OFFSHORE HELICOPTER SAFETY INQUIRY

October 28, 2009
Tara Place, Suite 213, 31 Peet Street
St. John's, NL

October 28, 2009

PRESENT:

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

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

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

D. Blair Pritchett .....Suncor (Petro-Canada)

Alexander C. MacDonald, Q.C. .....Husky Oil Operations Ltd.

Geoffrey Spencer..... Helly Hansen Canada Ltd.

Rolf Pritchard.....Government of Newfoundland and Labrador

Jonathan Tarlton/Mark Freeman .....Department of Transport Canada

Norman J. Whalen, Q.C.....Cougar Helicopters Inc.

Jamie Martin.....Families of Deceased Passengers

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

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

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

TABLE OF CONTENTS
OCTOBER 28, 2009

Page 1

October 28, 2009

COMMISSIONER:

Q. Good morning, ladies and gentlemen. I'd like to welcome this morning Mrs. Wendy Tadros, who is the Chair of the Transportation Safety Board, and with her and assisting her is Mr. John Cottreau and I'm very pleased to welcome them both and Ms. Tadros, you'll recall that at the beginning of my remarks, at the very beginning, I mentioned that it was important that I felt that we get the view from the Offshore Petroleum Board and then Transport Canada and particularly important, of course, is the role of the Transportation Safety Board, which is the investigative body of incidents and accidents in all fields in Canada, but particularly in our case, we're concerned with the aeronautics side and so I welcome Ms. Tadros and she will make a presentation to us and there will be an opportunity afterwards for her to take questions from you. Okay then, Mrs. Tadros.

MS. TADROS:

A. Thank you, Mr. Commissioner. I must say I'm very pleased to be here in St. John's and to

Page 2

participate in your Inquiry and to help you out in any way we can at the TSB. It also gives me an opportunity to visit your community and to personally thank the many -

REGISTRAR:

Q. Excuse me, sorry to interrupt. Mr. Commissioner, should I swear Ms. Tadros.

COMMISSIONER:

Q. Not for the moment.

REGISTRAR:

Q. Okay.

COMMISSIONER:

Q. Okay.

MS. TADROS:

A. Okay, maybe when we finish the presentation then we'll do that.

COMMISSIONER:

Q. Yes.

MS. TADROS:

A. Okay. Yes, I was saying it gives me the opportunity to personally thank the many, many people who helped our investigators last March in the very early days after the accident when an awful lot needed to be done and it needed to be done very, very quickly.

Page 3

I recognize this Inquiry is important to your community and particularly to the families who lost loved ones in the crash of Cougar Flight 491. It's also very important to us at the TSB, no more so than to the team of investigators who arrived in St. John's in the days following the accident and whose faces you have come to know. Those same investigators are still hard at work in pursuit of the facts and the answers that we all need to ensure this tragedy does not repeat itself. This investigation is one of the Safety Board's top priorities. A very strong and capable team of professionals has been assigned to this work.

While the team focuses on their work, I'm happy to be here to explain to you what to expect as the TSB investigation unfolds and discuss the role of my organization and what we do to advance transportation safety. We're not a regulator. We are an independent investigative body. Over the last 20 years, the Transportation Safety Board has built an international reputation as a leader in accident investigation. To this end, our

Page 4

annual report reflects the volume of investigations and activities undertaken in the last year to advance safety in marine, rail, pipeline and aviation. Our annual report is Document No. 1.

I'm sure a question on the minds of many is how does this Inquiry, your Inquiry, differ from the TSB's investigation. So right off the top, let me clearly distinguish your Inquiry from a TSB investigation.

Offshore oil workers move back and forth by helicopter every day. You will look carefully at the role of the C-NLOPB and what they can do to ensure workers get safely to and from offshore rigs. I would maintain that the Offshore Petroleum Board can influence aviation safety indirectly through its regulation of petroleum producers. It can also raise the safety bar through the imposition of license conditions and the setting of contract provisions, and this is a good thing.

By contrast, the TSB's role is to advance the safety of aviation and helicopter operations worldwide. We do this by

Page 5

investigating accidents, whether in the offshore or elsewhere in the world. We seek to find out what happened and why it happened. In accordance with our legislation, we take a systemic approach to all our investigations. We run the gamut of issues from the immediate causes of an accident to the risks Canadians may encounter and we do all of this to learn lessons to make the system safer.

At the end of the day, it really is my belief that this Inquiry and the TSB investigation, each in their own way, will improve safety for the people of Newfoundland and Labrador.

Before I tell you about how we work, let me put the TSB's independent investigation of aviation accidents in perspective. Let me give you a little bit of context.

In 1990, the Government of Canada passed the Canadian Transportation Accident Investigation and Safety Board Act, and that's a very long title, and so we refer to it as the CTAISBA Act. This legislation contains a set of principles and gives the TSB its power to investigate accidents and incidents. When

Page 6

there is a transportation accident in rail, marine, aviation or pipeline, the legislation allows the TSB to occupy the field. When the Safety Board is investigating, no other Federal Government Department, other than the Department of National Defence, can investigate for the purpose of determining causes and contributing factors. This exclusivity goes beyond Canada's borders. When we are investigating an aviation accident in accordance with international agreements, no other country can investigate, period.

An example very close to home is our investigation of the Swissair 111 crash. The aircraft was manufactured and certified in the United States. It took off from New York, bound for Switzerland. The carrier and the crew were Swiss and the passengers came from many places in the world. The Canadian connection, if you will, was the waters off Nova Scotia or the crash site. This gave exclusive jurisdiction to the TSB. Canada is one of about a dozen nations, in keeping with international protocols, that conduct independent accident investigations for the

Page 7

sole purpose of advancing safety.

Three fundamental principles form a solid foundation for this approach. The first principle is to separate the investigation from the influence of regulators, airlines, manufacturers and any other body with an interest. This is because all of our investigations look at these players and at their roles. Let me give you an example of one player, the regulator, who you heard from earlier this week, Transport Canada. They set safety standards for the industry. They license air carriers and crews and enforce the Canadian Aviation regulations. In all our investigations, we can and must look at the role of the regulator and we look specifically at their role in overseeing the industry. This means that Transport Canada has a direct interest and therefore cannot objectively make findings on their own role. The TSB, because of its independence, can follow the evidence wherever it may lead and say what we need to say.

The second principle is to separate the investigation from legal proceedings. Having

Page 8

served on the Bench for many years, sir, I'm sure you know well that issues of criminal or civil liability rightly belong with the Courts. Whereas the TSB's sole purpose is to advance transportation safety and we do not lay blame. Moreover, TSB investigators cannot be called into Court and the Board's findings cannot be used in Court or disciplinary proceedings.

The third principle is to conduct our investigations in accordance with agreed upon international practices and standards. Canada follows the International Civil Aviation Organization's Annex 13 to the Convention on Civil Aviation, and that is Document No. 4. This Annex sets out the protocols for determining which state will conduct the investigation, the roles and responsibilities of other states in an investigation and how the investigation is to be conducted. Above all, it states clearly that the sole objective of an investigation shall be the prevention of accidents. That is the only objective.

The application of these three important principles, the independence of the

Page 9

investigation, the separation from legal proceedings and the adherence to international agreements help ensure public confidence in the TSB and the work we do to advance aviation safety. This process or this approach has proven very successful. As I mentioned before, it has put the TSB at the forefront of accident investigation worldwide. But a process is nothing without a dedicated workforce to put it into action.

I really hope you will take away with you a sense of my pride in the work of the 235 men and women who make up the TSB. These people are specialists in investigations, engineering, metallurgy, human factors, communications and human resources, to name just a view. They are focused and dedicated to our mission. They are engaged every day in making transportation safer than it was the day before, not only for Canadians, but for people around the world. They are the ones who, after careful science and thorough analysis, nail the causes and contributing factors leading to accidents, and they provide the Board with the information it needs to

Page 10

make recommendations, recommendations that can be credited with changing the way aircraft are operated and maintained and with improving the way they are designed, built and certified.

Now I would like to show you our corporate video. We'll just give you the short version this morning. This was created in house at our engineering laboratory. It will provide you with an overview of the work we do day-to-day. I'll add a few details after the video, but just in passing, I can tell you it's also available in French.

COMMISSIONER:

Q. Okay.

(VIDEO PLAYED)

The TSB's mission is to conduct independent safety investigations and communicate risks in a transportation system. No matter where in Canada the accident occurs, isolated in the middle of the bush, out at sea, or in the high Arctic, TSB's diverse workforce has the necessary experience, training, tools and equipment to perform specialized tasks. The TSB also represents Canadian interests in foreign investigations

Page 11

involving ships, pipelines, railway rolling stock or aircraft that are registered, licensed or manufactured in Canada. Reporting directly to Parliament through the President of the Queen's Privy Council, the Transportation Safety Board of Canada is an independent agency and a recognized leader in transportation safety investigation. In addition to its head office and engineering laboratory in the National capital area, the TSB has eight regional offices across the country in strategically placed locations to better enable rapid response to accident sites.

Canada is a vast country and the transportation industry plays a vital role in the Nation's economy. The marine transportation sector involves more than 300 million tons of cargo and over 55 million passengers per year. Freight and passenger trains travel over more than 80,000 kilometres of rail. Natural gas and oil pipelines stretch for over 50,000 kilometres across Canada and there are over seven million air movements within Canada's air space to

Page 12

transport more than 70 million passengers per year.

On average, over 4,000 transportation related occurrences are reported each year to the TSB. Investigations are initiated when occurrence analysis will lead to a reduction in risks to persons, property or the environment. At accident sites, TSB personnel work in cooperation with various organizations, whether they be international, federal, provincial, municipal or private companies, in order to investigate an occurrence in an efficient and timely manner. Often representatives from the transportation industry are invited to watch a TSB investigation in progress.

A TSB investigation consists of three phases, the field phase, the post-field phase and later, the report production phase. The TSB concentrates on the dangerous conditions that could compromise the safety of people, property or the environment as revealed by transportation accidents. The TSB will not hesitate to issue preliminary recommendations or other safety communications if they could

Page 13

have an immediate impact on transportation safety.

On site, TSB staff examine and document everything in detail. Investigators use all possible methods and resources to enable a thorough and objective investigation in order to draft accurate findings and identify safety deficiencies. After each investigation, a draft report is sent by the Board on a confidential basis to designated reviewers who have a direct interest in the occurrence. They may suggest corrections, dispute or contradict the draft report if it is believed that the information is inaccurate or mistaken. The Board carefully considers all comments on a draft report. The TSB report is then finalized, depicting the description of the occurrence, analysis of the issues, findings, deficiencies and safety actions taken or required. The final report is then released to the public in both official languages. The Board will continue to monitor the actions of industry, the regulator and operator as to how they address the Board's safety concern.

Page 14

In recent years, the TSB has issued recommendations addressing numerous safety issues, including crew fatigue, electrical wiring, recorder capacity, outdated life rafts, rail passenger safety and overheated brake systems. Canada is recognized internationally to have one of the safest transportation systems in the world. The important work mandated to and conducted by the TSB contributes to safer waterways, railways, pipelines and skies, not only in Canada, but around the world. The TSB will continue to build awareness of safety issues and to promote the development of a strong safety culture within the transportation industry to advance transportation safety. This is the number one priority of the Transportation Safety Board of Canada.

(VIDEO ENDS)

MS. TADROS:

A. Okay. So you now know that there are three basic phases to a TSB investigation. I want to tell you a little bit more about those phases. They are described in some detail in our pamphlet entitled "Investigation Process"

Page 15

and that's Document No. 6. The first phase is the field phase. An investigator in charge, or IIC, is appointed and an investigation team is assembled. The make up of the team is based on the circumstances of the occurrence and investigation needs and may consist of operations, equipment, maintenance, engineering, scientific and human performance specialists. The number of investigators sent to an occurrence site varies from one or two for a relatively straightforward investigation to ten or more for a major investigation.

The field phase can last from one day to several months. During the phase, team members will secure the occurrence site, examine the equipment, vehicle or wreckage on site, interview witnesses, company and government personnel, collect pertinent information, select and remove specific wreckage for further examination, review documentation and identify potential unsafe acts and unsafe conditions.

The second phase of the investigation is the post-field phase. Significant investigation activity takes place after the

Page 16

TSB departs the occurrence site and this is the phase that we are in in our investigation of Cougar 491. The post-field phase can take many, many months, depending on the size and complexity of the investigation. During the post-field phase, the TSB typically examines all relevant company, vehicle, government and other records, examines selected wreckage in the laboratory and tests selected components and systems, analyses records and data, creates simulation and reconstructs the events, conducts further interviews, determines the sequence of events, what happened and when it happened, and identifies safety deficiencies by looking at occurrences in Canada and abroad.

At the end of the post-field phase, the IIC produces an initial draft investigation report that is reviewed by other TSB experts. At this stage, this is really a form of scientific challenge, as all the experts get together and test the theories on one another, look at the evidence and there's a challenge process. When everybody is settled on exactly what the facts are and what they mean, then

Page 17

the report moves forward through the director of investigations.

During the first two phases of the investigation, a built-in independence separates the work of the investigators from the Board. The Board is not involved in the work and exercises no control or influence over the direction of the investigation. This really leaves investigators free to ask any questions and to follow all leads. So for instance, in the investigation of Cougar 491, while the Board has been kept apprised of the conduct of the investigation, they have not been involved in any of the investigative or communications developments.

The third phase is the report production phase. In this phase, the Board steps up to review the draft investigation report, which may be approved, amended or returned for further staff work. Once the draft report is approved, the TSB legislation requires this report to be sent to designated reviewers on a confidential basis. The designated reviewers are persons and corporations whose performance or products are being remarked on in the

Page 18

report. They are most qualified to comment on the accuracy. For this reason, they are given the opportunity to dispute, correct or contradict information they believe is incorrect or unfairly prejudicial to their interests. This process really is intended to both ensure procedural fairness and the accuracy of the Board's final report, and the Board considers all comments and will amend the report if it is convinced that a change is warranted. Once the Board approves the report, the final report, it is then released to the public.

Many cooperate with the TSB during an investigation. We work with all levels of government, transportation companies, equipment manufacturers and individuals, such as survivors, witnesses, next of kin and operators. We also work with coroners, police, fire departments and search and rescue teams. This cooperation is absolutely essential to a successful investigation.

When fatalities occur, the police, coroner or the transportation company will advise the next of kin, and along the way, the

Page 19

TSB keeps survivors and next of kin informed and may request interviews with them to assist in the investigation. TSB investigators conduct interviews with anyone who may be able to assist them with their investigation. The statements and the interviews are protected under our Act and individuals are never named in a Board report.

The Board may also grant observer status to anyone who, in its opinion, can contribute to the investigation. In this regard, representatives from transportation companies, equipment manufacturers and regulatory agencies often attend our investigations, under the supervision, of course, of the investigator in charge, and in accordance with certain conditions that may be imposed.

International agreements also entitle other countries to designate accredited representatives to Canada's investigations. The TSB also sends its people to investigations in other countries. These representatives really bring technical expertise to those investigations.

I want to give you more detail and when

Page 20

and why we investigate and the methodology we use.

MS. FAGAN:

Q. Commissioner, just like to interrupt for one moment. The technology is not working. I understand there's a PowerPoint that will go with this portion of the presentation, and if we could just take a two-minute break because we'd just like to correct that, so that the PowerPoint -

COMMISSIONER:

Q. You think it's a matter of two or three minutes or ten minutes? Any idea?

MS. FAGAN:

Q. Could be -

REGISTRAR:

Q. I have no idea.

MS. FAGAN:

Q. No more than five. If it can't be corrected in five minutes, we'll just have to move on.

COMMISSIONER:

Q. All right, well then we can--no need for us to sit in our seats. We'll just come back in five minutes.

MS. FAGAN:

Page 21

Q. Thank you.
(BREAK)
COMMISSIONER:
Q. -- are we able to do now?
MS. FAGAN:
Q. Well, the equipment is now working and I understand we'll be able to move through the slide presentation.
COMMISSIONER:
Q. Okay.
MS. TADROS:
A. Okay, John? Okay. I want to give you a little bit more detail about when and why we investigate and the methodology that we use. Every investigation starts with a notification of an occurrence with over 4,000 occurrences reported to the TSB each year. The initial information must be assessed against our occurrence classification policy to determine how much investigating to do. One of the things we look at very carefully is whether the available evidence is enough for the Board to determine the causes and contributing factors. The other consideration is whether new safety deficiencies would likely be

Page 22

uncovered. If there's a real potential to advance safety, we launch an investigation and the occurrence classification policy is Document 7.

The TSB has developed a methodology that we call the integrated safety investigation methodology or ISIM. Other industries, like the nuclear industry use similar approaches. This type of methodology is also used in accident investigation in other countries. I've made these slides and the ISIM training manual available to you as Documents 8 and 9.

ISIM is an analysis tool. The purpose is to examine each accident for safety significant events to identify unsafe acts or unsafe conditions. We then search for the underlying factors that made the unsafe acts or conditions possible. At this stage, it really is about asking a whole lot of whys, which prompts us to drill down and uncover new facts. Next, we assess the nature and extent of risks to safety. This includes analysis of the risk controls or safety defences in place.

Inadequacies in safety defences are found in every accident. Either the means of

Page 23

controlling the risk didn't exist or they didn't function as intended. There are two categories of defences, physical and administrative. Physical defences include, for example, alarms and warning lights in the cockpit, runway lighting and air traffic control radar and administrative defences include standards, regulations, operating procedures, supervision, training and the like.

Let me just give you a slice of a hypothetical investigation. A commuter aircraft carrying 11 passengers crashes on landing. On examination, it's clear that the pilot did not select the landing gear down. This is an unsafe act. The pilot did not react to the alarm warning that the landing gear was not in the down and locked position. This is an unsafe condition. In trying to determine why, investigators find that the alarm functioned properly. Upon further analysis, the investigators learned that the pilot had only slept five of the past 36 hours and was significantly fatigued. In this scenario, fatigue is the underlying factor.

Page 24

Investigators will look carefully at the reasons for the pilot's fatigue to determine the level of risk. They want to know is this as isolated event or does it represent a risk to the system as a whole. They will then look at whether defences were in place, and if so, whether they were adequate. These would include administrative defences like duty time regulations, company policies and training, pilot scheduling and company means of identifying hazards. Where these defences are not adequate, we consider there is a safety deficiency, and then each safety deficiency is assessed qualitatively for risk. The next step is that the risk control options are assessed.

Now that sounds like a lot of process and it is, and the reason for that is that we absolutely have to be methodical, but we are also mindful of the need for speed where safety is concerned. This means if we uncover immediate risks to safety, we do not wait for the final report. We report on them right away. It may be by way of interim safety recommendations, as we did in the Ryan's

Page 25

Commander investigation, or we may choose to send out safety advisories or safety information letters to the regulator and industry. Where helicopters are concerned, over the past ten years, the TSB has issued many safety information letters and safety advisories in the course of the ongoing investigations. I am providing all of these to you for your consideration, sir.

A little more than a week into the Cougar 491 investigation, the TSB revealed the failure of the damaged titanium studs on the main gearbox filter bowl assembly. This led the manufacturer to immediately replace the studs on these aircraft worldwide. But it didn't stop there. Fast on the heels of that came an FAA emergency airworthiness directive aimed at reducing the risk of a similar failure. These actions have led to reduced risk for S-92 operators early and while the investigation is ongoing. The big safety pay-off for us really occurs when everyone agrees, during the course of an investigation, about what needs to be done. Safety deficiencies are addressed quickly and rather than making

Page 26

recommendations, we report on the progress in our final report.

This being said, the TSB does not impose changes on the transportation industry or regulators. Solutions to safety are a shared responsibility amongst many players and our job is to make a convincing case for change.

I spoke in the opening about the indirect ways that your inquiry can influence the safety of helicopters operating in the offshore. I know you will look carefully at our public report on this accident. There you will find the Board's final word and its definitive findings as to the causes and contributing factors that led to this accident. I will draw your attention to Section 4, which as in all TSB Reports, will contain the Board's opinion on what needs to be done to advance aviation safety. Most TSB recommendations are made to the regulators like Canada's Department of Transport and the Federal Aviation Administration in the United States. The reason for this is if we find a safety deficiency, the fix should really apply to the whole industry worldwide. Changes to

Page 27

laws take time and many of our recommendations have not been fully implemented. Meanwhile, I would argue that nothing stops the offshore industry or the C-NLOPB from striving to reach a higher standard. For example, many in the oil and gas industry require subcontractors to maintain ISO standards, or to have integrity management systems. The regulator, the C-NLOPB in Newfoundland and Labrador, could require similar things. You could think about advising them on the setting of licence conditions for petroleum producers, or you might want to consider whether contract provisions for any carrier wishing to provide helicopter services in the offshore would be of value. In looking at what improvements should be made, a starting point may be TSB recommendations from our past investigations. If you think that might be useful, we would certain assist in that regard and provide you with the recommendations that may be on point. Helicopters operate worldwide and there are many strong players in aviation accident investigation. You may also wish to look at the work of international counterparts. In

Page 28

North America, the United States conducts a huge number of aviation investigations. Great Britain, Sweden, Norway, and Finland, the Netherlands, France, and Russia, all have excellent capabilities. In the far east, Japan, Korea, and Taiwan, are leaders, and down under, Australia and New Zealand, both excel at accident investigation. Now I would be pleased to answer your questions. If required, I would be happy to speak about the facts that we've published to date on the Cougar 491 accident, but in the interest of accuracy, I will not be providing detailed technical information or explanations beyond that scope. I'd also remind you that I will not be able to comment on any ongoing aspects of the investigation, but would be happy to speak in general terms about the TSB and its processes, and I thank you for your understanding in that regard.

COMMISSIONER:

Q. Thank you, Mrs. Tadros. I understand from Ms. Fagan that you have something to enter or there is something to be entered as an exhibit. This might be a good opportunity

Page 29

before you take questions and before you enter that exhibit for you to be sworn, and then we'll carry on.

MS. WENDY TADROS (SWORN) EXAMINATION BY MS. ANNE FAGAN

MS. FAGAN:

Q. Thank you, Mr. Commissioner. Thank you, Mrs. Tadros. Mrs. Tadros and the TSB were kind enough to put together a package of documents. Those documents have been disclosed to the parties and their counsel, and they are now marked and we'd like to have them entered as Exhibits 1 through 10, and Mrs. Tadros referred to most of these exhibits as documents and her document number matches the exhibit number, and for the record, the first exhibit is the Annual Report to Parliament in French and in English and these will all be posted on the website for the public and for their convenience. Most of these documents would also be available on the TSB website, and other information is available on the TSB website. However, for ease of convenience, we will post them on our website under today's evidence. The second is the Canadian Transportation Accident Investigation and

Page 30

Safety Board Act, a long name, but the Act is there. The third is the Transportation Safety Board Regulations. The fourth is Annex 13, the International Convention on Civil Aviation Accident and Incident Investigation. Most of these are in French and English. The Convention is actually in a number of languages. The video that was played, in the event viewers would like to look at that video again, or any of the parties. The Investigation Process Pamphlet, that's number six. The video is number five. The Occurrence Classification Policy, which assists the Board in determining which occurrences they're going to investigate, that's number seven. The PowerPoint which includes the slides on the methodology is number eight. The Integrated Safety Investigation Methodology, the reference manual that explains that methodology, is nine. There is a long list of helicopter related safety advisories and safety letters, and that's number ten.

COMMISSIONER:

Q. Okay, thank you, these documents are entered now.

Page 31

MS. FAGAN:

Q. Thank you. I was going to ask a few questions and then leave it to the group to see if anybody else would like to ask questions.

COMMISSIONER:

Q. Yes, okay then.

MS. FAGAN:

Q. Thank you very much for the information you've provided so far. We heard in the past few days about incidents and accidents, and if you would be good enough to explain or define, we don't need to drill down into an exact definition, whichever you believe is the best way to explain what is it that needs to be reported. I understand under the Act, I believe they use language "occurrence", and then occurrence is broken into "accident" and "incident". An accident may be fairly easy to understand, yet people may not have the right understanding, and an incident may even be a little bit more difficult to grasp. So if you could take us through what those concepts mean?

MS. TADROS:

A. Okay. I think the easiest way to do this is

Page 32

just to go through a short scroll of the Act and the Regulations, which I think you said were Documents 2 and 3.

MS. FAGAN:

Q. That's correct, the Act is 2, and the Regulations are 3.

MS. TADROS:

A. So if you take a look at Section 2 of the Act, there's a definition of aviation occurrence, and aviation occurrence includes an accident or incident associated with the operation of the aircraft.

MS. FAGAN:

Q. My colleague is gone to get the Registrar to pull up the Act.

MS. TADROS:

A. Okay, I'll just standby.

MS. FAGAN:

Q. She's multi-tasking, trying to post them on the website, and she'll be right in.

COMMISSIONER:

Q. I suppose most people may have the document in front of them, in any event, this binder.

MS. FAGAN:

Q. Most of them -- here she comes.

Page 33

REGISTRAR:
Q. The exhibits have been delivered to the media room.
COMMISSIONER:
Q. Thank you.
REGISTRAR:
Q. You're welcome.
MS. FAGAN:
Q. We are looking for the Act, which is Document 2.
MS. TADROS:
A. If you can scroll down to Section 2 there.
MS. FAGAN:
Q. Just another page or two.
MS. TADROS:
A. There we go.
MS. FAGAN:
Q. Occurrence, aviation occurrence is what we're -- okay. Your assistant can do this too. Once it's up, he can move.
MS. TADROS:
A. Okay.
MS. FAGAN:
Q. Let's go.
MS. TADROS:

Page 34

A. Okay. So that's the definition of an aviation occurrence, and the aviation occurrence is the umbrella. Within that umbrella, we have accidents or incidents and you can see the definitions there, and they're fairly broad.
MS. FAGAN:
Q. And would you be good enough to read those definitions in because this is probably not being seen by the viewers on the webcast.
MS. TADROS:
A. Okay.
MS. FAGAN:
Q. They can't see what's here unless they have a split screen at home, which is very unlikely.
MS. TADROS:
A. Okay. An aviation occurrence means any accident or incident associated with the operation of an aircraft, and any situation or condition that the Board has reasonable grounds to believe could, if left unattended, induce an accident or incident described in Paragraph A. So then if we flip over a little bit to Section 3, the Act is really intended to set out what we can investigate, where the jurisdiction of the Board lies. So in Section

Page 35

3, we have this Act applies in respect of aviation occurrences, which we've just defined, and we have some of the geographic parameters. So in or over Canada, in or over any place that is under Canadian air traffic control, in or over any other place, if Canada is requested to investigate the aviation accident by an appropriate authority, or the aviation occurrence involves an aircraft in respect of which or that is operated by a person to whom a Canadian aviation document has been issued under Part I of the Aeronautics Act. So that's basically our jurisdiction. The next question that I think you posed had to do with what needs to be reported, and that's found in the Regulations, which is the next document.
MS. FAGAN:
Q. Number 3.
MS. TADROS:
A. Number 3. There's some definitions right up front in Section 2, and it's about half way along you'll find reportable aviation accident, John. There we go, yeah. So we have reportable aviation accident and

Page 36

reportable aviation incident, and they're rather long. Would you like them read into the record?
MS. FAGAN:
Q. No, but perhaps you could as best you can, just describe - the lawyers in the room may wish to read the definitions at a later time, but if you could just explain, so that the viewers would understand what an accident is and what an incident is, and then we could move into who has to report and the protocol for reporting.
MS. TADROS:
A. Okay. To make it really, really short, an accident is more serious, and an incident is less serious. So that's the basic demarkation.
MS. FAGAN:
Q. And what types of things would be an incident? I mean, I think an accident -- I think that might be fairly easy to understand, but what types of things would fall into an incident?
MS. TADROS:
A. Well, there's a whole list there in the definition. We've got engine failure or

Page 37

shutdown as a precautionary measure, transmission gear box malfunction, smoke or fire occurs, difficulty in controlling the aircraft, the aircraft fails to remain within the intending landing or take off area, and then there is another section on the crew duties related to the safe operation of the aircraft, if the crew are unable to perform those duties. We have incapacitation, depressurization, fuel shortage, the wrong type of fuel is put into the aircraft, a collision, a risk of collision, or a loss of separation, those are air traffic control terms. A crew member declares an emergency. If you have a helicopter with a slung load and it's released unintentionally. So these are just examples. The demarkation again with reportable aviation accident is the seriousness of what happens.

MS. FAGAN:

Q. Okay. So who has to report and to whom do they have to report, and I know you're speaking from the Transportation Safety Board, so who has to report to you, and what do they have to report, and when do they have to

Page 38

report it?

MS. TADROS:

A. Okay.

MS. FAGAN:

Q. That kind of thing.

MS. TADROS:

A. If we scroll down to Section 6 of the Regulations, if you have something that falls within the definitions that we just spoke about, then there's mandatory reporting under Section 6.

MS. FAGAN:

Q. So would that be accidents and incidents?

MS. TADROS:

A. Yes.

MS. FAGAN:

Q. Okay, and who would have to report?

MS. TADROS:

A. There's a list in there, and it includes the owner, operator, pilot in command, any crew member of the aircraft, and where the accident or incident involves a loss of separation or a risk of collision, any air traffic controller having direct knowledge of the accident or incident, shall report to the Board as much

Page 39

information as is listed in Subsection 2, as is available, as soon as possible and by the quickest means possible, so right away.

MS. FAGAN:

Q. And they have to report, and what we're interested in here really is helicopter transportation, and I realize you're speaking from all the aviation type terminology. I understand there is reporting requirements in the marine and the rail, and they would have different types of incidents. I understand they must report to the TSB. Do -- would this type of thing also have to be reported to anyone else, to the best of your knowledge, such as Transport Canada, or any other regulatory body?

MS. TADROS:

A. There may be separate reporting requirements for Transport Canada, but I can't speak in any kind of detail about those reporting requirements.

MS. FAGAN:

Q. I wouldn't expect you to be able to speak in detail. We understand that -- from Transport Canada that this type of activity would have

Page 40

to be reported to both authorities, both regulators, and one being the TSB. Is there any coordination or linkage or communication between the TSB and Transport Canada? Now you've said, of course, they're the regulator and your recommendations would go at the end of the day, quite often, if it's aviation, would certainly go to the Transport Canada aviation people because they are the regulator. What about from a reporting perspective before you even start your investigation?

MS. TADROS:

A. Well, in terms of reporting, the reporting requirements to the TSB are separate from the reporting requirements to Transport Canada. So we maintain carriage of all of the information that comes into the TSB, and the reason for that is our independence as an investigative body. There will be sharing of information when there is an accident, particularly a large accident, and the Minister has the option of appointing a Minister's observer to the investigation, and in that way there's a single point for the

Page 41

information to flow to Transport Canada.

MS. FAGAN:

Q. In addition to the reporting, what types of documents would you receive, either they're presented in a sort of proactive, somebody submits them, or you seek them out? What types of documents -- for example, from Transport Canada, what documents would you expect in a major accident where there's loss of life, what would you expect to receive, or what do you go collect?

MS. TADROS:

A. Well, this is speaking broadly, not about any particular accident, because the information that we would require would depend on the facts of the accident. So it would depend on what the investigators are looking for, but they would normally ask and receive all of the information that has to do with Transport Canada's interaction with that carrier. If air traffic control is involved, everything to do with the interaction between Transport Canada and the air traffic control system.

MS. FAGAN:

Q. What about the vehicle itself, whether it was

Page 42

the aircraft or the ship, would you -- you dealt with the carrier, and in our terminology, we use an air operator.

MS. TADROS:

A. Okay.

MS. FAGAN:

Q. Who's commuting passengers, so would I take it that the carrier -- if Transport Canada has a relationship with the air operator, especially if they issued the certificate, that information would come to you?

MS. TADROS:

A. Yes.

MS. FAGAN:

Q. You know, the communications back and forth. What about information with respect to the particular vehicle involved, let's say, an aircraft, what information would you get?

MS. TADROS:

A. If there's -- we would get whatever information Transport Canada has on that particular aircraft or on that aircraft type in terms of the certification of the aircraft. So we would receive -- we would ask for and receive all relevant information. You asked

Page 43

me about the aircraft itself in terms of the wreckage, is that what you wanted me to --

MS. FAGAN:

Q. Documentation on the -- you can go there as well, but the documentation on the aircraft from Transport Canada, and then anything else that you'd get, such as from the wreckage? What would you take in with respect to the aircraft?

MS. TADROS:

A. In terms of documentation?

MS. FAGAN:

Q. Yes.

MS. TADROS:

A. Well, we would want to know the number of hours, for instance, that the aircraft had been flown, but that would normally come from the carrier, not from Transport Canada, but we would want to know everything that they know about the operator and about that particular aircraft, if they have any information on it. So it's any relevant information.

MS. FAGAN:

Q. So if Transport Canada type certified an aircraft, you would look for the

Page 44

certification, the documents in connection with the certification, for example?

MS. TADROS:

A. Yes, if we were -- if we were looking at anything to do with the aircraft, we would want to know what issues arose during the certification, if any.

MS. FAGAN:

Q. You had mentioned that you work closely with the FAA, or there's a connection between the FAA. As I understand it, the FAA in the United States is the equivalent of Transport Canada, if you wanted to look at a counterpart. In the United States, what's the investigative arm in the United States, their division or branch? In Canada, it's the TSB.

MS. TADROS:

A. Okay. In the United States, the National Transportation Safety Board, and you've probably seen that on the news. You'll see NTSB. They are an independent body, as we are, and investigate -- they have a slightly different mandate, but they investigate in much the same way that we do.

MS. FAGAN:

Page 45

Q. Would the TSB interact, you'd mentioned earlier, with the manufacturer? Could you give us an example or -- I guess, an example or a situation, or what type of interaction? I mean, is it a phone call, or would you physically go to see the manufacturer? I mean, how far does the TSB go with investigating or interviewing manufacturers of the equipment that was in the accident?

MS. TADROS:

A. Well, there's really two things that can happen. We can interview the manufacturer, but the manufacturer can also work with the investigation, if there are specific things that need to be known about that machine. I think that you can appreciate that there are many, many different aircraft operating in the world, and so when you're investigating a particular aircraft, as we were with Swissair, the manufacturer has all of the as-builts, if you will. They have all of the drawings, they know where every wire was placed in the aircraft, so we work very closely with the manufacturer. They provide us with the information that they have.

Page 46

MS. FAGAN:

Q. Do you work -- if the accident occurs in Canada, then the TSB would have the exclusive jurisdiction, is that correct?

MS. TADROS:

A. Correct.

MS. FAGAN:

Q. So the NTSB, the investigative arm, the US equivalent, would they be involved in the accident -- in your investigation in any way, if it was an American aircraft?

MS. TADROS:

A. They would have the right under international agreements to appoint accredited representatives.

MS. FAGAN:

Q. And what do the accredited representatives do in that -- where are they physically? Are they sent information by e-mail, are they physically part of the field or the reporting phase? Where do they come in in the investigation?

MS. TADROS:

A. They may do both. They may attend on site, they may attend group meetings, they maybe

Page 47

sent information off site, but they are kept apprised of the investigation as it moves forward, and the reason they're doing that, for instance, with the NTSB, that's the state of manufacture, and there's an interest there. They want to keep on top of all the safety issues as they're coming out in the investigation. So that's their primary interest.

MS. FAGAN:

Q. So they might be there, the manufacturer may be a representative or an observer, they may have a similar type role in that -- they may be there. You mentioned supervised, of course.

MS. TADROS:

A. Yes.

MS. FAGAN:

Q. But they have been there as part of the --

MS. TADROS:

A. Well, I'll give you an example. If you're dealing with an engine and you have to do a tear down of an engine, then there are a number of people who would attend that tear down and observe, and one of them would be the

Page 48

company that manufactured the engine.

MS. FAGAN:

Q. When it comes to coordination and exchange of information, I understand the TSB has the exclusive jurisdiction. Sometimes with accidents you may end up with a police force, for example, also involved in some aspect of the accident. Could you explain how that works physically if, say, the RCMP is there? You've said DND can -- the Department of National Defence, they can investigate on their own, but let's just say it's a police force and it's the TSB?

MS. TADROS:

A. Okay, let's say it's a civilian aircraft. The best example of this was Swissair 111. In the early days of an accident, you don't always know whether there was a criminal act or not. So we work in tandem and we have a very good relationship with the RCMP, and sometimes they have a lot more resources than we have, so we work in tandem until a decision is made about whose jurisdiction -- primary jurisdiction it would be. So if it is determined absolutely from a scientific perspective that it wasn't a

Page 49

criminal act, then the RCMP will drop off and we will continue. If it is determined there was a criminal act, then we will drop off and the RCMP will continue, and that's what happened in the situation with Air India.

MS. FAGAN:

Q. Because a criminal act, for example, would be a bomb or some type of sabotage?

MS. TADROS:

A. Yes, they're good example.

MS. FAGAN:

Q. So if that was the cause, then RCMP would use its labs and its personnel and take the -- take over the accident. Would that be fair, or does TSB -- are you still involved, or are they the lead?

MS. TADROS:

A. They're the lead and we wouldn't be investigating for causes and contributing factors once it had been determined that it was a criminal act, but we may assist them. For instance, in Air India, it was the TSB investigator who determined that it was a bomb on board the aircraft. It's up to the RCMP to decide whether they're going to conduct a

Page 50

further criminal investigation and prosecute.

MS. FAGAN:

Q. The Department of National Defence, I understand that's sort of a separate -- how does that work?

MS. TADROS:

A. They investigate their own accidents.

MS. FAGAN:

Q. So if there's an accident with DND aircraft, they have the jurisdiction to investigate their own accidents and they have a group of very capable investigators.

MS. FAGAN:

Q. You had mentioned that you have 235 people. Are they all at headquarters or is the 235 at headquarters and in those fields, sort of satellite offices or branch offices that were on the slide?

MS. TADROS:

A. It's 235 all the way across the country. So it's a very small organization with a very big mandate, if you will, and the reason that we have people across the country is we have to be able to deploy quickly to accident sites all over Canada.

Page 51

MS. FAGAN:

Q. So for the Atlantic region, where would the field office be?

MS. TADROS:

A. Halifax.

MS. FAGAN:

Q. Halifax. And do you know approximately how many people there are in the field office in Halifax? Or just a sense, we have 235, sort of how are they spread across?

MS. TADROS:

A. Well, the decisions are made about who will be in our regional office based on the modes (phonetic), so in Halifax we have aviation expertise, we have marine expertise and we have rail expertise. In some other offices, for instance on the Prairies, we don't have too much marine expertise.

MS. FAGAN:

Q. And what happens when there is an accident, I mean, Newfoundland and Labrador, like many jurisdictions where we seem to have a fair number of accidents, not only in aviation, in the marine area it seems to be fairly, fairly constant in the news.

Page 52

MS. TADROS:

A. Yes.

MS. FAGAN:

Q. So you have your field office, could you just take us through, I mean there's a--I wouldn't want to say a skeleton group, but there's a group of experts there. Now there's some major accident or catastrophe, how does it work? Do people from Ottawa or the main office or other jurisdictions come to support?

MS. TADROS:

A. If there's a big investigation, like Swissair 111, we will pull on our people from across the country. In a situation with Cougar 491, the two investigators from our Halifax office deployed immediately and they were joined by experts from head office. So it really depends on the accident and the investigator in charge, what his needs are.

MS. FAGAN:

Q. The facilities, could you just elaborate a little bit more on the types of people, the credentials, I mean, are the people that--are they in laboratories, do they have Ph.D's, what types of equipment do you have,

Page 53

especially in an aviation, you know, the Swissair was a major catastrophe. We hear, although not able to look at the 491 accident, that's your jurisdiction, but what types of equipment and what types of expertise would be brought in an aviation type accident?

MS. TADROS:

A. Whatever type of expertise we require and if we don't have that expertise, we can borrow from National Research Council or several other bodies, but normally we do have the expertise and in an aviation occurrence, you would have people with an operation's background, so you would have pilots. If you have something like a near miss, you have air traffic control specialists, people who've actually been air traffic controllers and know how the system works. You have people with maintenance background, so you have AMEs who understand the physical make up of the aircraft. You have lots and lots of engineers and they may be specialists in fire, they may be specialists in metallurgy. We have human performance experts who look at the interaction between the person and the

Page 54

machinery and all of the factors that can impact on that, on those dynamics. We have chemists, we have practically every scientific background that you can imagine and within those backgrounds they are sub, sub, sub specialized.

MS. FAGAN:

Q. The recorders, they're often referred to as the "black box".

MS. TADROS:

A. Yes.

MS. FAGAN:

Q. Could you just describe the process, where that goes, where is it and I understand that information is privileged, but I'd just like for just a general understanding and an answer as to--I understand that information is never released, but could you just explain what happens to that recording, where are they and what happens to them.

MS. TADROS:

A. Okay, what people refer to as the "black box" actually has two components and sometimes they are together and sometimes they are separated, but you have a flight data recorder which

Page 55

records parameters on the aircraft and depending on how sophisticated that recorder is. There will be more parameters the more sophisticated the recorder is, so it's recording more things. There's also the cockpit voice recorder and that records not only the voices in the cockpit, but any sounds that may be heard. So for instance, they will be looking for whether certain instruments were activated by the sounds that they can try to pick up off of the recorder and it's the CVR or the cockpit voice recorder that's privileged. The reason for that is the same reason that the witness statements are protected, it is because we want to have this information for future investigations, so in Canada, in particular, that's a very important principle.

MS. FAGAN:

Q. I understand in the Swissair, I believe, in some accidents you will hear that the recorder stopped or there wasn't enough--the tape stopped. Are there recommendations out there or how does that come about? Is there equipment that now allows the tapes to run

Page 56

right through or do the tapes still stop?

MS. TADROS:

A. The tapes still stop from time to time and when they do, we have to set about trying to figure out why. But in answer to your question about the recommendations, there were recommendations in the Swissair investigation that dealt with recorders. One recommendation pertained to the length of time when the recorder will record, and our recommendation is that that be bumped up from 30 minutes to two hours, so that--there may be a misunderstanding that you only want the information right around the occurrence, but in fact, investigators want to know all of the preceding events because there may be something they can learn in the first ten minutes that will help them understand at the very end. So that's the one recommendation. The second recommendation deals with the power supply to recorders and the recommendation asks that there be separate power supplies, so that if one stops, the other doesn't automatically stop.

MS. FAGAN:

Page 57

Q. You had said that in the flight 491 accident, the FAA issued an emergency airworthiness directive.

MS. TADROS:

A. That's correct.

MS. FAGAN:

Q. You also said that the TSB informs the FAA, is that correct? Did I miss something? How did that come about, I mean I'm getting at the reporting and the communication and quite often you may be investigating an aircraft that's manufactured somewhere other than in the United States or in Canada and there's the manufacturing certified authority, and we've heard yesterday that the airworthiness directives usually come from the original certified authority from the country which typed certified the aircraft from a design manufacturer perspective.

MS. TADROS:

A. From the state of manufacturer, yes.

MS. FAGAN:

Q. State of manufacturer. So could you explain the reporting or the interaction between the TSB and that state of manufacturer?

Page 58

MS. TADROS:

A. Well I can tell you what it normally would be, something would be drafted up outlining what the safety deficiency was that was found and it would be sent off. But in the case of this investigation, it happened much more quickly is my understanding and we spoke earlier about the team being on site, together with the accredited representatives and the observers and apparently this is what happened in the situation when the stud was discovered is that the key people were there and so action was taken very quickly. We didn't actually put out a long description of what the problem was because the people who needed to know, knew immediately what the problem was.

MS. FAGAN:

Q. You mentioned that you keep the survivors and next of kin informed. How do you go about that, do you send letters or do you work through counsel or do you offer that and then leave it up to the next of kin or survivors or other passengers to contact the TSB?

MS. TADROS:

A. Well in the case of a large accident, we have one person whose job it is to do that, they are dedicated to keep in touch with the families and so all of the communication goes through that one person and they work at the board.

MS. FAGAN:

Q. Commissioner, I have a couple of more questions and I know we've had a break, so I don't know what your wish is. I know I've run past--10:45 is the normal break time, so I don't know if you want to -

COMMISSIONER:

Q. If you just have a couple more questions, why not do that then.

MS. FAGAN:

Q. Only have a few more questions, okay. On your investigative methodology and then you're reporting. Do you--I know you don't assign fault, but in the report itself, do you--are there different categories in that there may be--you may determine that something caused the accident, but you may make other findings or have other recommendations that aren't related to the cause, are there different categories?

Page 60

MS. TADROS:

A. Okay, I think there's really two questions there. Yes, in the report there are three categories of findings. The first is finding as to causes and contributing factors, and those are things that have been demonstrated to have played a role in the accident. The second is findings as to risk and those findings are things that have not necessarily played a role in the accident, but they're risks in the system. So we would make findings on all of those. We may make recommendations on them if something needs to be done that we learn along the way. And the third is other findings and those are really more minor. They're designed sometimes to put an issue to rest. If any issue has come up in an investigation and it's being publicly discussed, then if we find that it didn't play a role, we will say so, or other factual information that we feel should be in the findings. So that was, I think, the second question that you asked. The first question that you asked was about blame and there is a section in our Act that basically says it is

Page 61

not the role of the Board to assign fault or blame, but that we should not hesitate to report on anything that may infer blame. Those aren't the exact words, but that is the general idea, so we still have to report everything that we learn, everything that we find. If somebody else infers blame from that, well then that's their business, but the purpose of the investigation is not to assist that process.

MS. FAGAN:

Q. One of the last areas is with respect to the report and I understand that you issue a report but that it's not the final report, that there's an interaction or an opportunity for feedback for the interested parties to maybe contest or bring other information forward. What is distributed and who receives the draft report, and I don't know if that's what it's called, but the section before it's going to be final, can you explain who is going to get it and what's in it?

MS. TADROS:

A. Okay, the people who receive the draft report are designed reviewers and those are persons

Page 62

or corporations with a direct interest. And the reason that we circulate the draft report is for two purposes. One is to satisfy fairness, which you understand in law what that means, and the second is to ensure the accuracy of the report. So in a sense, it's a form of scientific challenge and if there's anything that isn't correct in that report, we want to know about it, we'd go back and take another look at it and a decision will be made as to whether that point of view is valid or not.

MS. FAGAN:

Q. If there are certain findings in the draft report, does that also include the grounds or the information upon which that finding--I mean, how much do the designated reviewers get in order to determine, there may be some things which they know, look, that's not true. There may be some obvious things where they know that's not true, they have it wrong. But how much information is there so that these designated reviewers can make that assessment?

MS. TADROS:

A. What we would normally send them is the draft

Page 63

report and any of the engineering laboratory reports that are produced in support of the draft support. They are entitled, if they wish, to have any information on the investigation that is public.

MS. FAGAN:

Q. Are the designated reviewers the same people who are observing or could they be different groups or could there be some overlap? For example, the manufacturer or let's say the people who are involved, it might be an American manufacturer, maybe the American investigative body is there, maybe the operator might be there, there may be a number of people who are sort of the stakeholders who are interested in the process, are they the same people as the designated reviewers or is the groups different?

MS. TADROS:

A. They're not necessarily, but you're pretty close.

MS. FAGAN:

Q. There's some overlap.

MS. TADROS:

A. There's some overlap. So, normally in

Page 64

aviation investigation, the manufacturer, if it's a foreign manufacturer, then that state, the pilot, the co-pilot or their next of kin would normally be designated reviewers; the company, the regulator, those are all examples. When you talk about manufacturer, you have many portions of aircraft are manufactured by different companies, so the actual aircraft may be manufactured by one company, the engines may be manufactured by another company or some component within the avionics may be manufactured by another company. So you're dealing with anybody whose product or behaviour may be commented on.

MS. FAGAN:

Q. What happens when the draft report goes out and then you wait for response? What's the process after you receive the response or the feedback from the designated reviewers?

MS. TADROS:

A. It's a very time consuming process, I can tell you that because we go through each and every comment, so on a small investigation--well it doesn't necessarily depend on the size of the investigation because you may get a very small

Page 65

accident where people are quite interested and you may get hundreds and hundreds of comments, but I think at the top range we would have a thousand to twelve hundred comments on a particular report, that would be at the very top range. At the lower end of the scale, the report maybe totally accepted and not disputed at all. So we go through each and every one of those and we provide the answer to each and every one to the individual that commented.

MS. FAGAN:

Q. And then you--I mean, could sometimes the comments result in the requirement to conduct further investigation or further interaction?

MS. TADROS:

A. Yes, they could--it could result in further investigation in order to determine if you have opposing viewpoints on a particular piece of machinery, for instance, the investigators will have to figure out which one is right. So that may require further investigation. If the report drastically changes, then it may have to be circulated again.

MS. FAGAN:

Q. To everybody?

Page 66

MS. TADROS:

A. Yes.

MS. FAGAN:

Q. What's the timing and I know, I guess we're looking at a huge range between the--for the type of accident, but this process appears to be very involved and time consuming, so what would the expectation be for the final report? I mean, this draft process, does this take--if the draft goes out, is it 60 days later, 30 days later, six months later and it may be impossible to gauge.

MS. TADROS:

A. Well the report can go out for 30 days or 60 days, depending, but in that range and often we're asked for extensions if it's a very complex report and if the person who is commenting wants to do some research on their own, we'll be asked for an extension. Normally the comments would come back within 30 or 60 days and then depending on how many of them there are and whether there's further investigation, that process can take anywhere from a month to five, six months.

MS. FAGAN:

Page 67

Q. So from start to finish, you have your accident and then you have your final report, I take it that process would take more than a year if you have six months between the draft and the coming back and forth--and I know it may be impossible, but even a range as to, on average or how long does it take to get that final report?

MS. TADROS:

A. To get the final report out to the public, it could take anywhere from, for a fairly straightforward investigation, it could take eight months to a year; for our largest investigation thus far, Swissair, it was four and a half years, but I think you can appreciate that that was a very, very complex investigation and the field phase itself, the recovery of the wreckage took more than a year.

MS. FAGAN:

Q. We have had the concepts of a culture, a safety culture and you had indicated that the main mandate--I may have it wrong, but the main mandate is to improve and enhance safety, I mean, that's the goal at the end of the day.

Page 68

MS. TADROS:

A. Yes.

MS. FAGAN:

Q. And this Inquiry is looking for ways to improve safety and one of the things that has been brought forward is encouraging and promoting a safety culture. Just ask if you comment on that concept and if there's any suggestions or recommendations as to how that can be promoted?

MS. TADROS:

A. Very, very complex field and this is part of what we look at when we look at organizational factors. And you've probably heard about safety management systems, but encouraging or promoting a safety culture is part and parcel of safety management systems and there's been much written on safety management systems, but I think it's definitely something that you should look at.

MS. FAGAN:

Q. That would be all the questions that I would have and I don't know if the Commissioner would like to break and then give the parties an opportunity -

Page 69

COMMISSIONER:
Q. Yes, we'll take a break now and we'll have questions from the group.
MS. FAGAN:
Q. Thank you, Ms. Tadros.
(RECESS)
COMMISSIONER:
Q. Now then we'll take questions from the group to Mrs. Tadros, and I have the list here. We would begin with counsel for C-NLOPB, Ms. Crosbie.
MS. CROSBIE:
Q. We have no questions, thank you.
COMMISSIONER:
Q. Okay, thank you. Counsel for Transport Canada?
MR. FREEMAN:
Q. We also have no questions. We simply thank Madam Tadros for her presentation today.
COMMISSIONER:
Q. All right, thank you. Mr. Brown, counsel for CAPP is not here, is he? No. Okay, and counsel for the operators.
MACDONALD, Q.C.:
Q. No questions.
COMMISSIONER:

Page 70

Q. Ms. Strickland.
MS. STRICKLAND:
Q. No questions at this time for HMDC.
COMMISSIONER:
Q. Okay, thank you.
MR. WALLACE:
Q. No questions, Mr. Commissioner.
COMMISSIONER:
Q. No questions, all right, thank you. Mr. Whalen for Cougar.
WHALEN, Q.C.:
Q. No questions, thank you, Mr. Commissioner.
COMMISSIONER:
Q. Counsel for Sikorsky is not here. Counsel for Helly Hansen, I think, is not here. Oh, you are.
MR. SPENCER:
Q. We have no questions at this time.
COMMISSIONER:
Q. Thank you, and for Memorial University.
HURLEY, Q.C.:
Q. Yes, we have no questions at this time.
COMMISSIONER:
Q. Thank you. For the Government of Newfoundland and Labrador.

Page 71

MR. PRITCHARD:
Q. Mr. Commissioner, no questions, thank you.
COMMISSIONER:
Q. Okay, thank you. Mr. Harris is not here. Counsel for -- yes, Mr. Earle, counsel for the CEP, the union.
EARLE, Q.C.:
Q. Yes, thank you, Mr. Commissioner. No surprise, we have questions as usual.
MS. WENDY TADROS - EXAMINATION BY RANDY EARLE, Q.C.
EARLE, Q.C.:
Q. Good morning, Ms. Tadros. I'm Randell Earle. As the Commissioner indicated, I represent CEP Local 2121, and 2121 is the bargaining agent for the employees on the Hibernia Platform and the Terra Nova FPSO. So what you're looking at is the questioner on behalf of probably a majority of the passengers who use helicopter transport to and from their workplaces, and clearly these people are extremely interested in the work of the Transportation Safety Board. My first question for you, and I think many of my questions will be almost by way of confirming things that are implicit in what you said earlier, but am I correct in saying

Page 72

that the work of the Transportation Safety Board is occurrence driven?
MS. TADROS:
A. Yes, but I would add a caveat. We have the capacity and we have done what we call Class 4 investigations, and those are investigations that are not driven by any particular accident, but when we do investigations of particular accidents and realize there may be an issue in the system, as a whole, we can look into those safety issues. For instance, at the moment we are doing safety issues investigation on fishing vessel safety. So we have done a number of investigations over the last number of years, over the last 20 years, and we have got to the bottom of the causes and contributing factors of each of those, but the Board feels that there is an issue in the industry as a whole, and so we are doing an investigation of the those issues.
EARLE, Q.C.:
Q. Would I be fair in saying, though, that even that investigation is, if you will, derivative from previous occurrences and things you have identified during the course of investigations

Page 73

in previous occurrences?
MS. TADROS:
A. Yes. I mean, it's issue driven, it's fact driven. You have to be able to determine that there is an issue there, that there's a safety issue that warrants a further look before you take a further look.
EARLE, Q.C.:
Q. You mentioned to Ms. Fagan in response to her question about the culture of safety, that you felt that would be a profitable area -- I don't think you used the word "profitable", but a good area for the Inquiry to direct --
MS. TADROS:
A. Yes, not specifically the culture of safety, but that falls under the rubric of safety management systems.
EARLE, Q.C.:
Q. The whole business of safety management?
MS. TADROS:
A. Yes.
EARLE, Q.C.:
Q. And would you agree with me that the modern approach to safety management is one of proactive management, seeking towards best

Page 74

practises, and the challenging of standards to see that they can be improved?
MS. TADROS:
A. I don't disagree with that, but there are really three prongs to safety management systems, and they are proactive means of managing safety. The first prong is hazard identification, proactive hazard identification within a company. The next is risk analysis and assessment, and then risk mitigation. So basically the idea is that you take a look at the hazards that are out there and you address them before they result in an accident, and you have to appreciate that that's a very simplistic precis.
EARLE, Q.C.:
Q. Yes, I appreciate that. In essence, the objective should be to keep you unemployed.
MS. TADROS:
A. That's my very best dream, sir.
EARLE, Q.C.:
Q. So in the scheme of things, given that your work is occurrence driven, and that you make -- this is not to suggest in the investigation of an occurrence you may not in the end make

Page 75

significant recommendations relative to safety management, but given that the work of the Transportation Safety Board is occurrence driven, in the regulatory scheme and the investigatory scheme as it relates to transportation, who does the Transportation Safety Board see as the body or regulator that has the burden, if you will, of moving forward safety management so that we don't have occurrences that bring Transportation Safety Board into the picture?
MS. TADROS:
A. In Canada, the regulator is Transport Canada, and Transport Canada is the body that is requiring air carriers to implement safety management systems, but just to go back to a point that you made in the beginning of your question, to comment on the notion that if you have safety management systems, that you have no accidents, I don't think that that's true.
EARLE, Q.C.:
Q. No.
MS. TADROS:
A. I think that transportation systems are very, very complex and the interactions between

Page 76

humans and the machine are very complex, and hopefully the accidents can be brought down, but I'm not sure, as long as you have transportation and you have things moving, that you can get to a zero accident rate.
EARLE, Q.C.:
Q. Yes. So if our objective is not to see that you're unemployed, it's that you're an awful lot less busy. There is in Canada, I'm sure that you're totally aware of it, a large regime, both federal and provincial, dedicated to occupational health and safety.
MS. TADROS:
A. Yes.
EARLE, Q.C.:
Q. Where would you see that regime fitting into the process of safety management, vis-a-vis, helicopter transportation safety?
MS. TADROS:
A. Well, let's be clear that under the Constitution, aviation is federal. So the regulator is a federal body, Department of Transport. So that any direct regulation of anything in the aviation industry is going to fall to the Department of Transport. What

Page 77

some other bodies can do is work indirectly to benefit aviation safety.

EARLE, Q.C.:

Q. Uh-hm. Would you not agree, though, that the constitutional structure of Canada gives to the federal government those ancillary jurisdictions like occupational health and safety when you are dealing with a matter which is within the constitutional competence of the federal government, so that there is room for a federal occupational health and safety regime to interact with air safety, for instance?

MS. TADROS:

A. Yes, it does get very complex, doesn't it? For instance, if you're looking in the marine world and you're looking at fishing vessels again, there are some aspects of fishing vessel operation that are provincial and fall under Workers Compensation type structures, and there are others that are federal.

EARLE, Q.C.:

Q. And, of course, we have the added complication in this particular situation that we have joint and overlapping jurisdiction when it

Page 78

comes to the offshore exercise on behalf of the two governments by our friends at C-NLOPB. Now the whole business of incidents is something that I'd like a little bit more information on, and that is the process of dealing with incidents and what comes out of an incident, and I was very interested when you went through the definitions that it includes such things as fuel shortages, and I'm going to put to you a factual situation to see if we've got the triameters right. This, I gather, is not a totally unusual event, but a helicopter may leave St. John's headed to one of the offshore installations with a certain amount of fuel on. The fuel on board is calculated for what is often called "the necessity of boomeranging", i.e. going out and coming back without landing. Weather conditions change. So deicing equipment is activated, and as I understand it, that changes the parameters of fuel consumption. It means that a decision is required to turn around and essentially abort the trip and return to St. John's. Would that be considered an incident?

Page 79

MS. TADROS:

A. If the trip was aborted or if there wasn't enough fuel on board?

EARLE, Q.C.:

Q. The trip is aborted because weather conditions had changed and there is now not enough fuel to get -- safely go to the platform and contemplate possibly not being able to land at the platform and return to St. John's without landing. Would that be considered an incident?

MS. TADROS:

A. Just to be clear, you're telling me that there is enough fuel to get back to land?

EARLE, Q.C.:

Q. There is enough fuel to get back to land, and the decision is made to get back to land because there will not be enough fuel if the original intention is carried out?

MS. TADROS:

A. Okay, just bear with me for a minute.

EARLE, Q.C.:

Q. Sure.

MS. TADROS:

A. Well, the definition of reportable aviation

Page 80

incident in Paragraph H says, "A fuel shortage occurs that necessitates a diversion or requires approach and landing priority at the destination of the aircraft". So it's a question of whether coming back to St. John's is a diversion or it's part of the original planning.

EARLE, Q.C.:

Q. Okay.

MS. TADROS:

A. So if it's part of the original planning that when you're heading out in the North Atlantic that you may have to come back, then my view is it's not a diversion.

EARLE, Q.C.:

Q. Okay. So that wouldn't be an incident, but I take it that if part way out the pilot recognized that for some reason or other, whether it was because of a miscalculation or a wrong assumption on somebody's part, there is not enough fuel on board to meet this boomerang parameter of being able to go out and come back, so the trip is aborted part way out and back they come, that would very clearly be an incident?

Page 81

MS. TADROS:
A. Reportable, yes.
EARLE, Q.C.:
Q. Reportable.
MS. TADROS:
A. And let's go back to the purpose of why we have reportable incidents. We want to know at the TSB whether we should deploy and consider doing an investigation, or if we're not going to do that, we want the data so that, say, there are a hundred such incidents reported in a two year period and they're not investigated because each of them are minor, we want to know if there's any kind of pattern there, and if there is a major occurrence that arises out of similar facts, we want to be able to look at those minor occurrences to see if there's a risk in the system.
EARLE, Q.C.:
Q. Uh-hm, and I think everybody understands and appreciates the benefit of that. What I'd like to hear from you now is let us assume that this incident is in isolation, considered a minor incident that is dealt with in a totally controlled fashion, no negative

Page 82

consequences other than the economic consequence of having lost a successful flight. What is the TSB's reporting mechanism that follows out of such an incident?
MS. TADROS:
A. We would put that into our database as a Class 5 occurrence, and it would remain there and it would be searchable if there's a future -- if there's a future occurrence with similar facts.
EARLE, Q.C.:
Q. So simply put, these minor incidents stop at the TSB and go no further?
MS. TADROS:
A. Well, they're available and there is a -- there is a plan in place or there's a project in place in Europe at the moment called ECC-AIRS, and that involves sharing of data amongst countries so that you can look not only to the minor occurrences in Canada, but there can be a sharing of that information and somebody can look across the world.
EARLE, Q.C.:
Q. And when you say sharing, I take it you're talking about sharing that information amongst

Page 83

similar organizations to the TSB?
MS. TADROS:
A. Yes, and I believe -- I believe, but I'm not 100 percent sure, that regulators may be involved in that.
EARLE, Q.C.:
Q. But there's no contemplation of a public disclosure or public access to such information, is there?
MS. TADROS:
A. You can get that information if you know exactly what you're looking for, but we're looking at thousands and thousands of reports in a week. If you're looking through all the modes of transportation, we're looking at a vast amount of data. So we wouldn't, you know, proactively publish all of that data, because out of context, it would be meaningless.
EARLE, Q.C.:
Q. Well, let's put it very specifically. What would be the capacity, for instance, of the Joint Chair of an Occupational Health and Safety Committee on one of these offshore installations to say I'd like to know, you

Page 84

know, what kind of incidents are happening with our means of transportation to and from work?
MS. TADROS:
A. Well, the reports are being made by the company, correct?
EARLE, Q.C.:
Q. Uh-hm.
MS. TADROS:
A. And you represent the employees of the company.
EARLE, Q.C.:
Q. No.
MS. TADROS:
A. No. You represent?
EARLE, Q.C.:
Q. The employees who ride on the company's helicopter.
MS. TADROS:
A. Oh, I see, okay. I see the distinction. You know, if you're talking about a narrow band of data, it may be best to get that from the people who are supplying the data because then it will only represent those incidents in the offshore, or with that particular helicopter

Page 85

company, or transporting to a particular oil rig. We have the data for all of aviation across Canada, and for rail, marine, and pipeline. So it depends on which is the best means of you obtaining the exact information that you want.

EARLE, Q.C.:

Q. But do you have the facility, if you will, for people who, you know, have a legitimate interest, like people who are dedicated to issues of occupational health and safety as it relate to their workplace, to go to you and say, well, we use this mode of transport on a many times daily basis, we would like to know the incidents that are being reported with respect to this mode of transport? Do you have that?

MS. TADROS:

A. We have the facility upon request, yes, but -- so if there's a specific request, then we can provide that information, but I think you can appreciate that the data isn't broken down by region or by undertaking, so we don't collect it and collate it in that kind of manner. So on an ongoing basis, if you wanted to receive

Page 86

it once a month, for instance, that would be quite a burden on my organization.

EARLE, Q.C.:

Q. Yes.

MS. TADROS:

A. And it may be better to receive that the people who are making the reports.

EARLE, Q.C.:

Q. Uh-hm. Now you indicated that the draft report is circulated to interested parties, and as a lawyer, I know that that is a weighted term, has a real legal meaning.

MS. TADROS:

A. We don't call them parties. We call them designated reviewers.

EARLE, Q.C.:

Q. Designated reviewers, but I believe you did say in your evidence that designated reviewers are representatives of interested parties.

MS. TADROS:

A. I don't believe I said parties, but --

EARLE, Q.C.:

Q. Nevertheless, I think we understand very easily that if you're going to say that the manufacturer of a particular type of aircraft

Page 87

has a problem in the design of that aircraft, that that is a body that has a very real interest in both the colloquial and the legal sense in the proceeding, and as I understand your evidence, what you tell us that a body like this would have a designated reviewer who would receive the draft report and be able to comment, is that correct?

MS. TADROS:

A. That's correct.

EARLE, Q.C.:

Q. Okay. Do you have within your system any capacity or means to, if you will, have someone review or comment on an issue from the perspective of the transportation user?

MS. TADROS:

A. We go -- that's a touchy issue, and we go back to the legislation which defines a person with a direct interest, and if -- if the test is met, and this is a determination that's made by the Board, if the test is met, the person or the body becomes a designated reviewer. If the test is not met, they will not. So it depends on the facts. You'd have to look at each one on its facts. Very rarely would a

Page 88

travelling member of the public be a designated reviewer. If they were on the flight, they would be interviewed, so they would be a witness, but they -- they probably would not meet the test of a designated reviewer.

EARLE, Q.C.:

Q. You can appreciate, though, that in this particular circumstance we have a frequency of use of a particular design of aircraft and a particular methodology?

MS. TADROS:

A. Yes, and that is why individuals may be interviewed to learn what they know about those things.

EARLE, Q.C.:

Q. But even with such a high frequency of use by a defined group of people, the people who work on these offshore installations, or the drill platforms, you would not have anyone, if you will, a passenger advocate, designated to review and give input to your draft report?

MS. TADROS:

A. You're asking me a hypothetical question and it's very difficult to answer without the

Page 89

context. If you're talking to me about the ongoing investigation of Cougar 491, then those determinations have not been made. They will be made by the Board when the draft report comes forward from the Director of Investigations here.

EARLE, Q.C.:

Q. Well, perhaps I've planted a thought in the mind of the Board. I'm interested in what you said about your investigation, and you talked about safety defences, and the example I believe you gave was a warning light on the panel for an operation, and I'd like to have some sense of how far this notion of defences go. You've certainly, unfortunately, had to investigate a number of marine incidents in our territory over the past few years. So if I could use that as an area to get a sense of where you go. If you had a marine incident, a vessel going down, and, of course, vessels are required to be equipped with life rafts, locator beacons, and a variety of safety equipment, would that be considered a defence which you would investigate if, for instance, one of those malfunctioned?

Page 90

MS. TADROS:

A. Okay. The defences are either physical or administrative, so in the case of a fishing vessel, we wouldn't look broadly at the whole vessel when we're looking at a defence. We want to look at what is the risk and what is the unsafe condition and then what are the defences to address that. So it's a much more methodical process issue by issue, but basically the thinking is that for robust safety systems, there should be defences in depth. So we're looking to see that there is more than one defence and how did those defences play out, how did they work. Did they work? Did they not work, and what happened if they didn't work? So I'm having a difficulty answering the question in context. Perhaps if there's a particular issue like -

EARLE, Q.C.:

Q. Well, that's a -

MS. TADROS:

A. - the people getting rescued, for instance. You want to look at what's available to them to communicate with other people so they can be rescued, and that's a defence.

Page 91

EARLE, Q.C.:

Q. That's a defence. So an EPERB, an emergency locator beacon -

MS. TADROS:

A. Is a defence.

EARLE, Q.C.:

Q. - and if it was one that was supposed to automatically activate and it didn't automatically activate, that would be a matter for your concern?

MS. TADROS:

A. Absolutely, and we would want to know two primary things. Why didn't it activate, and is this a problem in the system or was it just on that vessel on that day?

EARLE, Q.C.:

Q. And I presume you might also want to know and what alternatives were there to back up that unit in the case of failure?

MS. TADROS:

A. Were there other defences that could have been of assistance, yes.

EARLE, Q.C.:

Q. Now we have a system of support, if you will, rescue support that operates in the--we'll use

Page 92

the marine environment. You have everything from military based search and rescue. You have Coast Guard. You have Coast Guard Auxiliary made up of volunteers and we have a radio communication system, fairly extensive system of, if you will, responders to accidents. Do you consider those responders to be part of the defences?

MS. TADROS:

A. They may well be. The first question that has to be answered is the scope of the investigation and in many of our investigations, we will look at search and rescue and whether it operated effectively. It depends on the facts of the accident. So in many, many of our investigations, we have looked at that, at that issue.

EARLE, Q.C.:

Q. So you -

MS. TADROS:

A. But we may not necessarily is what I'm telling you. It depends on the facts of the accident.

EARLE, Q.C.:

Q. But it is not ipso facto outside your purview?

MS. TADROS:

Page 93

A. No, because the accident is--the accident, as a concept, is not a very narrow thing. So we're looking at response to the accident, if that comes into play, if that's an issue. We're looking at, you know, things that might have saved the lives of the people who were in the accident. So we broadly scope the investigations and that's a determination that's made by the investigator in charge and the director of investigations, as to which issues are going to be examined in depth and the way that we come to that determination is through the ISIM methodology.

EARLE, Q.C.:

Q. And you say the investigators make that decision, and we know that search and rescue provided by the military is out of bounds, if you will, for this Inquiry. However, there are some people, at least, who believe that search and rescue provided by other than the military will be clearly within the bounds of this Inquiry. How would we know, other than by receiving your final report, that Transportation Safety Board will be going in that area?

Page 94

MS. TADROS:

A. Well, the other way that you--you normally would find out in the final report, unless you were somebody with a direct interest in that issue and then you'd be invited to comment on it. The other way you would know is if we put out an interim safety communication on an issue like that.

EARLE, Q.C.:

Q. Ms. Tadros, you spoke of how this Inquiry could influence helicopter safety and you talked about contractual means and conditions of license and the like. I was interested, it seemed to me that you were urging an approach that says don't just stop at the regulatory standard. Seek to go beyond meeting the regulatory standard, that that's the approach that safety management should have.

MS. TADROS:

A. Well, I would always encourage companies or segments of industries or industries as a whole to go beyond the regulatory standards.

EARLE, Q.C.:

Q. Isn't it fair to say that one of the big results of the efforts of the Transportation Safety Board has been to cause regulators to look at their standards and increase their standards?

MS. TADROS:

A. Yes. I mean, just to draw a distinction, the investigations that we do are not regulatory audits, so we are not looking primarily to see if the operator met the regulations. We're looking beyond that to all the safety issues. So if the regulation itself is deficient, then that's something that we will look at and we will point out, if you take my distinction.

EARLE, Q.C.:

Q. Yes, and you make recommendations -

MS. TADROS:

A. Yes.

EARLE, Q.C.:

Q. - that have, from time to time, led to a new regulatory scheme?

MS. TADROS:

A. Yes.

EARLE, Q.C.:

Q. Thanks very much, Ms. Tadros.

MS. TADROS:

A. You're very welcome.

Page 96

COMMISSIONER:

Q. Thank you. Now, counsel for the families, Mr. Martin.

MS. WENDY TADROS, EXAMINATION BY MR. JAMIE MARTIN

MR. MARTIN:

Q. Thank you, Mr. Commissioner. I guess it's now good afternoon, Ms. Tadros.

MS. TADROS:

A. Good afternoon.

MR. MARTIN:

Q. I'm Jamie Martin. I represent several of the families of the Flight--of the passengers on the Cougar helicopter on March the 12th '09. I just have a couple of questions, and the first one, I just want to follow up on Mr. Earle's questions on the receipt of that draft report, the designation process that you use for that purpose. It was my understanding of your evidence that individuals with a direct interest would be provided with that draft report, and I think you included, among others, the operators, any corporate entities that would have a direct interest. Is that correct?

MS. TADROS:

Page 97

A. I'm just trying to provide you with examples from past investigations. In terms of this investigation, that determination will have to be made when we're further down the road.

MR. MARTIN:

Q. I realize, from your response to Mr. Earle's question, that there's been no decision taken on the report because the report is not done yet.

MS. TADROS:

A. That's correct.

MR. MARTIN:

Q. But you did provide a number of examples of people who would likely get receipt of the draft report and I think you included the operators. You also included the pilots and the co-pilot or their families. Is that correct?

MS. TADROS:

A. That's correct. That is the normal practice or that's what I can tell you from previous investigations that the flight crew are normally designated reviewers or their next of kin.

MR. MARTIN:

Page 98

Q. Now what about the members of a deceased family?

MS. TADROS:

A. They are not normally designated reviewers because it is not just people with an interest, but people with a direct interest, which I think you can appreciate that's a legal distinction. But unless they were involved in the operation of the aircraft, then there isn't normally a direct interest. But again, I cannot say for this particular investigation.

MR. MARTIN:

Q. So there are exceptions or there have been exceptions used in the past by the Transportation Safety Board to allow that to happen? Would that be a fair comment?

MS. TADROS:

A. There can be exceptions, if it is clearly demonstrated that the individual meets the test.

MR. MARTIN:

Q. Okay, can you bring the test up? I believe you referred to the test as a statutory test, something that's in the statute, correct me if

Page 99

I'm wrong, and I don't think it -

MS. TADROS:

A. There's two things--oh, sorry.

MR. MARTIN:

Q. I don't think we discussed what the test is. Can you point us to the test?

MS. TADROS:

A. There's -

MR. MARTIN:

Q. In the regulations or the Act itself.

MS. TADROS:

A. There's a test, but there's also a policy which I don't have with me here today. I could provide it to you, if you wish.

MR. MARTIN:

Q. I think it would be helpful, if you could?

MS. TADROS:

A. Okay. John, can we undertake to provide the policy on designated reviewers to Mr. Martin, please?

MR. COTTREAU:

A. Absolutely.

MS. TADROS:

A. The reference in the Act, I believe, is Section 24. It's Section 24.2, subsection

Page 100

24.2, and if you look about the middle of that paragraph, it's basically the wording that -

MR. MARTIN:

Q. Can we bring it down a little bit further, because I'm--24.2, is it?

MS. TADROS:

A. Okay.

MR. MARTIN:

Q. Okay, sorry.

MS. TADROS:

A. So the draft report, on its findings and any safety deficiencies that it has identified to each Minister and any other person who, in the opinion of the Board, has a direct interest in the findings of the Board. So that is the wording in the Act. The policy further defines what it means to have a direct interest.

MR. MARTIN:

Q. Okay, and I know you don't have the policy here, but -

MS. TADROS:

A. I can give you the basic parameters.

MR. MARTIN:

Q. If you could, please?

Page 101

MS. TADROS:
A. If you don't hold me to the exact wording.
MR. MARTIN:
Q. No, no, that's fine, I won't.
MS. TADROS:
A. It's a person who may see their behaviour or product commented on in the report or who may contribute to the scientific fullness of the report, the accuracy of the report.
MR. MARTIN:
Q. But is it possible for the members of the deceased families to fall within that category as someone having a direct interest in the proceedings?
MS. TADROS:
A. You would have to make a very clear argument and demonstrate very clearly why that was the case.
MR. MARTIN:
Q. And who would have to make that argument, the families themselves or their legal representative?
MS. TADROS:
A. Well, the legal representative represents the families so stands instead of the families, I

Page 102

would -
MR. MARTIN:
Q. But at what stage do you make those representations? Because at some point in time, you're going to get to the stage in your proceedings where you're going to have to issue a draft report, and then a decision is going to have to be made, well who do we circulate that report to. So how will we know, as their legal representative, or how will the families know that there is a decision about to be taken about the release of a draft report? Will there be timely notification of that?
MS. TADROS:
A. I would say that, you know, if you make it known that you're interested in making representations, then we will be mindful of that, or there's no particular time limit. You can make those representations at any time from this day forward.
MR. MARTIN:
Q. Okay, and they're made directly to whom?
MS. TADROS:
A. They're made directly to the Board, so you can

Page 103

write anybody at the Board or you can make them to the investigator in charge.
MR. MARTIN:
Q. Okay. Now when that process is undertaken and the draft report is circulated to the various parties who meet the definition as you've outlined in the Act, do the comments of each party then get distributed to the other parties who have made comments on the draft or do you restrict them or do you just sent them back the report with their own comments reflected? Just explain that process. In other words, what I'm getting at is if I have a direct interest and I'm allowed to make comments on that report, do I get to know what the other parties -
MS. TADROS:
A. No.
MR. MARTIN:
Q. I don't?
MS. TADROS:
A. Because the comments from the designated reviewers, not the parties, but the designated reviewers, are confidential. The list of who are designated reviewers is also confidential,

Page 104

and the reason for this is that we want anybody with a direct interest, whether they are the head of a major corporation or the fellow who works on the line for $12 an hour, to be able to freely comment to the Board and to tell us what they know and what their opinion is without any fear of reprisal. We want them to speak openly and honestly to the Board and to voice their opinions, and there's no back and forth between the designated reviewers. The back and forth comes when the Board analyses each and every comment to determine whether it's valid or not.
MR. MARTIN:
Q. Okay. I'll move on to my second line of questioning. In response--and I appreciate the opportunity to be getting that policy and certainly upon review of that policy and the legislative requirements, we'll discuss that with our clients. The second line of questioning, you were asked by Ms. Fagan as to what constitutes the black box. I mean, it's a very common term that we hear about post-accident and you indicated that the first component was a flight data recorder and the

Page 105

second component was a cockpit voice recorder. Is that correct?

MS. TADROS:

A. That's correct.

MR. MARTIN:

Q. Okay. Now you went on to say that the cockpit voice recorder is privileged information. It's treated the same as a witness statement. Is that correct?

MS. TADROS:

A. It's privileged under the Act.

MR. MARTIN:

Q. Privileged under the Act, okay. So it's a statutory privilege. It's not a common law privilege. And I know--I'm not trying to get legalistic here, but that's where the privilege arises from, it's a statutory privilege?

MS. TADROS:

A. Correct.

MR. MARTIN:

Q. And I don't believe that you identified where in the Act that privilege would exist. Can you point us to it?

MS. TADROS:

Page 106

A. Section 28.

MR. MARTIN:

Q. Section 28, and so it's a fairly detailed definition. Do you want to just paraphrase where the authority lies for the privilege? So what is that section saying?

MS. TADROS:

A. Well, in terms of--if we just look at aircraft, it's recording of voice communications originating from or received on or in the flight deck of an aircraft.

MR. MARTIN:

Q. Okay, and are there any exceptions to the statutory privilege?

MS. TADROS:

A. Yes. A lot of these provisions, I think you can appreciate that in a democratic society, there are lots and lots of interests and so when these provisions are crafted, they're rather like those Russian dolls where there's a provision and then there's another one in the middle and another one and another one, and if you look down, there are provisions where Courts can--if you can just scroll down a little bit, you'll find that.

Page 107

MR. MARTIN:

Q. Courts can--or someone can subpoena the records? Would that be a fair exception?

MS. TADROS:

A. Well, let's put it this way. They can try.

MR. MARTIN:

Q. They can try, okay. So there is recourse for parties if they really want to get at that information?

MS. TADROS:

A. There's recourse--the Courts may decide that in the interest of justice that it is either to be released on a very limited basis or on a general basis, but this is one of the things that we take great pains to protect and respect, and so if there are Court proceedings, we've been very successful in arguing that the privilege afforded to the CVR should be maintained.

MR. MARTIN:

Q. Okay, and that privilege only exists for the CVR? It doesn't exist for the flight data recorder?

MS. TADROS:

A. No, there's no--that's not personal

Page 108

information in any way. It's not information associated with a person's voice and it's data, you know. The aircraft was travelling at such and such a speed. So there's no need to have privilege afforded to that data.

MR. MARTIN:

Q. Okay, the CVR, the cockpit voice recorder is considered personal information?

MS. TADROS:

A. Yes, and -

MR. MARTIN:

Q. That's how it falls within the privilege? Is that a fair comment?

MS. TADROS:

A. Yes, and I mean, the cockpit is a pilot's place of work, and so we have to be very careful when you're routinely recording somebody's place of work that that be respected.

MR. MARTIN:

Q. Okay. Those are my questions, Ms. Tadros. Thank you very much.

MS. TADROS:

A. Okay.

COMMISSIONER:

Page 109

Q. Okay, thank you, Mr. Martin. Counsel for the estates of the pilots, Mr. O'Brien?

O'BRIEN, Q.C.:

Q. I don't have any questions, Commissioner.

COMMISSIONER:

Q. No questions, okay, thank you. Anything from Inquiry counsel to close out the matter then?

MS. WENDY TADROS, RE-EXAMINATION BY MS. ANNE FAGAN

MS. FAGAN:

Q. I just have one area which I'd like Mrs. Tadros to just clarify, and that is the issue between the TSB's role and the regulator's role, just to ensure that it's clear as to sort of the enforcement powers or the ability of the TSB to regulate these activities or the lack of the power to act as the regulator. If you could just cover that one point, please?

MS. TADROS:

A. Well, the TSB is not a regulator. We're absolutely not a regulator and that was done purposefully in Canada because in the older days, more than 20 years ago, accident investigation was done by the regulators and that was seen as a conflict of interest, so a decision was made, a conscious decision, to

Page 110

separate out the accident investigation capability from the regulator's tasks and the regulator in Canada is Transport Canada. In the United States, is it the FAA.

MS. FAGAN:

Q. So since the TSB cannot attribute blame, the TSB's mechanism, once it conducts its investigation, what is the TSB's mechanism to see that their recommendations are adopted or carried out?

MS. TADROS:

A. Well, we have several ways that we communicate safety deficiencies and recommendations are at the higher end or they are the most serious issues. We may communicate through a safety advisory, safety information letter, and we do these things all along the way. So the regulator is aware of what the issues are as the investigation is proceeding, and best case scenario is that action is taken before we get to the stage of making a recommendation. But if we do make a recommendation, then if it goes to a minister in the government, they have 90 days in which to tell us and tell the public what they are going to do in response

Page 111

to that recommendation. Then we rate that response and we post the rating on our website and we follow up on a periodic basis and basically, the role in that respect is one of persuasion and we believe if you have strong science and you have a logical argument that you put forth that the changes that we recommend should be made.

MS. FAGAN:

Q. So as this Inquiry is looking at the safety of workers, we would appreciate and take you up on your offer to provide the recommendations that whatever they are there, whatever recommendations that the TSB has made in the area of helicopter transportation, for consideration. Because some of these recommendations may be in the regulations, but some of them may not be for the regulator, may not be in the regulator's exact area, or they may not actually be regulations yet. So as you've said initially, this Inquiry can make recommendations to the C-NLOPB through a contract or through the authorization process, we would like to consider those recommendations. So I'd ask that you follow

Page 112

up and provide those recommendations to us for consideration.

MS. TADROS:

A. Okay. I'd be pleased to do that. We can certainly talk about the scope of what you would like to receive, because there are recommendations that were made in the context of helicopter investigations. There are recommendations that were made in other contexts that may be transferable. So we'd be pleased to provide you with whatever you need.

MS. FAGAN:

Q. Okay, thank you, appreciate your evidence.

MS. TADROS:

A. Thank you.

COMMISSIONER:

Q. Okay then, thank you. Well then, in closing, Mrs. Tadros, is there any sort of general comment you might wish to make or further comment?

MS. TADROS:

A. I would just follow up on the last comment that I made that if--as your Inquiry moves forward, if there's any further information that comes to your attention and you need more

information from the TSB that we'd be pleased to provide you with whatever we can, and I wish you well.

COMMISSIONER:

Q. Okay, thank you very much. All right then, if there's nothing further then, we'll adjourn.

ROIL, Q.C.:

Q. Until Monday.

COMMISSIONER:

Q. Oh yes. We had set aside two days. Obviously it's not been used, so we'll meet again at 9:30 on Monday morning coming. Okay, thank you.

ADJOURNED TO NOVEMBER 2, 2009 AT 9:30 A.M.

CERTIFICATE

We, the undersigned, do hereby certify that the foregoing is a true and correct transcript of a hearing heard on the 28th day of October, 2009 at Tara Place, 31 Peet Street, Suite 213, St. John's Newfoundland and Labrador and was transcribed by us to the best of our ability by means of a sound apparatus.

Dated at St. John's, NL this 28th day of October, 2009

Cindy Sooley
Discoveries Unlimited Inc.

Judy Moss
Discoveries Unlimited Inc.

-F-

-G-

-H-