have as area Nav or R Nav and we require both  
 17 ground and flight and flight certification for  
 18 those. To maybe the softer side, we talked a  
 19 little bit about the two areas which specific  
 20 training that's required, it's called  
 21 controlled flight into train, in other words,  
 22 you know, some of these lessons that we've  
 23 learned in the past are now translated into  
 24 proactive learnings. That, on top of this  
 25 crew resource management, now this is again

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1 very important because working with -- the  
 2 human factor in this aircraft, you know, they  
 3 say it's the interesting link between the  
 4 collective and the cyclic and that's the human  
 5 that we're dealing with here is so important,  
 6 it should never be left out, never be  
 7 forgotten, so this is a focussed training on  
 8 the crew, crew dynamics, how to work with the  
 9 crew. We just don't sit in a room and say "do  
 10 this", you know, be aware he can be like that  
 11 and if he says that, don't get upset and  
 12 that's pretty germane but it's not how we  
 13 integrate it. We integrate it in live  
 14 training in the simulator, so we'll do crew  
 15 resource management training as we are  
 16 learning how to fly the aircraft. For  
 17 example, how is that emergency, simulated  
 18 emergency or in the simulator, the actual  
 19 emergency, how did you handle that? And  
 20 you'll talk about how the crew called for the  
 21 checklist and how he handled it here and  
 22 they'll say, now, what you might have done  
 23 here is you could have given him a heads up  
 24 and said why don't we think about this and  
 25 that's how we would integrate cockpit and crew

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1 resource management.  
 2 MS. FAGAN:  
 3 Q. There's also a note here "Transport Canada  
 4 check ride."  
 5 MR. BURT:  
 6 A. Right.  
 7 MS. FAGAN:  
 8 Q. And you've referred to check ride a few times,  
 9 but I don't know if it's been explained. I  
 10 think Michael Stephenson might have--everybody  
 11 talks about it, but what is a check ride?  
 12 MR. BURT:  
 13 A. Check ride is where a pilot's heart comes  
 14 through his chest, it's at that time when you  
 15 are tested and Transport Canada takes full  
 16 oversight and awards those licenses, if you're  
 17 successful. Transport Canada will sit in the  
 18 aircraft in the jump seat or in the simulator,  
 19 I should say, the simulator, and watch you  
 20 conduct a flight and that flight has very  
 21 strict parameters, you must do a take off, you  
 22 must do an en route segment, you must get  
 23 established en route, you must do emergency  
 24 procedures, instrument holding procedures and  
 25 these are procedures that Air Traffic Control

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1 would expect you to, and that's the contract  
 2 with that agency. Deviations in altitude air  
 3 speed are all predicated on that check ride.  
 4 You'll come back, you'll do approaches, they  
 5 have to be successful in instrument conditions  
 6 and mis-approaches as well. All those aspects  
 7 are done on a flight check which usually takes  
 8 about an hour and thirty minutes, or hour and  
 9 forty-five and then the Transport Canada  
 10 inspector will leave and brief the crew and  
 11 say congratulations, sir, you've got your type  
 12 certificate either on the aircraft and a  
 13 separate validation of your instrument skills.  
 14 So there's really two things that's going on.  
 15 He'll validate your type, the S-92, let's use  
 16 that aircraft, yes, you're certified now to  
 17 fly that type of aircraft; and No. 2, your  
 18 instrument certification is also valid. So  
 19 there's really two things going on in the way  
 20 that we do our flight tests.  
 21 MS. FAGAN:  
 22 Q. Okay. You have mentioned that the check rides  
 23 are, they're conducted by Transport Canada and  
 24 that's often in the simulator. You mention  
 25 simulator training, is simulator training

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1 required by Transport Canada?  
 2 MR. BURT:  
 3 A. No, it's not required by Transport Canada. It  
 4 has been an absolute tenant of our individual  
 5 company since 1989. I think we're very proud  
 6 of that; however, what I will do is state that  
 7 I have to put a hand up and say that all the  
 8 operators we work for here on the east coast  
 9 of Canada has put it in as a basic  
 10 requirement, if you're to bid their work, you  
 11 must have and complete your training on a full  
 12 motion certified flight simulator device. And  
 13 I have to say that's not the case around the  
 14 world, but it is the case on the east coast of  
 15 Canada and that has served us so well here to  
 16 have the highest level of standard of training  
 17 available to us.  
 18 MS. FAGAN:  
 19 Q. And where is the simulator?  
 20 MR. BURT:  
 21 A. West Palm Beach is the one that we mainly go  
 22 to, but we have gone to Farmborough and we  
 23 checked out that new facility, so we've got  
 24 some extra capacity if we need to in the  
 25 Farmborough area when it comes to developing

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1 our procedures and such. There's a couple of  
 2 areas I didn't touch on, but you know, we do  
 3 have to have specific area training. If we go  
 4 to St. John's, you have to be trained there in  
 5 St. John's and the peculiar areas about this  
 6 area and their ATC procedures and I touched on  
 7 our winter operations, again are very  
 8 important. We go through the basic survival  
 9 training, like everybody else does, we have  
 10 the initial and the recurrent and it's just  
 11 like everybody else that goes offshore.  
 12 MS. FAGAN:  
 13 Q. We've heard about the five day BST, so is that  
 14 the course that you--when you say you have the  
 15 training, it's that same basic survival  
 16 training course?  
 17 MR. BURT:  
 18 A. That's correct, yes.  
 19 MS. FAGAN:  
 20 Q. And that's for your pilots.  
 21 MR. BURT:  
 22 A. Dunker training and everything, yes, and we do  
 23 have occasion, actually it's a very good  
 24 feedback, when our pilots are in, we'll  
 25 actually talk to the crew and the other

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1 passengers that are going through and just  
 2 talk about some dynamics and that and it's  
 3 actually a very good exchange.  
 4 MS. FAGAN:  
 5 Q. What about the recurrent, because we've had  
 6 information that there is a recurrent course.  
 7 Does the pilot have to do a recurrent course  
 8 and is it the same as the other course that's  
 9 done by the passengers?  
 10 MR. BURT:  
 11 A. Yes, they do a recurrent and it's the same.  
 12 MS. FAGAN:  
 13 Q. I have a few questions on some of the  
 14 equipment that is used by the pilots and the  
 15 suits, so I don't know, Commissioner, if you  
 16 want to take the break?  
 17 COMMISSIONER:  
 18 Q. All right then, we'll take a break now.  
 19 MS. FAGAN:  
 20 Q. Okay, thank you.  
 21 (RECESS)  
 22 MS. FAGAN:  
 23 Q. Now, I just have a few more questions with  
 24 respect to pilots. You have provided a lot of  
 25 information about the pilot training and the

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1 number of hours and the various credentials  
 2 that your pilots have. We had heard earlier  
 3 that there was a personal on board management  
 4 system, there's a, you know, a system at  
 5 Cougar that keeps track of the passengers.  
 6 Where do you keep track of the pilot's  
 7 credentials? Is it in that system or is it in  
 8 a different databank? How do you know if your  
 9 pilot's credentials--if they've had their ride  
 10 checks and that type of stuff.  
 11 MR. BURT:  
 12 A. All the pilot's credentials and their training  
 13 data when they receive their training is all  
 14 kept in a Cougar system called FOIMS, it's  
 15 Flight Operations Information System, and this  
 16 is a system, as I say, we have a very robust  
 17 IT department and programming department here  
 18 in St. John's. The system was developed by  
 19 our flight operations group and some other  
 20 folks who use it to be very detailed and  
 21 specific about our requirements and that's  
 22 where it's kept.  
 23 MS. FAGAN:  
 24 Q. Okay, and what about the passenger, the POB  
 25 system, so the information of the pilot's

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1 credentials are kept in your own system.  
 2 MR. BURT:  
 3 A. Uh-hm.  
 4 MS. FAGAN:  
 5 Q. Your own Cougar operating system and what  
 6 about the POB system, is any pilot information  
 7 kept in that system?  
 8 MR. BURT:  
 9 A. Just the essential information on that, just  
 10 next of kin, yes.  
 11 MS. FAGAN:  
 12 Q. If they happen to be on flight -  
 13 MR. BURT:  
 14 A. That's correct, on that particular manifest,  
 15 yes.  
 16 MS. FAGAN:  
 17 Q. They departed--okay, so the information of the  
 18 pilot, on the pilots for a particular flight  
 19 would be in the POB system from a flight  
 20 manifest perspective.  
 21 MR. BURT:  
 22 A. That's correct.  
 23 MS. FAGAN:  
 24 Q. But their credentials, such as did they have  
 25 the BST or do they have their check ride or do

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1 they have certain credentials, that's in your  
 2 own -  
 3 MR. BURT:  
 4 A. That's in our flight operations information  
 5 system.  
 6 MS. FAGAN:  
 7 Q. Okay, great. Now on the equipment that the  
 8 pilots have, we heard a lot of information  
 9 about the suits that are worn by the  
 10 passengers. I understand that the suits worn  
 11 by the pilots are different. Can you describe  
 12 the suits that are worn by the Cougar  
 13 helicopter pilots?  
 14 MR. BURT:  
 15 A. Sure. The suits that the flight crew use--  
 16 that I've used my whole career are, first of  
 17 all, the requirement by Transport Canada is  
 18 that we provide a suitable protection from  
 19 hyperthermia to our crews, that is a  
 20 requirement by Transport Canada and that is  
 21 our authority. What we have done, just  
 22 recently actually, is we did an analysis as to  
 23 what would be the best suit for our operation  
 24 and what we did is we did a global search of  
 25 suit suppliers. We had a criteria that we

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1 were looking for and then we did an industry  
 2 best practices search as well with other  
 3 operators, and we took that whole process and  
 4 distilled it down into our selection, which  
 5 was quite, quite firm and we selected this  
 6 suit by Viking. Now the suit is a dry suit  
 7 first off and it is built to function in a  
 8 cockpit, a helicopter cockpit. Let me explain  
 9 that. We have our flight crew in that cockpit  
 10 which is largely a full glass enclosure or  
 11 Lexan enclosure, and they'll be in there for  
 12 up to eight, possibly nine hours a day and  
 13 that's where they work. So that also can  
 14 provide a lot of heating and that stuff, so  
 15 you have to have something, number one, that  
 16 can accommodate that environment. Number two,  
 17 is that we have aircraft controls and switches  
 18 and when it comes to having gloves hanging off  
 19 the side of your sleeves, you have to have a  
 20 very clean sleeve that when you go touch  
 21 something or you make a movement on a control  
 22 service, you don't hook anything up and we've  
 23 done a very detailed survey in our cockpit to  
 24 make sure that we do not increase any risk by  
 25 hooking up on anything. So it is very

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1 important for us. We've also integrated all  
 2 the other aspects of the suit and anything on  
 3 it for, not only cockpit orientation, but also  
 4 egress. So for us it's a purpose-designed  
 5 suit for a purpose, a very specific job.  
 6 MS. FAGAN:  
 7 Q. The issue also came up as to whether or not  
 8 the pilots wore helmets and do the pilots with  
 9 Cougar helicopters wear helmets or not?  
 10 MR. BURT:  
 11 A. The pilots wear both, they wear headsets and  
 12 some pilots wear helmets. The background  
 13 behind that is that we've had crews come from  
 14 different disciplines, such as some crews came  
 15 from Search and Rescue or the Military and  
 16 it's their function, based upon the job that  
 17 they've had in the Military that they said  
 18 look, I've had this, I'm comfortable with it,  
 19 I'd prefer that and they've asked us would you  
 20 mind if we did wear our helmets and, you know,  
 21 we looked at our company core values, our  
 22 company culture and we saw no reason as to not  
 23 to oblige them on that and support them. So  
 24 it doesn't make one thing safer than the  
 25 other, we're flying, again, as an airline



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1 standard, so we were accommodating with our  
 2 crew, so we do have a mix of both.  
 3 MS. FAGAN:  
 4 Q. Are there any floatation devices or life vests  
 5 that are provided to pilots?  
 6 MR. BURT:  
 7 A. Sure, and of course the life vest is a  
 8 Transport Canada required item, so we have  
 9 sourced a life vest that works with, again,  
 10 very carefully works with this suit and made  
 11 sure that it is compatible and we procured  
 12 that and implemented it as part of our PPE for  
 13 our personal protective equipment for our  
 14 flight crew. I will also say that what we  
 15 have provided for the pilots is an element of,  
 16 number one, is the dry suit emersion suit  
 17 coverage, but we've also provided a flame  
 18 barrier as well. We have a Nomax flight suit  
 19 that we provide and the suit and emersion suit  
 20 and the flight suit are items that we mandate  
 21 our crews wear.  
 22 MS. FAGAN:  
 23 Q. So is the flight suit required by Transport  
 24 Canada?  
 25 MR. BURT:

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1 A. Not that specific flight suit, but adequate  
 2 protection against hyperthermia, yes.  
 3 MS. FAGAN:  
 4 Q. Okay. Personal locator beacons, do they have  
 5 any type of beacon or strobe lights, any other  
 6 sort of -  
 7 MR. BURT:  
 8 A. Yes  
 9 MS. FAGAN:  
 10 Q. - identifiers in the event they need to be  
 11 found.  
 12 MR. BURT:  
 13 A. We do have personal locator beacons for our  
 14 crew and of course, there is a beacon on the  
 15 lift vest as well, a visible flashing beacon.  
 16 MS. FAGAN:  
 17 Q. Okay. Emergency breathing apparatus, now the  
 18 workers travelling offshore have recently been  
 19 provided with a HUEBA. I understand that  
 20 that's a particular name that's been adopted  
 21 by the oil industry on the east coast. There  
 22 is a more generic form, the emergency  
 23 breathing apparatus, and do you provide your  
 24 pilots with such an apparatus?  
 25 MR. BURT:

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1 A. I'm fortunate that we have Mr. Banks here. He  
 2 did the analysis and he's been involved in the  
 3 implementation of that, so I think I'm going  
 4 to take advantage of that and just let Rick  
 5 speak to you about the process that he's gone  
 6 through and where we are with that.  
 7 MS. FAGAN:  
 8 Q. Okay, thank you.  
 9 MR. BANKS:  
 10 A. Okay, just to reiterate and step back a little  
 11 bit, what Rick was trying to get at obviously  
 12 was upfront in the confines of the cockpit we  
 13 try and streamline our air crew. There is  
 14 just too many smaller issues there going on  
 15 that the bigger suit, the more cumbersome,  
 16 everything that we looked at and assessed and  
 17 did risk assessments on and went out as far as  
 18 Norway on some of these aspects to get the  
 19 best equipment we could, was the streamlining  
 20 effect with quality gear. So, you know, going  
 21 into the vests, you know, the suits,  
 22 everything is tracked through our LETS  
 23 tracking system as well, which is a Lifesaving  
 24 Equipment Tracking System in house. So the  
 25 safety department is taking care of all of

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1 this, as well as bringing in experts from  
 2 their various fields to get these types of  
 3 equipment, so the breathing apparatuses that  
 4 we've gone to, although I sat on the HUEBA  
 5 task force while it was going through for the  
 6 passengers, we went to a different model,  
 7 again streamlining for upfront, it's called  
 8 HEEDS, which is Helicopter Emergency Egress  
 9 Device. It's known around the world, again  
 10 largely used for air crew, not passenger and  
 11 it really--when it came to selection, the best  
 12 thing I can say is it's a smaller two pound  
 13 scuba bottle, if you will, with a regulator  
 14 built right on the top. There's no whip  
 15 effect like the passengers have that runs up,  
 16 you know, built right into the suit. We don't  
 17 have that luxury when you're in the cockpit,  
 18 we need something that cannot hang up  
 19 whatsoever in the confines of the egress  
 20 situation, so to us and in talking to many  
 21 operators that use these down through the  
 22 States, Sheriff Department, Rescue, some of  
 23 the military as well as JTF2 -  
 24 MS. FAGAN:  
 25 Q. What's JT -

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1 MR. BANKS:  
 2 A. Joint taskforce to military, anti-terrorism  
 3 group and when dealing with some of these  
 4 entities, you know, we found that to be the  
 5 best selection for us and the proper gear. If  
 6 there were issues, the bottle can be dumped,  
 7 as long as the air crew got a couple of  
 8 breaths, enough to get out and surface.  
 9 That's the requirement that we're after is to  
 10 get a couple of breaths, those much needed  
 11 breaths, once the window is pushed, you've got  
 12 that extra bit of air after the cold induction  
 13 of the water and the gasping. So, you know,  
 14 it turned out to be a valuable piece of  
 15 equipment and I can say now that training has  
 16 been occurring in the last month, month and a  
 17 bit from survival systems, has been over in  
 18 Halifax, our last training is tomorrow. They  
 19 are ongoing today in the pool with the sweat  
 20 chairs, putting all our pilots through or air  
 21 crew and dispatchers and rescue specialists  
 22 and it will be on line the 8th, which is next  
 23 Monday. Once the bottles are replenished  
 24 after tomorrow's training, we're implementing  
 25 and full bore through all our operations, not

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1 just St. John's, but our Halifax group will be  
 2 complete as of tomorrow and then we're moving  
 3 it down to the Gulf of Mexico, so again our  
 4 standardization of such an apparatus is going  
 5 to work right through all of our operations.  
 6 MS. FAGAN:  
 7 Q. Now when you say the whip effect, we had the  
 8 breathing device that is used by the workers  
 9 here and it was a canister with a tube and  
 10 then the regulator was at the end of the tube.  
 11 I take it from what you're saying is the tube  
 12 is not a feature of the device that is going  
 13 to be used by the pilots and anybody who looks  
 14 at the various options, you'll see that there  
 15 is an option where the regulator is attached  
 16 directly to the canister and there is no cord  
 17 or tubing, so is this the one that you're  
 18 talking about, the one where the regulator is  
 19 right on the canister so there is no tube to  
 20 get caught in any of the switches that's in a  
 21 cockpit?  
 22 MR. BARNES:  
 23 A. Yes, and I think you've got to understand too  
 24 we could not build that into the suit, there's  
 25 nothing wrong with that device, it just opens

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1 up one element of risk to us not having it  
 2 inside embedded into the suit. So if we were  
 3 to have it hanging, there's obviously that  
 4 risk of hang up. Within the passengers, they  
 5 don't have that, so they have the option that  
 6 it's hidden away, there's nothing wrong with  
 7 that. With us, it just wouldn't have worked  
 8 in the proper manner that we were looking for.  
 9 MS. FAGAN:  
 10 Q. Okay, because the passenger one doesn't hang,  
 11 it's built in.  
 12 MR. BARNES:  
 13 A. Right.  
 14 MS. FAGAN:  
 15 Q. But the pilot suits wouldn't accommodate that  
 16 -  
 17 MR. BARNES:  
 18 A. No, and the vest we used wouldn't accommodate  
 19 it as well, and I've used both and both are  
 20 great pieces of kit, it's just that this one  
 21 will do far superior for our needs.  
 22 MS. FAGAN:  
 23 Q. Will this be on the vest, physically attached  
 24 to what the pilots are wearing or will it be a  
 25 canister that they can, within arm's reach.

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1 MR. BARNES:  
 2 A. No, it must be attached to the body because if  
 3 it's not, then it becomes dangerous goods in  
 4 the aircraft. 3000 psi in a bottle, it must  
 5 be attached to the person. So within out  
 6 sweat like vest, it's a spec off the vest, if  
 7 you will, that's already built in, that was  
 8 incorporated, made for these bottles to be  
 9 applicated later. So when we purchased these  
 10 vests a number of months back, that's what we  
 11 had in mind and we kept going with the program  
 12 and now we're at the end of our training cycle  
 13 and implementation stage. So it is contained  
 14 within the holder, with a little guide on it  
 15 that if in the event there is a bit of a hang  
 16 up, it's just a witness thread that can be  
 17 broken and discarded and egress can be  
 18 maintained.  
 19 MS. FAGAN:  
 20 Q. Thank you. That will be the questions that I  
 21 have with respect to the flight operations and  
 22 in particular the pilots. And our next  
 23 section is passenger movement. I don't know  
 24 if we're ready, unless you have something to  
 25 add, we'd move to the passenger movement

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1 video. I'd ask the technician/registrar to  
 2 bring up the next video.  
 3 (VIDEO PLAYED)  
 4 Passenger Movement: Passengers begin to  
 5 arrive at the heliport for the next flight  
 6 offshore. They are greeted by efficient  
 7 courteous staff and a tight security system.  
 8 What they don't see are the many hours  
 9 invested in advance planning to prepare the  
 10 flight manifest. They work well ahead of the  
 11 flight date to ensure that all passengers have  
 12 the appropriate documentation in place, such  
 13 as medical certificates and basic survival  
 14 training. They work well ahead of the flight  
 15 date to ensure that all passengers have the  
 16 appropriate documentation in place, such as  
 17 medical certificates and basic survival  
 18 training. They work with dispatch to  
 19 determine the payload for each flight and then  
 20 pass this on to check-in staff one hour prior  
 21 to departure.  
 22 The passenger movement department is the  
 23 logistics division of Cougar Helicopters.  
 24 They are responsible for communicating the  
 25 logistical requirements with the offshore

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1 operator, their onshore representatives in  
 2 order to provide safe, secure, efficient  
 3 transportation of personnel to the offshore  
 4 installations, and this can either by via air  
 5 or via vessel, as required. From the  
 6 passenger movement co-ordination side, a  
 7 flight manifest involves many different  
 8 aspects and interaction with other  
 9 departments. It will begin with a list of  
 10 passengers, freight, cargo, other requirements  
 11 that will be sent to the traffic office from  
 12 the offshore operator, either their offshore  
 13 representative logistics or their onshore.  
 14 From this, the traffic office will determine a  
 15 booking list and they will create a flight.  
 16 Now that will now be in the system. The  
 17 dispatcher will provide a payload for each  
 18 flight and this is based on the weather  
 19 conditions and other variables of that day.  
 20 However, what they will give us is the payload  
 21 that is left over after the fuel requirements.  
 22 The traffic agents will enter this payload  
 23 into the POB system. This will be  
 24 communicated to the checking agent downstairs  
 25 and as each passenger comes through, their

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1 weight and other items will be subtracted from  
 2 this payload.  
 3 The payload limit is a cold equation,  
 4 meaning it cannot be exceeded by a single  
 5 kilogram. If payload is exceeded, logistics  
 6 will work with the client to prioritize. Most  
 7 often cargo will get bumped, but occasionally  
 8 passengers must be rescheduled. Cougar  
 9 utilizes a computerized POB System named after  
 10 the Personnel On board System used by the  
 11 offshore operators to identify whom and how  
 12 many of our passengers are on the offshore  
 13 installations at any given time.  
 14 The POB System is an acronym which stands  
 15 for the Personnel On Board. It has three main  
 16 functions. It's primary function is to make  
 17 the user aware of exactly how many personnel  
 18 are on board any installation at any given  
 19 time, who they are, what their details are,  
 20 including the room that they're assigned and  
 21 the muster station. One of the other things  
 22 it does is it has a human resources component,  
 23 which means the person's personal information  
 24 is stored in there. We have a database which  
 25 tells the user what certificates a person has,

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1 what they require, it lists all their personal  
 2 information, their emergency contacts, their  
 3 address, and this can be checked as they come  
 4 in. The next function that it serves is as an  
 5 actual flight operations tool, in that within  
 6 this program we can create the booking list  
 7 for the passengers who are travelling, we can  
 8 verify as each passenger comes up to check in  
 9 that they are indeed who they are supposed to  
 10 be.  
 11 The passenger discloses any medications  
 12 which are bagged separately and retrieved on  
 13 arrival offshore from the medic. The check in  
 14 process is intended to make the flight as  
 15 safe, efficient, and comfortable as possible.  
 16 Cougar has implemented some of the strongest  
 17 security checks in the transportation industry  
 18 and the entire passenger movement process is  
 19 monitored by an extensive array of video  
 20 security cameras. Passengers follow  
 21 barricades to the security counter where they  
 22 present boarding pass and photo ID to the  
 23 security agent. The passenger removes objects  
 24 from pockets and places them in the basket  
 25 provided. Luggage is given a thorough hand

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1 search by the agent and is then x-rayed. Cell  
 2 phones, cameras, and other unapproved devices  
 3 are surrendered and secured until the  
 4 passenger returns from offshore. The  
 5 passenger then goes through a metal detector  
 6 and may also be searched with a hand wand.  
 7 Baggage is placed in a secure baggage and the  
 8 passenger is released to the immersion suit  
 9 room. There, after verifying photo ID and  
 10 boarding pass, the immersion suit agent checks  
 11 the manifest for the passenger's suit size or  
 12 does a suit fitting. A personal locator  
 13 beacon and an underwater breathing apparatus  
 14 are then attached to the suit and checked for  
 15 functionality. The suit is entered into a  
 16 tracking system. The suit is presented to the  
 17 passenger. Passengers wait in the lounge  
 18 until they are paged into the briefing room.  
 19 All shoes are removed and placed in colour  
 20 coded boot bags, and the check in agent then  
 21 plays the briefing video which reviews safety  
 22 features on the helicopter and includes  
 23 instructions for first arrival on the  
 24 installation. Passengers don ear protection,  
 25 line in single file, and are escorted by

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1 Cougar personnel to the helicopter for  
 2 boarding. Escorts (inaudible) seat belts and  
 3 give load documentation to the pilots. The  
 4 flight maintenance engineer secures the door.  
 5 On signal, the escort pulls the chucks from  
 6 the wheels and the aircraft can then taxi to  
 7 the runway. Aircraft monitoring in Blue Sky  
 8 begins and the flight registers as departed in  
 9 the POB System as the aircraft begins  
 10 departure for the offshore. Dispatch receives  
 11 a call when the flight has landed, at which  
 12 point Heli Admin offshore registers all  
 13 passengers in the POB System as occupants on  
 14 board the installation. At all times during  
 15 the flight communication is frequent and  
 16 ongoing between the flight crew and the co-  
 17 authority dispatch onshore. Occasionally, the  
 18 flight will be turned back due, for example,  
 19 to deteriorating weather conditions offshore,  
 20 or the illumination of a cockpit indication  
 21 light that may indicate a technical problem.  
 22 Turnarounds are generally caused by  
 23 weather. It can either be the weather en  
 24 route or the weather at the location, or in  
 25 rare instances, the weather in St. John's or

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1 alternates. Weather offshore is also a  
 2 factor. If en route or during the flight,  
 3 even in the final stages, the weather goes  
 4 below our approach and landing minimums, we  
 5 will have no choice but to turn around and  
 6 return to St. John's or to our alternate. We  
 7 won't launch a flight unless we had a  
 8 reasonable expectation of success in our  
 9 ability to land out there, that the conditions  
 10 will be as required. However, they change  
 11 quickly en route, they change as we're  
 12 approaching on some occasions. In most cases  
 13 the fog will come in, the visibility will go  
 14 below limits, and we'll have to turn around  
 15 and return to base. This fog can persist for  
 16 days, it can persist for a week.  
 17 When flights are grounded for consecutive  
 18 days, as occasionally happens during the foggy  
 19 season, passengers move offshore by sea on  
 20 support vessels that depart from St. John's  
 21 Harbour. In such cases, the passenger  
 22 management system is still in place, except it  
 23 tracks their movement by vessel, not  
 24 helicopter.  
 25 The decision on whether or not a

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1 passenger will remain at the heliport, be  
 2 placed on pagers, or sent home at the end of  
 3 the day, is primarily an offshore operator  
 4 decision. It is the operator's choice whether  
 5 they would like to try again for another  
 6 flight, or with the variables, and in  
 7 discussion with Cougar dispatch, Cougar  
 8 operations and passenger limits, if it would  
 9 be best to move that into the next day, or  
 10 whether or not they should actually go over  
 11 for a meal or remain at the heliport. That's  
 12 all done in consultation with each other, but  
 13 it is the operator's decision.  
 14 (VIDEO ENDED)  
 15 MS. FAGAN:  
 16 Q. Now I believe Mr. Williams is going to handle  
 17 this section, is that right? Okay, passenger  
 18 movement, now we've just had the check-in  
 19 process described and the pictures were very  
 20 helpful. We've also had a description of the  
 21 POB System, the electronic tracking system.  
 22 The information with respect to the passengers  
 23 that are on a particular helicopter, as I  
 24 understand it, are all stored in the manifest?  
 25 MR. WILLIAMS:

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1 A. Stored in the POB System details, yes.  
 2 MS. FAGAN:  
 3 Q. Right. So you could -- how long would it take  
 4 to have a list and the contact information  
 5 with respect to the passengers on a particular  
 6 flight? If you wanted a manifest for a  
 7 particular flight, how quickly could you  
 8 obtain that information using this system?  
 9 MR. WILLIAMS:  
 10 A. Very quickly. It's about three or four point  
 11 clicks in the system and you're into a  
 12 printable page of who's on the flight and  
 13 their details.  
 14 MS. FAGAN:  
 15 Q. So if there was an emergency, how long would  
 16 it take to create a manifest and retrieve that  
 17 information with the contact information, and  
 18 then what would you do with that manifest?  
 19 MR. WILLIAMS:  
 20 A. Understand the manifest is created prior to  
 21 flight departure. It's a manifest that we  
 22 would give the flight crew saying who's on  
 23 board his flight, just the names, and the  
 24 weight of what he's carrying and any cargo and  
 25 destinations. I think what you may be

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1 referring to is, say, if we want the personal  
 2 details, the next of kin, telephone numbers,  
 3 who this individual works for, what's his  
 4 occupation offshore, that's the stuff we would  
 5 retrieve if it was any type of an emergency  
 6 either on an installation or on a flight. That  
 7 can be retrieved fairly quickly. If there was  
 8 an emergency offshore at any location and we  
 9 were asked by the respective oil companies in  
 10 support of their emergency control centre to  
 11 supply that information, very quickly, within  
 12 minutes they could have that information.  
 13 MS. FAGAN:  
 14 Q. Now what about the supply vessels? The supply  
 15 vessels have a crew, you know, it's a vessel,  
 16 so they have a captain and all the crew. Is  
 17 the crew of the supply vessels kept in this  
 18 system or is it just the workers of the oil  
 19 rig?  
 20 MR. WILLIAMS:  
 21 A. Just the workers of the oil rigs. We do not  
 22 track the POB for the actual employees of the  
 23 supply vessels, no, we don't.  
 24 MS. FAGAN:  
 25 Q. So if there was an emergency on the supply

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1 vessels, you would -- say if a supply vessel  
 2 had a manifest -- you know, flight was  
 3 cancelled, sixteen passengers were now put on  
 4 a supply vessel, you would be able to obtain  
 5 the information for the sixteen passengers?  
 6 MR. WILLIAMS:  
 7 A. For the passengers we are transferring from  
 8 St. John's to the offshore installation, yes.  
 9 MS. FAGAN:  
 10 Q. That you track. So whether they're on the  
 11 supply vessel or whether they're on a  
 12 helicopter, you track them?  
 13 MR. WILLIAMS:  
 14 A. Yeah, at any given time we can tell you where  
 15 any individual is for an oil company, and we  
 16 refer to it, he's either on the beach, or he's  
 17 on an aircraft, on a vessel, or on an  
 18 installation. So at any given time if you  
 19 work for any of the offshore operators, we can  
 20 tell you where that individual is.  
 21 MS. FAGAN:  
 22 Q. Okay. Now we had heard that it may take  
 23 longer to deal with notifying family members  
 24 or immediate contact information if there was  
 25 an emergency. So can you tell us what you do?

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1 You're saying that you can retrieve this  
 2 information and have this data available.  
 3 What do you do with it if there's an emergency  
 4 with the workers of an oil operator?  
 5 MR. WILLIAMS:  
 6 A. That information is strictly supplied to the  
 7 oil operator's respective departments, and how  
 8 they contact their individual's -- they're  
 9 their employees, we're not privy to pass  
 10 supplying them with the information.  
 11 MS. FAGAN:  
 12 Q. So you pass the information on?  
 13 MR. WILLIAMS:  
 14 A. Correct.  
 15 MS. FAGAN:  
 16 Q. They may take longer for them to actually  
 17 contact the people they're looking to contact?  
 18 MR. WILLIAMS:  
 19 A. That's -- I couldn't answer to how long. I  
 20 might add that most of the oil companies, if  
 21 not all of them, in their own emergency  
 22 control centres have access to the system, it  
 23 can actually get this data themselves.  
 24 MS. FAGAN:  
 25 Q. Okay, so they don't need to wait for you to

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1 pass them the information?  
 2 MR. WILLIAMS:  
 3 A. But if they do, we're more than ready to  
 4 provide it quickly.  
 5 MS. FAGAN:  
 6 Q. In the system, it indicated that it keeps  
 7 track of the certificates for the workers,  
 8 such as their BST, their medicals. What about  
 9 exemptions? We had heard in Mr. Decker's  
 10 testimony that he had an exemption or an  
 11 extension with respect to his sea day because  
 12 the weather apparently was very cold when he  
 13 was scheduled to do his sea day, so that had  
 14 been postponed, and we had heard that that was  
 15 an exemption.  
 16 MR. WILLIAMS:  
 17 A. Correct.  
 18 MS. FAGAN:  
 19 Q. So does this system track exemptions?  
 20 MR. WILLIAMS:  
 21 A. Yes, it does.  
 22 MS. FAGAN:  
 23 Q. Okay. We had a demonstration there of  
 24 security measures. Can you describe the  
 25 security measures? They've shown us how the

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1 baggage is tested and it's all inspected and  
 2 x-rayed and the people are going through a  
 3 metal detector. Do you test or do you have  
 4 any regime for testing your security measures?  
 5 MR. WILLIAMS:  
 6 A. Yes, we do. If I can explain the security a  
 7 little more, of course, we operate as an air  
 8 carrier, we must abide by the Transport Canada  
 9 security items of flight. That being said,  
 10 that's things like dangerous goods, weapons,  
 11 the same as if you got on Air Canada, the same  
 12 thing is there as well, but from a security  
 13 perspective, we also -- the operators will  
 14 tell us what do they not want on their  
 15 installation. For example, matches, cell  
 16 phones, pagers, cameras, lighters. All these  
 17 things are okay for carriage under Transport  
 18 Canada, but the operators are saying they do  
 19 not want these items to show up on their  
 20 facility. So our security is safety of  
 21 flight, the Transport Canada related items,  
 22 and then it's items that the operators do not  
 23 want on their facility. When it comes to  
 24 testing, yes, we do get -- each of the  
 25 operators have their own security advisors

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1 that basically establish the protocols for our  
 2 security, help us in training of what their  
 3 expectations are, and they do periodic testing  
 4 as well on us.  
 5 MS. FAGAN:  
 6 Q. Now you have some slides which give us the  
 7 weekly flying program and I'm wondering if you  
 8 could turn to slide 49, and just give us an  
 9 overview as to how many passengers you move  
 10 per week, and just describe what's in this  
 11 slide, because people who are viewing this  
 12 through their computers don't see the  
 13 PowerPoint.  
 14 MR. WILLIAMS:  
 15 A. Okay, what you see on the slide here is a  
 16 Monday through Saturday scheduled flying  
 17 program, and emphasis, I guess, on the word  
 18 "scheduled". We commence our operations at  
 19 0700 in the morning and a typical day will see  
 20 us doing five or six flights that are  
 21 scheduled, Monday to Friday. There is  
 22 currently one scheduled flight on Saturday.  
 23 So our typical week will, you know, like I  
 24 said, five to six flights per day, but keeping  
 25 in mind that each individual operator will

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1 require what we refer to as some ad hoc  
 2 requirements. A flight is not scheduled, but  
 3 they need additional flights. So an average  
 4 of six or seven flights per day we're rolling  
 5 out of St. John's here.  
 6 MS. FAGAN:  
 7 Q. Okay, and it appears from this schedule that  
 8 you start at seven in the morning and the last  
 9 flight would be around noon?  
 10 MR. WILLIAMS:  
 11 A. That is correct.  
 12 MS. FAGAN:  
 13 Q. And so these are the flights that leave St.  
 14 John's?  
 15 MR. WILLIAMS:  
 16 A. Correct.  
 17 MS. FAGAN:  
 18 Q. So they have to go out and --  
 19 MR. WILLIAMS:  
 20 A. And come back.  
 21 MS. FAGAN:  
 22 Q. And there's -- we've heard that there's about  
 23 a 20 minute, 15/20 minute turn around time and  
 24 then they come back?  
 25 MR. WILLIAMS:

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1 A. Yeah, pretty well each aircraft will do two  
 2 flights a day. So when one aircraft comes  
 3 back, it has a turn around time and will be  
 4 scheduled in another slot time.  
 5 MS. FAGAN:  
 6 Q. Okay, and this schedule, is this schedule for  
 7 the four S-92s or for the three S-92s?  
 8 MR. WILLIAMS:  
 9 A. That schedule you see there now is for the  
 10 four S-92s.  
 11 MS. FAGAN:  
 12 Q. So they all have the same -- they have  
 13 different numbers?  
 14 MR. WILLIAMS:  
 15 A. Yeah, if I can give you an example. I'll take  
 16 Cougar 131 on Monday, commencing at 0700. The  
 17 1 represents Monday, of course. We say Monday  
 18 is the first day of the week. Each  
 19 installation has an identifier number; 3 is  
 20 Hibernia, and 1 is the first flight of the day  
 21 for Hibernia. So 131 is Hibernia flight at 7  
 22 o'clock on Monday. A 331 would be Hibernia  
 23 flight at 7 o'clock on Wednesday, and each  
 24 individual installation has its own -- like I  
 25 say, its own identifier. Cougar 101 goes to

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1 the Stena Carron on Monday.  
 2 MS. FAGAN:  
 3 Q. Okay, and so on?  
 4 MR. WILLIAMS:  
 5 A. And so on.  
 6 MS. FAGAN:  
 7 Q. 151 and 121 and 141.  
 8 MR. WILLIAMS:  
 9 A. Keeping in mind, like you say -- you had  
 10 mentioned about the schedule here. We always  
 11 say that's if the stars align because the  
 12 weather has to be good, there's no aircraft  
 13 serviceability issues, no delays, if winds  
 14 slowed us down coming back. So that is our  
 15 wishlist schedule you see there.  
 16 MS. FAGAN:  
 17 Q. So zero wind would help?  
 18 MR. WILLIAMS:  
 19 A. Zero winds would help.  
 20 MS. FAGAN:  
 21 Q. The next slide is probably a nice lead in, and  
 22 that is the pooling agreement. Now we've heard  
 23 about the pooling agreement, so we don't need  
 24 to take too much time, but from Cougar's  
 25 perspective, can you give us a little bit of

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1 information on the agreement, the history, and  
 2 how you apply it?  
 3 MR. WILLIAMS:  
 4 A. Yeah, I think I mentioned yesterday when I  
 5 talked about the fleet in St. John's, each of  
 6 our three main oil companies here in St.  
 7 John's have one aircraft assigned on contract.  
 8 What they've done is taken those three  
 9 aircraft and put them into a collective pool  
 10 and sort of passed them back to Cougar to  
 11 manage on their behalf. What the pooling  
 12 agreement gives us is some guidelines on how  
 13 we manage their assets. For example, if  
 14 Hibernia's aircraft today for some reason was  
 15 out for scheduled maintenance or unscheduled  
 16 maintenance, does that mean that Hibernia  
 17 doesn't get a flight today; no, we have a  
 18 pooling agreement that say this is how we  
 19 share all the airframes together and how we  
 20 roll the flight schedule. I won't -- like you  
 21 say, you talked a lot about this one, but we  
 22 do have one of the key components of the  
 23 pooling arrangements is priority of flight,  
 24 which is on the next slide, and can I go into  
 25 that --

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1 MS. FAGAN:  
 2 Q. Yes, you can go to the next slide.  
 3 MR. WILLIAMS:  
 4 A. And where priority of flight comes in, for  
 5 example, you saw the flight schedule that was  
 6 up earlier, and if on Monday morning at 0700  
 7 the first flight is scheduled to go to  
 8 Hibernia, if there's a medevac requirement on  
 9 Terra Nova, Hibernia's flight doesn't go  
 10 because the first priority of flight you see  
 11 here is emergency flights. So in the pooling  
 12 agreements that's a given that first priority  
 13 flight is emergencies. I'll go on down to the  
 14 second one, the second priority of flight,  
 15 crew change flights. Hibernia could request  
 16 additional flights today, ad hoc flights, but  
 17 they do not go in front of another operator's  
 18 crew change flights. Crew change takes the  
 19 second priority. Then on into, I guess, the  
 20 third priority would be technical priority ad  
 21 hoc flights, and that means if it has a major  
 22 operational impact offshore that they need a  
 23 piece of freight or personnel quickly, we'll  
 24 assess with each operator which one is more of  
 25 a priority and arrange that. Of course, the

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1 fourth one is any other ad hoc flight that we  
 2 can do whenever we can fit it in. So the key  
 3 to the pooling agreements is the way we  
 4 address priority flights and all the pooling  
 5 participants, the three pooling participants,  
 6 clearly define to our operations manager how  
 7 to manage each of the individual aircraft on  
 8 their behalf.

9 MS. FAGAN:  
 10 Q. Okay, thank you. Now this is the passenger  
 11 information system and I believe this takes up  
 12 two slides. So could you describe what is  
 13 contained in these two slides?

14 MR. WILLIAMS:  
 15 A. On those two slides we want to lay out the  
 16 amount of communication that goes between the  
 17 Cougar traffic agents, the Cougar logistics  
 18 teams, the OCC Centre, and the logistics folks  
 19 offshore. I'll start off by saying every  
 20 evening a daily schedule is put together for  
 21 the next day's flying program, and that's a  
 22 combination of the operator's requirements,  
 23 what did we not get done today that takes a  
 24 priority tomorrow, are all aircraft available,  
 25 takes into priority consideration all those

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1 items and we arrive at a flying program that  
 2 gets issued the evening before the flights.  
 3 There's a morning operations call which is  
 4 very important. It kicks off at 0730 in the  
 5 mornings, and that is one that's basically  
 6 chaired by our base operations manager from  
 7 the OCC, and each of the operators will have a  
 8 participant on that morning operations call  
 9 where we give an update of today's activities.  
 10 This is what we have from a weather  
 11 observation, this is what we have from  
 12 aircraft serviceability, these are some of the  
 13 challenges we see today, we have strong winds  
 14 or snow, and these type of things. So that  
 15 takes place at 0730 in the morning. The FIDS  
 16 we refer to, our Flight Information Display  
 17 System, basically that's controlled by the  
 18 radio operator that you saw in the dispatch  
 19 function of the OCC. That's the position that  
 20 updates real time flight information. It will  
 21 show when an aircraft is departed St. John's,  
 22 it will show en route to an installation, it  
 23 will show it landed on an installation, and,  
 24 of course, show its subsequent return back.  
 25 It also shows -- if there is a delay, it will

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1 show our revised time of departure on that  
 2 display system. So that's where probably the  
 3 most real time information is available to the  
 4 general public, or a passenger, or a  
 5 passenger's relatives on the beach, you know,  
 6 is that aircraft left St. John's, or is she  
 7 coming back, and that's where that real  
 8 information is there. I want to speak briefly  
 9 about the flight information line when we talk  
 10 about passenger information system. The  
 11 primary role of our flight information line is  
 12 to make sure that if you're scheduled for a  
 13 flight at 8 o'clock going outbound, that you  
 14 get to the heliport on time. This line is not  
 15 updated for the purpose of you knowing when  
 16 you need to be at the heliport, because we  
 17 don't want you leaving Placentia, driving in  
 18 to pick up your relative, and the flight is  
 19 not even left St. John's yet. So the flight  
 20 information lines primary purpose is to get  
 21 people to the heliport for departure. If I  
 22 can move on to the next slide.

23 MS. FAGAN:  
 24 Q. Yes.

25 MR. WILLIAMS:

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1 A. Another way we communicate the passenger  
 2 information system is what we refer to as  
 3 logistics e-mail. Each of the operators have  
 4 assigned, I guess for want of better words, a  
 5 single point of contact that we have that we  
 6 will deal with issues on scheduling, any  
 7 issues around operations within the oil  
 8 companies. So there's a constant  
 9 communication back and forth to logistics  
 10 folks on any updates throughout the day, as  
 11 weather changes, aircraft status changes and  
 12 the like.

13 Passenger briefing and what we say from a  
 14 verbal passenger briefing. We try and share  
 15 as much information we can. Unfortunately in  
 16 Newfoundland, you know, there's an old saying  
 17 if you don't like the weather, wait 15  
 18 minutes, and sometimes you look rather stupid  
 19 when you say that "well, we're not going for  
 20 the next two hours because of freezing rain."  
 21 All of a sudden it changes in 15 minutes and  
 22 we're ready to go. So we're trying to give  
 23 the best information we have available now to  
 24 the passengers, and that changes quite  
 25 frequently.



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1 Our operations manager or his delegate  
 2 from the traffic centre will -- any flight  
 3 interruptions, if you were scheduled to go and  
 4 for some reason we said stand down, we try as  
 5 much as possible to tell you why. Is it  
 6 weather? Is it mechanical issue? Is there  
 7 any issues offshore where we need to be  
 8 delayed? So we try and pass that on as much  
 9 as possible.  
 10 And I just want to say the Cougar  
 11 website, if there's a passenger travelling  
 12 offshore, specifically for the first time, if  
 13 you go on our Cougar website, there's a lot of  
 14 information that you should know prior to your  
 15 travel offshore. So I would encourage  
 16 anybody, if they're going for the first time,  
 17 that's where you need to go to get a lot of  
 18 that information.  
 19 MS. FAGAN:  
 20 Q. Okay, thank you. Now before we move to the  
 21 suit fitting process, I just have a couple of  
 22 -- on the communication, still on the  
 23 communication topic. You spoke of the pooling  
 24 agreement and the helicopters, the sharing of  
 25 the helicopters, and as well the scheduling,

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1 and clearly we have delays or cancellations,  
 2 especially in light of the weather. Could you  
 3 give us a percentage of what -- what's the  
 4 percentage of scheduled flights that leave or  
 5 at least leave on the day they're scheduled?  
 6 MR. WILLIAMS:  
 7 A. Yeah. I guess one of the definitions and one  
 8 of the targets we try to use, we do a stat  
 9 called as scheduled, meaning that if a  
 10 passenger was scheduled to get there today,  
 11 did he get there today. Not necessarily was  
 12 he delayed a couple of hours, but did he get  
 13 there on the day he was scheduled to go. Over  
 14 a 12-month period, that average will be  
 15 probably around 75 to 80 percent, and you will  
 16 find in July, June and August, you know,  
 17 around that time frame, it's a lot lower  
 18 because we spend a lot more days in the foggy  
 19 season. So you know, the issues that would  
 20 impact, of course, whether you get there on  
 21 the day you were supposed to: weather being  
 22 one of the big ones, if all of our aircraft  
 23 are available to us today, and that varies  
 24 from month to month. But overall, on a 12-  
 25 month cycle, you'll probably get 70 -- you

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1 know, between 75 and 80 percent of the people  
 2 will get there as scheduled, we refer to it.  
 3 MS. FAGAN:  
 4 Q. We also have had a discussion as to an  
 5 additional helicopter, and it had been put to  
 6 other presenters that would an additional  
 7 helicopter assist in the interruptions. You  
 8 know, if you have a backlog of two or three  
 9 days, what is your view on how much or if an  
 10 extra helicopter would assist in the backlog?  
 11 MR. WILLIAMS:  
 12 A. I think if you're in a backlog situation and  
 13 you throw additional resources at it, it's  
 14 pretty obvious that yes, you will get it done  
 15 quicker. You know, you won't eliminate  
 16 delays, but you will catch up on your backlog  
 17 quicker with additional airframe. That's --  
 18 you know, the more you got, the more people  
 19 you can move in the run of a day. That's for  
 20 sure.  
 21 MS. FAGAN:  
 22 Q. Okay. But you can't start moving them until  
 23 the weather clears.  
 24 MR. WILLIAMS:  
 25 A. Absolutely.

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1 MS. FAGAN:  
 2 Q. Okay. I also have become aware that in  
 3 addition to this information that you provide  
 4 the passengers and the information and the  
 5 liaison with the oil operators themselves,  
 6 that there is a helicopter steering committee.  
 7 Could you describe this committee and who are  
 8 the members, how often does it meet?  
 9 MR. WILLIAMS:  
 10 A. Well, the helicopter steering committee was  
 11 established way back in the early days of  
 12 Cougar, back in 1997, I think real early, but  
 13 I'd like to add first is that I mentioned we -  
 14 - supply services do three operators. Our  
 15 base operations manager will have weekly  
 16 meetings with -- logistics meetings, it's  
 17 referred to, with each individual operator.  
 18 That's dealing with specific issues that's  
 19 pertaining to their installation, their  
 20 processes, their procedures, and any issues we  
 21 have with that particular company or they with  
 22 us.  
 23 But what the helicopter steering  
 24 committee does is basically manages the  
 25 pooling principle. There are a lot of issues

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1 that we have are relative to all three  
 2 operators together and the decision that we  
 3 move forward must be made together as a  
 4 collective pool. Those may be issues around  
 5 enhancements to the aircraft. I can remember  
 6 back a long time ago when we did some  
 7 enhancements to radar equipment on the Super  
 8 Pumas. That was a decision that all three  
 9 operators made in conjunction with Cougar. It  
 10 was a great move forward, but it needs to be a  
 11 mutual decision amongst all personnel.  
 12 Typically the makeup of the helicopter  
 13 steering committee is a representative from  
 14 each of the individual operators from  
 15 operations and finance, because a lot of the  
 16 things we talk about involves that we want to  
 17 adjust capacity, bring in another airframe,  
 18 remove another airframe, has a commercial  
 19 component as well, and from the Cougar  
 20 environment, you'll get representations from  
 21 pretty well all departments at those  
 22 helicopter steering committee meetings.  
 23 MS. FAGAN:  
 24 Q. So when you say the operators, is it the three  
 25 operators that are part of the pooling

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1 agreement?  
 2 MR. WILLIAMS:  
 3 A. Correct.  
 4 MS. FAGAN:  
 5 Q. It wouldn't, right now, involve ConocoPhillips  
 6 or it wouldn't involve -- was it Statoil that  
 7 you did work for?  
 8 MR. WILLIAMS:  
 9 A. Statoil or Conoco or Chevron that came in as  
 10 individual operators for a short period of  
 11 time.  
 12 MS. FAGAN:  
 13 Q. Because this affects the pooling arrangement  
 14 of the three helicopters.  
 15 MR. WILLIAMS:  
 16 A. It's how we manage our assets together as a  
 17 collective group, and I call it with four  
 18 parties, the three individual operators and  
 19 Cougar. It's how we manage our operation and  
 20 our assets together.  
 21 MS. FAGAN:  
 22 Q. Okay, and how often does this committee meet?  
 23 I mean, is this an annual thing or a monthly  
 24 thing? And what's the focus?  
 25 MR. WILLIAMS:

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1 A. Well, that varies, how often we meet.  
 2 Initially when it was established, I think it  
 3 ended up being like a -- it was established as  
 4 a quarterly meeting, and that will ratchet up,  
 5 depending on the activity. I can remember  
 6 during -- in Mr. Burt's previous slides, he  
 7 talked about the aircraft transition from  
 8 Pumas to 92s, which was something that  
 9 involved all of us. We all needed to be  
 10 involved in. I would say we were having those  
 11 every three or four weeks.  
 12 We've been a while since we've had one in  
 13 a formal process because we've been meeting so  
 14 regularly in a return to service and all this,  
 15 and all these issues have been bundled  
 16 together. But the baseline that we will  
 17 establish for the helicopter steering  
 18 committee is a quarterly, but adjust depending  
 19 on any activity that needs immediate attention  
 20 or more frequent meetings.  
 21 MS. FAGAN:  
 22 Q. Okay, thank you. Now the next slide is 54 and  
 23 it is suit fitting process. Now we've had a  
 24 lot of information on suit fitting. I'm  
 25 hoping not to repeat it too much, but Cougar

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1 Helicopters, you know, is involved and is  
 2 where the suits are actually distributed, so  
 3 it's important that we understand this process  
 4 from your perspective.  
 5 So what I would like you to do is to take  
 6 this in two segments. So the first segment is  
 7 in November of 2007, the suits were  
 8 introduced. So if you could go through, you  
 9 know, what took place at that time and, you  
 10 know, what was the process? Describe what  
 11 Helly Hansen did at Cougar Helicopters from  
 12 Cougar Helicopters' perspective when the suits  
 13 were introduced, and then we'll deal with post  
 14 March 12th after.  
 15 MR. WILLIAMS:  
 16 A. Okay. So in November, as you've -- I think  
 17 you heard from the joint panel group is when  
 18 they made the transition to the Helly Hansen  
 19 E452, and our obligation or our contractual  
 20 obligation is to provide storage and issuance  
 21 of the suits that are selected by the oil  
 22 companies. So Helly Hansen, being the  
 23 provider, in November 2007, Helly Hansen was  
 24 at our facility for a six-week period, and the  
 25 reason why six weeks comes up so often,

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<p>1 because that should get a rotation of every 2 individual at least once through the heliport 3 on a three-week rotation. So Helly Hansen 4 provided suit fittings for passengers 5 travelling offshore. They did pre-flight 6 briefing videos or pre-flight briefings, I 7 should say, on the E452 suit, answering any 8 questions that passengers had and basically 9 helping everyone into this new suit, some of 10 them for the first time.</p> <p>11 Cougar's immersion suit issuance training 12 was received in November 2007 from Helly 13 Hansen. Again, our responsibilities and 14 training was consisting of on-the-job training 15 for suit handling. The suit had different 16 components of it. Maybe the light was in a 17 different place, how we stored the suits, how 18 we hang the suits and all of that kind of 19 stuff. Helly Hansen provided a database 20 system which basically tracks the inventory of 21 suits, how many suits are at the heliport, how 22 many suits are on any particular rig. They're 23 not necessarily attached to an individual, but 24 it's sort of a suit inventory system. Of 25 course, the suit is attached with a PLB.</p>	<p>1 MS. FAGAN: 2 Q. When it was introduced? 3 MR. WILLIAMS: 4 A. Yeah, that information is in the POB system. 5 Once you travelled once at Cougar, when John 6 Smith checked in, John Smith received a suit 7 for the first time. His personal details was 8 updated in the POB system to reflect the size 9 suit that he had. So when he returned six 10 weeks later for another suit, we knew the day 11 before what size suit this gentleman would be 12 requiring.</p> <p>13 MS. FAGAN: 14 Q. Okay. The type of training you received from 15 Helly Hansen, can you describe -- you received 16 training on how to manage -- you know, take 17 care of the suits, store them, hang them, 18 record them. What training did you receive, 19 if any, on how to fit them on the passengers? 20 MR. WILLIAMS: 21 A. The definition of fit is what I think has 22 probably changed from November 1 to post 23 return to flight. As I said earlier, there 24 was, I think -- I'm not sure about the number 25 of sizes, but if there's seven suit sizes, the</p>
<p>Page 254</p> <p>1 There was preflight checks. And basically a 2 general overview of the suit and how it 3 properly should fit and at that time, I think 4 there was seven different size ranges. So 5 trying to teach us, instruct us on how out of 6 those size ranges we issue the right suit to 7 the right individual.</p> <p>8 So Helly Hansen, for six weeks, and start 9 up on November 1st and that was through to 10 December 12th, I think.</p> <p>11 MS. FAGAN: 12 Q. When the -- this was a fitting process for six 13 weeks. When the suit was fitted to an 14 individual, was a size assigned to that 15 individual? Like John Smith is a medium - 16 MR. WILLIAMS: 17 A. Yes. 18 MS. FAGAN: 19 Q. - and then that stored and tracked and 20 maintained, so that every time John Smith 21 would come up, it would say John Smith, 22 medium. Was that type of data collected and 23 maintained? 24 MR. WILLIAMS: 25 A. Yes.</p>	<p>Page 256</p> <p>1 individual was fitted to an appropriate size. 2 That did not consist of any type of securing 3 seals to ensuring that the face seals or the 4 wrist seals was sealing properly. That wasn't 5 a part of the initial - 6 MS. FAGAN: 7 Q. So would it be fair to say the sizing -- we've 8 seen the charts. They were put in as exhibits 9 from Helly Hansen, and on those charts, they 10 had sizing and then there was a table, certain 11 weight, certain height. You know, you fit in 12 this range. It's like buying a lot of other 13 clothes, you fit in this range, and that size 14 is supposed to fit you. 15 MR. WILLIAMS: 16 A. Correct. 17 MS. FAGAN: 18 Q. Okay. So you had that type of information. 19 What I'm hearing -- what I think I'm hearing 20 is that there wasn't a process where you 21 tested the seals? 22 MR. WILLIAMS: 23 A. No, not on November 2007. 24 MS. FAGAN: 25 Q. Okay, and I take it that the process is</p>

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1 different now, and I'll have you go through  
 2 that process in a minute. I just want to make  
 3 sure I've finished pre-March 12th. Oh, there  
 4 was one other issue. Were you aware of any  
 5 complaints by passengers with respect to the  
 6 suits prior to March 12th? Between November  
 7 7th and March 12th.

8 MR. WILLIAMS:  
 9 A. Yes. More in the form of verbal  
 10 communication. The passengers would express,  
 11 you know, some concerns around their thought  
 12 process on the suit, some good, some bad. A  
 13 lot of people had great compliments and some  
 14 had not so good compliments, but as part of  
 15 the communication process that I mentioned  
 16 earlier between our base operations manager  
 17 and the logistics group, all that information  
 18 was passed on in our various logistics  
 19 meetings around any issues that came forward,  
 20 if a passenger brought it forward to us.

21 MS. FAGAN:  
 22 Q. So most of these were verbal?

23 MR. WILLIAMS:  
 24 A. Correct.

25 MS. FAGAN:

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1 Q. If not, all. Do you recall the type of  
 2 complaint?

3 MR. WILLIAMS:  
 4 A. Mostly around comfortability and issues with  
 5 struggling getting the zipper up and that --  
 6 you know, each of those individual things was  
 7 taken into consideration where we actually  
 8 ensure that people could get their zipper up.  
 9 Part of the training that -- you know, after  
 10 some of those complaints came in was we  
 11 actually sat people in a seat and they proved  
 12 that they could get the zipper up before they  
 13 actually left the heliport.

14 MS. FAGAN:  
 15 Q. Okay. Now we know that the training is  
 16 different now, so can you describe the  
 17 process, and I think you have a slide that  
 18 deals with the process for fitting now.

19 MR. WILLIAMS:  
 20 A. Yeah.

21 MS. FAGAN:  
 22 Q. May 2009 is when the return to flight.

23 MR. WILLIAMS:  
 24 A. Yeah.

25 MS. FAGAN:

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1 Q. So describe how that's different.

2 MR. WILLIAMS:  
 3 A. Of course, when we resumed flying in May 2009,  
 4 again Helly Hansen came back to the heliport  
 5 as part of their return to service program for  
 6 fitting suits, and that, at the request of the  
 7 operators, by the way, Helly Hansen was at the  
 8 heliport. How long Helly Hansen was going to  
 9 stay there sizing each individual before they  
 10 go onto the aircraft was unknown at that time.  
 11 I'm not sure of the exact, how long they were  
 12 there. But in May '09, of course, the suit  
 13 fit evaluation process was enhanced, you know,  
 14 to include the face seal and any other type of  
 15 issues around the suit. I won't get into --  
 16 I'm not sure of the actual details about how  
 17 many people didn't fit. I think you've  
 18 already gotten that information from some of  
 19 your -

20 MS. FAGAN:  
 21 Q. Yes. We don't need that. I mean, all I'm  
 22 looking for is what changed at Cougar  
 23 Helicopters. What were you told and how did  
 24 you change your procedures?

25 MR. WILLIAMS:

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1 A. What changed after May was that during a  
 2 period of time and I guess a phase-out of the  
 3 Helly Hansen people being at the heliport all  
 4 the time, in conjunction with the operators,  
 5 they requested that if we would take over the  
 6 sizing and the fitting of the passengers as  
 7 Helly Hansen was prescribed to do prior to.  
 8 So what happened was that we agreed to do that  
 9 and our personnel at Cougar was trained by  
 10 Helly Hansen to basically become suit  
 11 technicians, which had the same qualifications  
 12 and training as the Helly Hansen folks that  
 13 was there in the initial start up of our  
 14 flights when we resumed in May.

15 MS. FAGAN:  
 16 Q. How long was the training, approximately? Was  
 17 it a day or a week?

18 MR. WILLIAMS:  
 19 A. I think that was close to a week of training  
 20 that these people received.

21 MS. FAGAN:  
 22 Q. And how many people at Cougar? Do you know  
 23 approximately how many people at Cougar are  
 24 trained?

25 MR. WILLIAMS:

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1 A. Well, we have a back-to-back. We have two  
 2 what I call suit guys, for want of better  
 3 words, and both of those individuals are  
 4 trained for the suit technician position.  
 5 MS. FAGAN:  
 6 Q. Okay. I have one or two questions on suits,  
 7 and I know we're getting -- we're at the end,  
 8 but I'd like to finish the suit discussion  
 9 before we break. The last issue is that I  
 10 understand from Helly Hansen that the workers  
 11 were surveyed with respect to the suits.  
 12 Helly Hansen said that they surveyed the  
 13 workers and the information on the survey has  
 14 already been presented.  
 15 MR. WILLIAMS:  
 16 A. Okay.  
 17 MS. FAGAN:  
 18 Q. What was Cougar's involvement in the survey?  
 19 MR. WILLIAMS:  
 20 A. Cougar's involvement was basically to help  
 21 facilitate the survey, because who sees every  
 22 passenger and who can actually literally hand  
 23 out a survey is the Cougar personnel on a day-  
 24 to-day basis. So Cougar was involved in  
 25 trying to facilitate that survey by making

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1 sure passengers got them, retrieving them back  
 2 and passing that information back to Helly  
 3 Hansen.  
 4 MS. FAGAN:  
 5 Q. Okay, and we understand Cougar is going to  
 6 distribute a survey for the Inquiry later on  
 7 when our expert, Kimberly Turner, returns.  
 8 MR. WILLIAMS:  
 9 A. Yes.  
 10 MS. FAGAN:  
 11 Q. And we're hoping we'll -- we understand you're  
 12 going to distribute it for us as well.  
 13 MR. WILLIAMS:  
 14 A. Okay.  
 15 MS. FAGAN:  
 16 Q. That would be -  
 17 MR. WILLIAMS:  
 18 A. I think there was a charge for that though, by  
 19 the way.  
 20 MS. FAGAN:  
 21 Q. Well, we'll have to discuss that during the  
 22 break. We are at the end of the day. There's  
 23 a couple of more points and then we were going  
 24 to have the pre-flight briefing video played.  
 25 So we could end now and tomorrow we'll pretty

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1 well start with that.  
 2 COMMISSIONER:  
 3 Q. Okay then, fine. We're adjourned until  
 4 tomorrow morning at 9:30 then.  
 5 UPON CONCLUSION AT 4:30 P.M.

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1 CERTIFICATE  
 2 We, the undersigned, do hereby certify that  
 3 the foregoing is a true and correct transcript of a  
 4 hearing heard on the 2nd day of February, 2010 at  
 5 Tara Place, 31 Peet Street, Suite 213, St. John's  
 6 Newfoundland and Labrador and was transcribed by us  
 7 to the best of our ability by means of a sound  
 8 apparatus.  
 9 Dated at St. John's, NL this  
 10 2nd day of February, 2010  
 11 Cindy Sooley  
 12 Discoveries Unlimited Inc.  
 13 Judy Moss  
 14 Discoveries Unlimited Inc.

<p>-?-</p> <p>'09 [1] 259:12</p> <p>'70s [1] 76:6</p> <p>'80s [2] 76:5,6</p> <p>'85 [1] 7:18</p> <p>'89 [1] 9:8</p> <p>'90s [1] 76:9</p> <p>'91 [1] 9:9</p> <p>---</p> <p>-an [1] 197:16</p> <p>-0-</p> <p>0700 [3] 235:19 237:16 240:6</p> <p>0730 [2] 242:4,15</p> <p>-1-</p> <p>1 [4] 96:15 237:17,20 255:22</p> <p>1,000 [1] 188:13</p> <p>1.5 [1] 175:9</p> <p>10 [2] 70:14 88:6</p> <p>10,000 [1] 198:9</p> <p>10-15 [1] 175:5</p> <p>100 [3] 22:20 39:11 53:18</p> <p>101 [1] 237:25</p> <p>103 [5] 182:2,2,5 198:18 199:1</p> <p>115 [1] 81:17</p> <p>12 [5] 62:4 172:18,19 177:17 246:24</p> <p>12,000 [1] 198:9</p> <p>12-month [1] 246:14</p> <p>12-year [1] 62:16</p> <p>120 [3] 53:14,20 81:17</p> <p>1200 [2] 132:9,13</p> <p>121 [1] 238:7</p> <p>125 [1] 53:17</p> <p>1250 [3] 119:1,9 130:24</p> <p>12th [9] 3:17 4:6 129:17 131:4 252:14 254:10 257:3,6,7</p> <p>13 [2] 46:19,23</p> <p>13,000 [1] 96:23</p> <p>131 [2] 237:16,21</p> <p>132 [1] 52:6</p> <p>134 [2] 91:12,16</p> <p>135 [2] 90:19 95:7</p> <p>137 [1] 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