

OFFSHORE HELICOPTER SAFETY INQUIRY

October 26, 2009

Tara Place, Suite 213, 31 Peet Street

St. John's, NL

October 26, 2009

PRESENT:

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1 October 26, 2009
 2 COMMISSIONER:
 3 Q. Good morning, ladies and gentlemen. We have
 4 with us this morning representatives of
 5 Transport Canada who are here to give
 6 evidence, or at least one representative to
 7 give evidence, and Ms. Fagan will introduce
 8 them and conduct the questioning, to Ms.
 9 Fagan.
 10 MS. FAGAN:
 11 Q. Thank you, Commissioner. The witnesses today-
 12 -well, we have one witness and support, so the
 13 witness is Michael Stephenson, who is the
 14 regional director for Ontario for the civil
 15 division. He's also acting general regional
 16 director, and you will hear that Transport
 17 Canada is divided into five regions in
 18 addition to the headquarters in Ottawa, the
 19 Pacific, the Prairie and Northern, the
 20 Ontario, the Quebec and Atlantic. The
 21 regional director for the Atlantic region was
 22 prepared to present at the inquiry. However,
 23 due to an unforeseen personal matter which
 24 came up quite unexpectedly, he is unable to
 25 attend. Mr. Stephenson, who is the regional

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1 director for aviation in Ontario, has
 2 graciously agreed to present on behalf of
 3 Transport Canada, and as this is the data
 4 collection phase the inquiry seeks to obtain
 5 information on the current situation with
 6 respect to helicopter transportation of
 7 workers to the offshore, and the first
 8 component will be an explanation of the
 9 regulatory regime, and Transport Canada is now
 10 going to provide an explanation of Transport
 11 Canada's part in the regulatory regime. Mr.
 12 Stephenson, being the regional director for
 13 Ontario, is in the same position from a
 14 regulatory perspective as the regional
 15 director for Atlantic. The five regional
 16 directors are counterparts of each other so he
 17 should be able to give a very good explanation
 18 of the regulatory regime. In addition to Mr.
 19 Stephenson, we have Lucille Kamal. Lucille is
 20 the director of civil aviation secretariat at
 21 Transport Canada in Ottawa. That's at the
 22 headquarters, and she's been with the
 23 department since 1988 and will be supporting
 24 Mr. Stephenson. Through some of the
 25 presentation we'll refer to the Transport

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1 Canada website, and in her position she's
 2 very, very adept to locating information and
 3 it's actually very simple, but she won't be
 4 providing evidence, so we will have Mr.
 5 Stephenson sworn.
 6 COMMISSIONER:
 7 Q. Okay, thank you.
 8 MS. MICHAEL STEPHENSON, (SWORN) EXAMINATION-IN-CHIEF BY
 9 MS. ANNE M. FAGAN
 10 REPORTER:
 11 Q. State your name, please.
 12 MR. STEPHENSON:
 13 Q. Michael Stephenson.
 14 MS. FAGAN:
 15 Q. Now, Mr. Stephenson, before we begin I
 16 understand there are some exhibits that we're
 17 going to refer to, and the exhibits have been
 18 disclosed and provided to the parties and the
 19 counsel, and for the record we'd like to have
 20 them entered if there is no objection. The
 21 exhibits are comprised of a PowerPoint
 22 presentation that Mr. Stephenson will refer
 23 to, and that's Exhibit #26; and we have the
 24 Aeronautics Act, 24; the Canadian Aviation
 25 Regulations, 25; the International Civil

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1 Aviation Convention, which is 27; and a
 2 booklet, which describes all the annexes to
 3 the Convention, and that's Exhibit 28, so we
 4 would like to have them entered so that they
 5 could be placed on the website and available
 6 to the public as soon as possible. Is that
 7 acceptable?
 8 COMMISSIONER:
 9 Q. Yes indeed.
 10 MS. FAGAN:
 11 Q. Okay.
 12 COMMISSIONER:
 13 Q. So you'll do that, Ms. Williams.
 14 MS. WILLIAMS:
 15 Q. Yes, Commissioner Wells.
 16 MS. FAGAN:
 17 Q. With the exception of the PowerPoint, all of
 18 these exhibits are available on the websites
 19 of Transport Canada, and available through the
 20 International Convention in any event.
 21 They're being marked as an exhibit and placed
 22 on the website for the convenience of the
 23 public and the parties.
 24 COMMISSIONER:
 25 Q. Okay.

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1 MS. FAGAN:
 2 Q. We don't intend to refer to the particular
 3 sections of those statutes. They're there as
 4 reference material if somebody would like to
 5 research some of the issues a little further.
 6 COMMISSIONER:
 7 Q. Okay then.
 8 MS. FAGAN:
 9 Q. Okay, Mr. Stephenson, we'll now begin. I
 10 understand you had a remark before I want to
 11 lead you into your bio and history.
 12 MR. STEPHENSON:
 13 Q. Yes, and I had the privilege of meeting
 14 Commissioner Wells. I just wanted to thank
 15 you for the privilege of being here and
 16 representing Transport Canada. More
 17 specifically, we didn't have that much time to
 18 talk. I did mention that I had read the
 19 introductory statements that you made earlier
 20 in the week last week, and I appreciate--
 21 particularly in the light of this particular
 22 tragic accident. The testimony that I'll give
 23 today, although it's very general in nature, I
 24 hope that you'll find it useful, and I hope
 25 everybody else will find it useful in

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1 understanding our mandate and what it is
 2 Transport Canada does. I also wanted to make
 3 sure that you're aware that even after my
 4 departure this week I am available to you
 5 either through counsel or directly to respond
 6 to anything else that might come during the
 7 proceedings, and again a source of contact for
 8 what might go on inside Transport Canada,
 9 trying to find your way within that structure.
 10 COMMISSIONER:
 11 Q. Okay, thank you.
 12 MS. FAGAN:
 13 Q. Okay, Mr. Stephenson, before we get into the
 14 regulatory regime, can you just give us a
 15 little bit of information as to what position
 16 you now hold and how long you have been with
 17 Transport Canada, and a little bit about your
 18 aviation experience.
 19 MR. STEPHENSON:
 20 Q. Sure. As you have mentioned, my substantive
 21 position is the regional director of civil
 22 aviation in Ontario. I do have a career in
 23 aviation before government. I started flying
 24 in 1976, myself personally, as a pilot.
 25 Stayed in the aviation industry for about 10

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1 years as an active pilot, and through that
 2 period I held positions as a chief pilot. As
 3 a chief flight instructor I managed a fairly
 4 large company in Toronto for a number of
 5 years. I began in Transport Canada in 1988 as
 6 a civil aviation inspector in our then air
 7 carrier branch. I essentially stayed within
 8 that organization as it changed over the years
 9 as an inspector, as a superintendent. I
 10 stepped out of that role for about two or
 11 three years as the manager of our enforcement
 12 branch in Ontario. Eventually, about seven
 13 years, became the director of civil aviation
 14 overseeing that entire branch in Ontario. I
 15 was privileged to come to the Atlantic region
 16 on an assignment about three years ago and
 17 held a position as the director general, so I
 18 oversaw the aviation branch as well as the
 19 marine and the surface branch, and all the
 20 other branches within the region. I'm
 21 currently in that position now in Ontario.
 22 I've been there for about a year as the
 23 director general, again overseeing essentially
 24 the same structure but in the Ontario region,
 25 and that's just again an assignment that I'm

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1 on.
 2 MS. FAGAN:
 3 Q. So would it be fair to say that right now you
 4 hold the two positions as the regional
 5 director for Ontario and the director for
 6 civil aviation?
 7 MR. STEPHENSON:
 8 Q. Well, I have a person staffing that position.
 9 I try not to do both jobs so I do have an
 10 actor in that role, but again I have direct
 11 contact with that position, but that is my
 12 substantive position.
 13 MS. FAGAN:
 14 Q. Can you please provide the vision and the
 15 mission statements for Transport Canada, and
 16 then for civil aviation specifically.
 17 MR. STEPHENSON:
 18 Q. Sure, and if you don't mind I'll read them so
 19 I actually get them accurately. "The vision
 20 for Transport Canada as a whole is a
 21 transportation system in Canada that is
 22 recognized worldwide as safe and secure,
 23 efficient and environmentally responsible.
 24 The mission of Transport Canada is to serve
 25 the public interest through the promotion of a

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1 safe and secure and efficient and
 2 environmentally responsible transportation
 3 system in Canada, and as a result civil
 4 aviation has developed its own vision and
 5 mission, which is simply an integrated and
 6 progressive civil aviation system that
 7 promotes a proactive safety culture, and the
 8 mission is to develop and administer policies
 9 and regulations for the safest civil aviation
 10 system for Canada and Canadians using a
 11 systems approach to managing risks."
 12 MS. FAGAN:
 13 Q. Thank you. Can you now explain the
 14 organizational structure of Transport Canada
 15 because it's a fairly large organization, and
 16 you have mentioned surface and marine and
 17 aviation.
 18 MR. STEPHENSON:
 19 Q. Sure.
 20 MS. FAGAN:
 21 Q. So can you take us through how this large
 22 department is divided up?
 23 MR. STEPHENSON:
 24 Q. Sure. It's a federal department, obviously,
 25 and it's headquartered in Ottawa. It's built

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1 out of some fairly large groups of
 2 individuals. Obviously, we have a policy
 3 group that's again headquartered in Ottawa
 4 with small elements in the regions. We have a
 5 programs branch that basically oversees all of
 6 what Transport Canada has in assets, in real
 7 estate. We have a corporate services branch
 8 that oversees the financial portions of
 9 Transport Canada and the human resources
 10 section, and obviously more than I'm telling
 11 you about that here today, the departmental
 12 general council and communications and
 13 marketing. Now the largest group,
 14 specifically, is the safety and security
 15 branch where aviation is actually housed, so
 16 that's kind of the structure and then, of
 17 course, we're broken up across the country.
 18 MS. FAGAN:
 19 Q. And how are you broken up across the country?
 20 MR. STEPHENSON:
 21 Q. Well, again five regions, you mentioned it in
 22 your opening statement. We have a Pacific
 23 region. We have a prairie and north, which
 24 geographically is a very large region. We
 25 have the Ontario region, which is the borders

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1 of the province of Ontario. We have a Quebec
 2 region, and then we have Atlantic Canada, or
 3 the Atlantic region.
 4 MS. FAGAN:
 5 Q. Now you have explained the groups. I
 6 understand in addition to the groups you then
 7 take the division even further into activity,
 8 more of a specific, almost an activity type
 9 based division. Can you explain how it's
 10 divided?
 11 MR. STEPHENSON:
 12 Q. Sure, and to your question--and I think the
 13 relevant group we're talking about is the
 14 safety and security group. It's divided into
 15 a modal structure, surface, marine. In this
 16 case we're talking about aviation. Each one
 17 of them has representatives in the different
 18 regions. They also have representatives right
 19 there in headquarters, so the aviation group
 20 I'll speak about. Aviation has a substantial
 21 group headquartered in Ottawa, and then they
 22 have their counterparts located in the regions
 23 where actual field work is done.
 24 MS. FAGAN:
 25 Q. Marine, you know, especially to the

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1 Newfoundland and Labrador public, is a fairly
 2 known entity. They generally would understand
 3 what is meant by "marine," but could you just
 4 explain "surface," what do you mean by
 5 "surface."
 6 MR. STEPHENSON:
 7 Q. Sure. Surface, obviously they would oversee
 8 railway operations as an example. The other
 9 primary piece of our surface branch is the
 10 transportation of dangerous goods, so whether
 11 it be by--well, specifically by surface, so
 12 rail, road or any other means of surface
 13 transportation.
 14 MS. FAGAN:
 15 Q. Okay. Marine, I take it, is the ocean, the
 16 marine traffic, vessel traffic.
 17 MR. STEPHENSON:
 18 Q. Yes, vessel traffic, whether it be marine--
 19 obviously in Ontario our Great Lakes would be
 20 our primary area of transport, yeah.
 21 MS. FAGAN:
 22 Q. And then "aviation," what does that cover
 23 because that's really where we're going to
 24 focus today.
 25 MR. STEPHENSON:

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1 Q. Sure. Aviation, in simple terms they are the
 2 regulatory body that certifies and oversees
 3 the, I guess--if I can say that the design,
 4 the manufacture and certification of products,
 5 of people, of organizations, so "people"
 6 meaning pilots, maintenance engineers. When I
 7 say "organizations," air operators,
 8 maintenance organizations, airports, that sort
 9 of thing.
 10 MS. FAGAN:
 11 Q. The civil aviation is subject to a legislation
 12 and a regulatory regime. I understand there
 13 may be guidelines, various types of advisory
 14 materials, so if somebody wanted to research
 15 or know what is the legislation and the
 16 regulatory framework, what should they look
 17 for?
 18 MR. STEPHENSON:
 19 Q. Well, again we can show you on the web, if
 20 you'd like. There is a spot--and you
 21 mentioned it in your opening statement that
 22 we--and you entered the exhibits. You can
 23 actually go to the web and find the
 24 Aeronautics Act specifically for aviation.
 25 It's our primary source of--or source of

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1 power. In other words, it allows us to make
 2 regulations and make standards for operations.
 3 We also generate our own internal and external
 4 guidance material in order to assist the
 5 industry, both outside and inside Transport
 6 Canada, on how to carry out our duties.
 7 MS. FAGAN:
 8 Q. So we have the Aeronautics Act, and we have
 9 the guidance and advisory materials.
 10 MR. STEPHENSON:
 11 Q. Right.
 12 MS. FAGAN:
 13 Q. And, as well, the regulations, what's the--the
 14 acronym, I understand is CARS?
 15 MR. STEPHENSON:
 16 Q. CARS, yes, Civilization--sorry, Canadian
 17 Aviation Regulations, or we use the acronym
 18 CARS, so again, we'll try not to use that, but
 19 it flows quicker than the other.
 20 MS. FAGAN:
 21 Q. Canadian Aviation Regulations.
 22 MR. STEPHENSON:
 23 Q. Yes.
 24 MS. FAGAN:
 25 Q. Okay. Could you give us a sense as to how

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1 comprehensive, or just the volume that would
 2 be involved if somebody--if one of the group
 3 here decided they wanted to hit the print
 4 button for the CARS, they go into your website
 5 tc.gc.ca. They click the "CARS," and then
 6 they all of a sudden hit "print," what are
 7 they going to end up with?
 8 MR. STEPHENSON:
 9 Q. I printed a sampling. It's a little bit under
 10 an inch, and that's basically the commuter
 11 regulations that apply to, you know, that
 12 class of aircraft that we're talking about
 13 today, for example, and that's about this
 14 thick, and so it's substantial. I would
 15 suggest it would fill this binder plus others
 16 if we were to print them all.
 17 MS. FAGAN:
 18 Q. Okay.
 19 MR. STEPHENSON:
 20 Q. Yeah.
 21 MS. FAGAN:
 22 Q. So you'd be looking at more than 500-package
 23 of paper.
 24 MR. STEPHENSON:
 25 Q. Yes, that's correct, yeah.

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1 MS. FAGAN:
 2 Q. Okay.
 3 MR. STEPHENSON:
 4 Q. And we're not talking about guidance material
 5 either, which doesn't seem to end so -
 6 MS. FAGAN:
 7 Q. Okay, so the guidance material is in addition
 8 to the regulations.
 9 MR. STEPHENSON:
 10 Q. Right, guidance material not being regulation.
 11 It's guidance material.
 12 MS. FAGAN:
 13 Q. And what's the purpose of the guidance
 14 material?
 15 MR. STEPHENSON:
 16 Q. It's to help not so much a layman, but it's to
 17 help somebody who's working in the industry on
 18 a regular basis. It assists them in complying
 19 with the regulation, and there are multiple
 20 ways of doing such things, but we give
 21 suggestions or ideas on how somebody might
 22 move forward and comply with a particular
 23 regulation or a particular standard, and
 24 that's generated by people who know--either
 25 internal, or we've gotten a lot of assistance

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1 from external sources in--by simply seeing how
 2 people are complying and using those as best
 3 practices and -
 4 MS. FAGAN:
 5 Q. The Canadian Aviation Regulations, the CARS,
 6 the substantial body of work, can you explain
 7 how it's divided and what section would apply
 8 to helicopter transportation. We're looking
 9 at the transportation of workers to the
 10 offshore.
 11 MR. STEPHENSON:
 12 Q. Right. The division--and I'll just read them
 13 so I get them correct. They're in nine parts,
 14 Part I being a general provision section.
 15 Part II is one that covers the registration of
 16 aircraft and the manner in which you deal with
 17 the ownership and registration of aircraft.
 18 The third part is aerodromes, airports, and
 19 heliports. The fourth one is personnel
 20 licensing and training. Some of them are
 21 obvious and some of them are not so obvious to
 22 a layman in any case. Part V is a our air
 23 worthiness section. Part VI is our general
 24 operating rule section. Part VII is the
 25 commercial air services section, which is

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1 something we may talk about a bit today, not
 2 specifically but in general terms. Part VIII
 3 is the air navigation services, which is the
 4 section that governs the matter which we
 5 provide navigational services, in other words
 6 the creation of the navigational system, the
 7 management of air traffic controllers and that
 8 sort of thing, and then Part IX is the repeals
 9 and coming into force, the section we use for
 10 rules that come into force and that are being
 11 repealed. I should say from a safety and
 12 security perspective, aviation in particular,
 13 we generally work within Part II to Part VIII.
 14 That's the piece that our staff would work
 15 with on a regular basis. That's the piece
 16 that an air operator would look at on a
 17 regular basis more so then, obviously, Part I
 18 and Part IX.
 19 MS. FAGAN:
 20 Q. Where would you find the safety standards in
 21 the regulations?
 22 MR. STEPHENSON:
 23 Q. Safety standards are--the regulations
 24 themselves will point to a standard. They'll
 25 speak of a standard in accordance with the

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1 Canadian Aviation and Safety Standards, so
 2 it'll literally point to them in words. You
 3 can find them on our website as well. I don't
 4 know, did you enter the standards as well or
 5 just the regulations, I don't recall, in your
 6 submission for evidence, but they can be found
 7 on the web.
 8 MS. FAGAN:
 9 Q. Yeah, we haven't put in the standards.
 10 MR. STEPHENSON:
 11 Q. Okay.
 12 MS. FAGAN:
 13 Q. We've just put in the regulations, but the
 14 standards are, as you say, available. If
 15 somebody wants to know a particular standard
 16 for -
 17 MR. STEPHENSON:
 18 Q. If you go to our website--and I'm now looking
 19 at the regulations. The standards are
 20 available usually right on the same page, and
 21 again we could demonstrate that if you wished.
 22 MS. FAGAN:
 23 Q. Okay. The Canadian Aviation Regulations, how
 24 are they created in that who is involved? I
 25 mean, it's fairly obvious that Transport

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1 Canada's, you know, staff may be involved, but
 2 do you consult with anybody else?
 3 MR. STEPHENSON:
 4 Q. Yeah. First of all, Canada is probably one of
 5 the first companies--or countries rather to
 6 put together a fairly comprehensive
 7 consultative process. We're bound to do it by
 8 regulation. We have a--it's an acronym, and I
 9 want to make sure I pronounce it correctly.
 10 Do I have it here? Yes, I do have it here.
 11 It's the Canadian Aviation Regulation Advisory
 12 Council, or CARAC, and it is a council that,
 13 as I said, started working fairly well in the
 14 early 90's. It's progressed over time to
 15 become a very robust consultative process.
 16 It's controlling council, which are
 17 individuals inside Transport Canada who are
 18 called CARC. Just remove the "advisory," and
 19 you have CARAC to CARC, and it's the group
 20 that actually makes the final decisions to
 21 make recommendations to the minister for
 22 regulation, but the CARAC process is a very
 23 comprehensive, consultative process. When we
 24 make regulations, we simply just don't make a
 25 regulation. The need has to be identified.

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1 The manner in which we might try to resolve a
 2 regulatory issue has to be discussed. The
 3 discussions are very comprehensive on--or
 4 participants in that, I'll say "a regulation,"
 5 participants in the evolution of a specific
 6 regulation might involve labour who will come
 7 to the table. Might involve the airlines
 8 themselves or the air operators themselves.
 9 It might involve, or it usually involves large
 10 associations who will represent probably more
 11 fulsomely the operators that can't come to the
 12 table because they're from perhaps other parts
 13 of the country. Most of these meetings take
 14 place in Ottawa. I know they've made an
 15 effort to move them out, but generally they're
 16 centered in Ottawa, so the associations play a
 17 significant role there to represent the
 18 various industries whether it be airports or
 19 whether it be pilots, or whether it be
 20 maintenance or manufacturers or whatever.
 21 They form technical committees, and they
 22 literally will have discussions, and they
 23 might even come up with something as basic as
 24 recommended wording for a regulation, or a
 25 recommended approach that they would then

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1 present to CARC, the council themselves, to
 2 have more additional discussion. CARC may
 3 actually send them back to do additional work
 4 if they don't think it's suitable for what it
 5 is they're trying to accomplish.
 6 MS. FAGAN:
 7 Q. You have included in your presentation some
 8 organizational charts to show the reporting.
 9 MR. STEPHENSON:
 10 Q. Sure.
 11 MS. FAGAN:
 12 Q. You know, we now have the regulation.
 13 Somebody has to enforce it. Somebody has to
 14 make sure that the air operators and the
 15 manufacturers are all complying, and somebody
 16 is developing the regulations, so can you
 17 please go through the reporting as to how all
 18 of this fits together? I mean, we had our
 19 regions.
 20 MR. STEPHENSON:
 21 Q. Right.
 22 MS. FAGAN:
 23 Q. But they have to connect and communicate and
 24 take direction.
 25 MR. STEPHENSON:

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1 Q. So can I show you our org chart for--starting
 2 with our headquarters, basically?
 3 MS. FAGAN:
 4 Q. Yes, I -
 5 MR. STEPHENSON:
 6 Q. Does that make sense?
 7 MS. FAGAN:
 8 Q. You have two organizational charts.
 9 MR. STEPHENSON:
 10 Q. Yeah.
 11 MS. FAGAN:
 12 Q. So whichever one makes the most sense -
 13 MR. STEPHENSON:
 14 Q. Yeah, so the one--I'll just wait until you
 15 give me the thumbs up, we're on the screen.
 16 MS. FAGAN:
 17 Q. Yeah, it's on the screen.
 18 MR. STEPHENSON:
 19 Q. Okay, very good, so what you're seeing here,
 20 if I can take the mouse just for people in the
 21 room, and again for people at home I'm not
 22 sure they'll be able to see this, but the
 23 director general for civil aviation resides in
 24 Ottawa. This is that box here, and that's the
 25 aviation director general, obviously, and

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1 you'll see on the left side of the screen, the
 2 blue and the yellow, they are the individuals
 3 that reside in headquarters. They reside in
 4 Ottawa. The groups here then, circled here in
 5 yellow, they're the groups that actually are
 6 the ones that actually generate regulation, or
 7 they create regulation. They also develop the
 8 standards. They also give standards advice or
 9 guidance to those who are on the ground
 10 actually doing field work, and the groups on
 11 the right-hand side that are in green are the
 12 operational groups. You can see the regions
 13 on the far right. I'll explain those in a
 14 minute, but the ones that are green in the
 15 middle actually also are headquartered in
 16 Ottawa, but they're operational groups that
 17 actually physically do field work. The
 18 director of national operations and the staff
 19 he has--or she has, actually, reporting to her
 20 are the groups that actually look after our
 21 major airlines in this country, so they're
 22 dedicated to that particular group of airline
 23 and the maintenance organizations around them.
 24 The director of national aircraft
 25 certification is the--it's probably close to a

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1 hundred professional engineers and all of the
 2 support that goes with that to deal with the
 3 certification of aeronautical products like
 4 aircraft or the modifications to aircraft and
 5 so on and so forth. They also have a small
 6 contingency of engineers in the regions as
 7 well, not directly linked to them. They're in
 8 the regions. I'll get to them in a minute,
 9 and then the director of international
 10 operations, and that individual, again another
 11 woman we have in Ottawa, have a small group of
 12 staff that deal with the licensing or the
 13 certification of foreign operators who may
 14 wish to operate in Canada, and so we work with
 15 her international colleagues to do some
 16 connection there. On the far right you'll see
 17 a dotted line to the regions. The dotted line
 18 expresses a functional connection to our
 19 headquarters. As you can imagine, in a region
 20 being a distance from Ottawa, we want some
 21 line authority over the top of all of what
 22 goes on in a region, and that's the role that
 23 director general plays. That's the role I
 24 played in Atlantic Canada. That's the role I
 25 currently play in Ontario as the director

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1 general, so underneath me in this case in the
 2 Atlantic region would be the director of civil
 3 aviation, Arthur Allan, who we've mentioned
 4 earlier, so he would report to the director
 5 general. The director general is an
 6 administrator. That's his primary role. He
 7 certainly does have the ability to interact
 8 with the modes, but from a technical
 9 perspective if questions need to be asked,
 10 Arthur, for example, Arthur Allan, the
 11 director of civil aviation, wouldn't
 12 necessarily consult the director general. He
 13 would direct his questions to headquarters in
 14 Ottawa, and that would be the case with all of
 15 the regions. I mentioned that the national
 16 aircraft certification organization here has
 17 staff on the ground in the regions. They
 18 don't have again a direct line, but they have
 19 a functional authority over the top of them as
 20 well. I know that's too much, but to give you
 21 an idea.
 22 MS. FAGAN:
 23 Q. Okay, and you can correct me if I'm wrong, as
 24 I understand it in the Atlantic region there
 25 would be your civil, your surface, and your

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1 marine.
 2 MR. STEPHENSON:
 3 Q. Correct.
 4 MS. FAGAN:
 5 Q. And those three sort of modes of
 6 transportation would be--the administration
 7 would go to the director general for the
 8 Atlantic.
 9 MR. STEPHENSON:
 10 Q. Correct.
 11 MS. FAGAN:
 12 Q. And they would look after the administration-
 13 type needs of the surface, the marine, and the
 14 aviation.
 15 MR. STEPHENSON:
 16 Q. That's correct.
 17 MS. FAGAN:
 18 Q. However, if there was a particular technical,
 19 aviation-related topic that was really precise
 20 and specific to an aviaional question, the
 21 regional director in the Atlantic region would
 22 go to the director general of aviation in
 23 Ottawa for some direction or guidance or
 24 information if it's aviation question.
 25 MR. STEPHENSON:

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1 Q. That's correct and, as you can imagine,
 2 there'd be more than one question so it
 3 wouldn't normally be director to the director
 4 general. It would be--there is connections
 5 with all the staff below that happens all the
 6 time.
 7 MS. FAGAN:
 8 Q. Okay, so it's not only the director -
 9 MR. STEPHENSON:
 10 Q. Right.
 11 MS. FAGAN:
 12 Q. You're saying that the staff -
 13 MR. STEPHENSON:
 14 Q. The staff are all connected. They have those
 15 linkages. The flow of information in
 16 questions moves all the time.
 17 MS. FAGAN:
 18 Q. So that's what's meant by the dotted line.
 19 MR. STEPHENSON:
 20 Q. Correct.
 21 MS. FAGAN:
 22 Q. You're looking to two sources. If you were in
 23 the Ontario region or the Atlantic region,
 24 you'd look to two sources. An administration
 25 source would be the director for your region.

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1 A technical topic mode type source would be
 2 the headquarters for that mode in Ottawa.
 3 MR. STEPHENSON:
 4 Q. That's correct.
 5 MS. FAGAN:
 6 Q. Okay. The certification of the aircraft, is
 7 the certification of an aircraft basically
 8 dealt with in Ottawa at headquarters or does
 9 the regions get involved in the certification
 10 of aircraft?
 11 MR. STEPHENSON:
 12 Q. Well, because of the resources available in
 13 Ottawa, I mentioned to you, for example, in
 14 headquarters, and I don't know the exact
 15 number, but they have very close to a 100
 16 engineers. It might be 60 or 80, but it's a
 17 large number of engineers that they have
 18 available to them, and engineering is a
 19 complex issue. People become experts in
 20 certain areas. In the Atlantic region, and
 21 again I don't remember the exact number, but
 22 they might have two or three. I know in
 23 Ontario I have about 10, so in Ontario it's a
 24 fairly large industrial area so obviously it
 25 would make sense we'd have more, but it's

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1 still not that many, so even in the region
 2 when we deal with products we rely on our
 3 headquarters' colleagues to assist us in--when
 4 we get into specialty areas because they have
 5 a broader group available to them. So to
 6 answer your question directly, when it comes
 7 to the certification of an aircraft in its
 8 entirety, normally handled in Ottawa.
 9 MS. FAGAN:
 10 Q. Okay. The civil aviation for Transport
 11 Canada, that entire branch, about how many
 12 people or employees would be involved in civil
 13 aviation. I mean, we have Transport Canada.
 14 Generally, how many are devoted to civil
 15 aviation, and then how many would be devoted
 16 to civil aviation in the Atlantic region?
 17 MR. STEPHENSON:
 18 Q. Sure, so Transport Canada has about 600
 19 employees. Aviation across the country,
 20 including headquarters, is about 1,500. Here
 21 in Atlantic region, aviation is about 80
 22 people.
 23 MS. FAGAN:
 24 Q. Marine and surface in the Atlantic region, how
 25 would they compare to the 80? Would marine

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1 have more than the 80 or less?
 2 MR. STEPHENSON:
 3 Q. Yeah, Marine in Atlantic has substantially
 4 more. To just pull an number out of my head,
 5 my recollection is it's about 150, 160, and
 6 contrast that to Ontario, if I may, just to
 7 give you a sense--marine is substantially
 8 smaller in Ontario. The Great Lakes there are
 9 very active, but we simply don't have that
 10 kind of traffic so I'm going to again say
 11 about 40. Aviation in Ontario is about 200
 12 employees, just to kind of give you the
 13 contrast.
 14 MS. FAGAN:
 15 Q. Because it has to do with the level of
 16 activity for that particular mode.
 17 MR. STEPHENSON:
 18 Q. Exactly.
 19 MS. FAGAN:
 20 Q. Okay. The prairies would have pretty lean in
 21 marine.
 22 MR. STEPHENSON:
 23 Q. The prairie's marine is relatively small,
 24 right.
 25 MS. FAGAN:

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1 Q. Okay.
 2 MR. STEPHENSON:
 3 Q. Yet aviation is quite large.
 4 MS. FAGAN:
 5 Q. There is a second organizational chart that
 6 you have included in your slide presentation,
 7 and before we move on to some of the other
 8 topics perhaps you could go through and
 9 explain what this slide demonstrates.
 10 MR. STEPHENSON:
 11 Q. Sure, and that's just a very simple graphic of
 12 what the Atlantic region civil aviation branch
 13 looks like. You'll see essentially the same
 14 mirror across the country. Currently
 15 underneath a director we have the branch
 16 divided into several groups. Our commercial
 17 and business aviation division, that's the
 18 group that deals primarily with commercial
 19 operations from an operations perspective, in
 20 other words, the pilot side and the manner in
 21 which they fly aircraft. The business piece,
 22 just forgive me, somebody may have a question
 23 about that. It's a minor issue for this
 24 inquiry, but not for the business community,
 25 but operating a business jet, for example,

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1 there's a small business contingency that we
 2 regulate business aircraft to a higher
 3 standard than a simple private aircraft that
 4 somebody might fly around. Once you get to a
 5 certain size of aircraft, we have stronger
 6 operational regulations.
 7 MS. FAGAN:
 8 Q. So the business part, that would be, say, a
 9 corporate jet for a -
 10 MR. STEPHENSON:
 11 Q. Correct, whether it be as a Learjet or even a
 12 Boeing 747 in corporate operations, so we
 13 leave that with that group because they have
 14 expertise in the operation of larger aircraft.
 15 The general aviation division does everything
 16 from the licensing, process of licensing,
 17 literally the administrative of handing over a
 18 license as we all do with our driver's
 19 license, to the actual certification of
 20 pilots. Flight instructors, they examine
 21 flight instructors. They hold and control the
 22 piece that talks about the licensing portion
 23 of pilots, pilots specifically. Also just the
 24 general, private pilot who might want to write
 25 an exam, general aviation looks after that.

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1 System safety is a group that's been changing
 2 over time. It's getting more and more
 3 dynamic. It's a group that is--it's basically
 4 a place where data has been collected.
 5 Traditionally, it's a place where data has
 6 been collected on events that occur in our
 7 system. They do analysis. They have
 8 traditionally provided guidance or information
 9 out to the industry as a whole. Certainly,
 10 they talk to each other, work with our
 11 headquarters folks to try and determine our
 12 direction from one year to the next on where
 13 we might focus on education and so and so
 14 forth. I think, as I say, that's changing
 15 over time. It's actually getting quite
 16 progressive. Your opening discussion on
 17 Monday, actually, Commissioner, tweaked my
 18 interest when you talked about culture and
 19 that sort of thing, and system safety has been
 20 working in those particular areas, human
 21 factors and so on and so forth. The
 22 aerodromes and aeronavigation is the
 23 regulatory piece. I don't think I mentioned
 24 Nav Canada specifically, but Nav Canada in or
 25 about 1996 or so in the last century, we

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1 divested Transport Canada's role of looking
 2 after the entire aviation navigation system.
 3 Prior to that, we were about 25,000 employees.
 4 We divested ourselves of that piece because we
 5 were the regulator and the operator, and one
 6 might see a conflict there, so through policy
 7 we decided to separate ourselves. Nav Canada
 8 as a not-for-profit corporation was developed,
 9 and our aerodromes and aeronavigation section
 10 either in headquarters or in region, have a
 11 role to play as a regulator in that particular
 12 area, but aerodromes and airports is probably
 13 something we might talk about today.
 14 Maintenance and -
 15 MS. FAGAN:
 16 Q. Can you -
 17 MR. STEPHENSON:
 18 Q. Sorry, go ahead.
 19 MS. FAGAN:
 20 Q. Sorry. What is Nav Canada? I mean, what do
 21 they do?
 22 MR. STEPHENSON:
 23 Q. Yeah, Nav Canada basically employs all of the
 24 air traffic controllers. They employ all of
 25 the flight service specialists that actually

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1 provide services to pilots from a non air
 2 traffic control perspective. They design the
 3 air space. They control the design and the
 4 manipulation of how the airways, for example,
 5 across this country are designed and utilized.
 6 They have a direct link to Environment Canada
 7 who have responsibilities for actual--the
 8 creation of weather, so there's a natural link
 9 there because they're the source of the
 10 information to our people who actually fly in
 11 the sky, and I'm really going in general terms
 12 here. I'm sure Nav Canada could do a better
 13 presentation on what they do, but it's, as you
 14 can imagine, a fairly complex system.
 15 MS. FAGAN:
 16 Q. And so your division, aerodromes and
 17 aeronavigation, that's your oversight or
 18 regulation of this entity.
 19 MR. STEPHENSON:
 20 Q. Nav Canada, that's right. The primary source
 21 of oversight for Nav Canada is actually
 22 centered in headquarters. Nav Canada is
 23 centered in headquarters in our oversight.
 24 The administrative is there, but we have field
 25 inspectors across the country as well.

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1 MS. FAGAN:
 2 Q. Maintenance and manufacturing.
 3 MR. STEPHENSON:
 4 Q. Maintenance and manufacturing is, I will say,
 5 the counterpart to commercial and business
 6 aviation. They look after, obviously, the
 7 maintenance specifically of not just
 8 commercial, but private aircraft. Anybody
 9 engaged in the maintenance of an aircraft or
 10 an aeronautical product of any sort, they're
 11 the group--they employ primarily maintenance
 12 engineers, and the manufacturing piece also is
 13 a group that oversees certified manufacturers.
 14 It would be somebody who manufactures either
 15 an aircraft or an aeronautical product so -
 16 MS. FAGAN:
 17 Q. So when you talk manufacturing, it's not--in
 18 the region there is the approval or
 19 certification of the design, and the approval
 20 of that particular product.
 21 MR. STEPHENSON:
 22 Q. Uh-hm.
 23 MS. FAGAN:
 24 Q. But then at some point it has to be
 25 manufactured.

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1 MR. STEPHENSON:
 2 Q. That's correct.
 3 MS. FAGAN:
 4 Q. So this would be the oversight of the
 5 manufacturer complying with the design.
 6 MR. STEPHENSON:
 7 Q. That's correct, and we certify manufacturers,
 8 so if you're in the manufacturing business
 9 then you would need a certificate in order to
 10 do that.
 11 MS. FAGAN:
 12 Q. Okay, the last two.
 13 MR. STEPHENSON:
 14 Q. The aviation enforcement. Forgive me,
 15 aviation enforcement is again a service to the
 16 other groups. Aviation enforcement, I
 17 mentioned I was the manager of aviation
 18 enforcement in Ontario for a number of years.
 19 It's a group that house some specialists.
 20 Specifically, they've traditionally hired
 21 pilots and engineers in their ranks, trained
 22 them to become investigators, and so they will
 23 be the individuals who will receive perhaps
 24 packages from the other operational groups.
 25 The operational groups will have to determine

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1 that an enforcement process is more suitable
 2 for their client if they're having difficulty
 3 with compliance. In other words, somebody is
 4 breaking the rules and not complying. We have
 5 many vehicles in order to gain compliance.
 6 One of them is simply convincing them that
 7 their certificate is important to them, and
 8 that if they want to maintain their
 9 certificate, compliance is important.
 10 Sometimes we actually issue fines and whatnot.
 11 The private pilot out flying his aircraft
 12 doesn't hold an operating certificate. They
 13 hold a private pilot's license and so, really,
 14 our only vehicle for enforcement for them is
 15 actually the enforcement branch, other than
 16 simply being assured that they're going to
 17 comply, so we rely on them to actually have
 18 that interaction with our department. The
 19 aircraft certification branch, or division
 20 rather, is the section--and I mentioned to you
 21 in regions they're relatively small. In
 22 Atlantic they're probably two or three. I
 23 haven't got the latest count here in Atlantic,
 24 but they're the ones that would receive--again
 25 in regions, my region, Ontario, or here, our

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1 primary business is modifications to aircraft
 2 where somebody has relative to a large
 3 aircraft, relatively small projects, and
 4 they'll bring projects to us and they'll want
 5 to go through a process of certification, and
 6 so our people generally can deal with the
 7 volume of work that a region might deal with
 8 from a simple project perspective.
 9 MS. FAGAN:
 10 Q. Okay, thank you, so it's fairly clear, I
 11 think, from this slide that in the regions
 12 this work is done from an operational
 13 perspective, and the implementation of the
 14 policies and the regulations that are set in
 15 Ottawa, so Ottawa will set up the framework.
 16 MR. STEPHENSON:
 17 Q. Right.
 18 MS. FAGAN:
 19 Q. And then it's up to the region to ensure that
 20 it's implemented.
 21 MR. STEPHENSON:
 22 Q. That's correct. I should say though the
 23 regional director--I should add, actually sits
 24 around a national table on a regular basis, so
 25 we're not completely separated from

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1 headquarters. We're directly engaged all the
 2 time. Our staff underneath the Civ. Av.
 3 director in Atlantic, for example, they'll be
 4 engaged in many discussions when it comes to
 5 actually the development of a policy or the
 6 development of a regulation, so there is a
 7 direct link on a regular basis, so they don't
 8 do it isolation. Just thought I'd share that.

9 MS. FAGAN:
 10 Q. That would lead into Transport Canada
 11 generally. Transport Canada, as an entity and
 12 as being charged with civil aviation and
 13 safety, does Transport Canada look beyond the
 14 borders of Canada itself? Do we, you know, as
 15 a Canadian entity act in a vacuum, or do we
 16 look elsewhere?

17 MR. STEPHENSON:
 18 Q. As probably everybody knows, aviation is a
 19 worldwide mode of transportation. You know,
 20 over time we've seen an evolution of the
 21 manner in which we conduct ourselves. We've
 22 obviously over probably years gone by focused
 23 on our country and focused on our country with
 24 respect to aviation, I suppose, which is not
 25 completely true. We've obviously been flying

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1 internationally for some time. Canada happens
 2 to be a member of an international
 3 organization. It's the International Civil
 4 Aviation Organization, an acronym, forgive me,
 5 ICAO. It flows a little better again. ICAO
 6 happens to be centered in Montreal, Quebec,
 7 where we are a member state. It has a link to
 8 the United Nations, so you can imagine the
 9 members of ICAO and who they might be.
 10 There's probably about 170, 180, 190 states
 11 who are linked to ICAO. Canada happens to be
 12 a fairly significant leader in that unit, not
 13 just because it's centered here, but we have
 14 an interest, obviously, in aviation. Canada
 15 has, I believe, about the third-largest fleet
 16 of aircraft in the world, so obviously we have
 17 a vested interest in the manner in which we do
 18 business. Aviation from a manufacturing--or
 19 design and manufacturing industry, obviously,
 20 is worldwide as well. Canada does sell its
 21 products abroad, and so we have an interest in
 22 that particular--ICAO looks at, and they
 23 develop recommended standards, I guess is the
 24 expression. Standards, or recommended
 25 practices, I believe, is the proper term.

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1 Again another acronym, SARPS, I don't use that
 2 very often because I don't talk about ICAO
 3 often, but ICAO has influenced, or they
 4 developed those standards of recommended
 5 practices in pretty much all aspects of
 6 aviation, whether it be the design and
 7 manufacturing and maintenance of aircraft,
 8 whether it's the operation of aircraft,
 9 whether it's the operation of an airport or
 10 aerodrome. I guess I could go on. It's very
 11 influential, although it doesn't have
 12 regulatory power over the top of any state
 13 particularly, but the states--"the states"
 14 meaning Canada as an example being a member
 15 state, do everything they can to comply with
 16 those recommended practices, and essentially I
 17 think we're very--as I said, we're quite
 18 influential in that process.

19 MS. FAGAN:
 20 Q. For an example, would it be problematic if a
 21 country wanted to set up an airport and accept
 22 international carriers or international
 23 airlines if it didn't comply or wasn't a
 24 member of this international organization? I
 25 mean, how much influence does it really have?

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1 MR. STEPHENSON:
 2 Q. I would suggest it's significant. I mentioned
 3 our international operation in Ottawa,
 4 international group that looks after air
 5 carriers, for example, coming into Canada. If
 6 they're member states, that's significant.
 7 They have an oversight program of their own,
 8 and so it's important that they know that
 9 they're in compliance with ICAO regulations.
 10 We look to them to comply with the Canadian
 11 regulations (a) because they're not--they
 12 don't have to. They have to comply with their
 13 own regulations. Their structure is based on
 14 ICAO, and I'm going to just leave it there,
 15 okay.

16 MS. FAGAN:
 17 Q. Now that we have the regulatory regime and how
 18 you're organized at Transport Canada, I'd like
 19 to now move into the various components as to
 20 what Transport Canada regulates, and I
 21 understand in your opening or one of your
 22 earlier statements that Transport Canada
 23 regulates products. It regulates
 24 organizations, and it regulates people.

25 MR. STEPHENSON:

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1 Q. Yes.
 2 MS. FAGAN:
 3 Q. So we're going to go down--eventually we'll
 4 get through them all.
 5 MR. STEPHENSON:
 6 Q. Sure.
 7 MS. FAGAN:
 8 Q. And we're going to start with products, and
 9 eventually work our way to the people, and I'd
 10 like you to start with an explanation of what
 11 is included in the definition of an
 12 aeronautical product, and I understand that
 13 definition would be found in the CARS.
 14 MR. STEPHENSON:
 15 Q. Yes.
 16 MS. FAGAN:
 17 Q. The Civil Aviation Regulations and, pretty
 18 well, if you want to know anything about
 19 aviation in Canada you would go to the CARS,
 20 so the first thing we'll start with is what is
 21 a product?
 22 MR. STEPHENSON:
 23 Q. Yeah, a product, and again inside the industry
 24 it's fairly well known, outside maybe not so
 25 much. I'll start with the simple product, an

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1 aircraft. Name any aircraft type, it doesn't
 2 make any difference. You have an aircraft and
 3 whether it be an aeroplane or whether it be a
 4 helicopter, we differentiate aircraft
 5 obviously with the different types, but I'm a
 6 fixed-wing guy so forgive me. I've got a
 7 fixed wing in my hand right now, but
 8 associated with the aircraft it's obviously--
 9 it's a composition of parts is what it is, so
 10 any one of those parts could be determined to
 11 be a product, or an aeronautical product,
 12 whether it be an engine or propeller, whether
 13 it be a wing or a piece of landing gear, a
 14 tire which is generated or created by, you
 15 know, a tire manufacturer, finds its way onto
 16 an aircraft, and so they would have to go
 17 through a process to make sure it can go onto
 18 an aircraft. Unlike an automobile, the
 19 standards are probably not the same. We
 20 certainly have our clear standards for what a
 21 product might be.
 22 MS. FAGAN:
 23 Q. So if it's a part of an aircraft -
 24 MR. STEPHENSON:
 25 A. Right.

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1 MS. FAGAN:
 2 Q. - or attached to the aircraft, would it be a
 3 product?
 4 MR. STEPHENSON:
 5 A. It would be a product.
 6 MS. FAGAN:
 7 Q. It would be a product.
 8 MR. STEPHENSON:
 9 A. Now, I should say, there are other things that
 10 could be considered product. I know a
 11 discussion we may have here today or in the
 12 future might be immersion suits. Is an
 13 immersion suit an product? The answer is yes,
 14 because the regulations point to it and say
 15 it's required on board because of whatever.
 16 We'll have that discussion. So it could
 17 become a product as well. So other things
 18 could become a product, an aeronautical
 19 product.
 20 MS. FAGAN:
 21 Q. Since Transport Canada regulates the product,
 22 we would start with the design.
 23 MR. STEPHENSON:
 24 A. Right.
 25 MS. FAGAN:

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1 Q. And I'm going to ask you to take us through
 2 the process, if I was a Canadian manufacturer,
 3 and first I'm a design, because the designer,
 4 as I understand, could be different from the
 5 manufacturer.
 6 MR. STEPHENSON:
 7 A. Correct.
 8 MS. FAGAN:
 9 Q. So if I'm in Ontario, do we have any designers
 10 or manufacturers in Canada?
 11 MR. STEPHENSON:
 12 A. We do. I mean, our largest ones maybe
 13 Bombardier centred in Montreal with
 14 manufacturing happening in Toronto actually.
 15 Bell Helicopter Textron, I think, based in
 16 Montreal, I think. There are a couple of
 17 large ones that quickly come to my mind.
 18 MS. FAGAN:
 19 Q. What about engines?
 20 MR. STEPHENSON:
 21 A. Same thing, Pratt and Whitney based in
 22 Montreal again manufacture engines. They
 23 design and manufacture engines.
 24 MS. FAGAN:
 25 Q. So if any of those organizations wished to

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1 have an engine or an aircraft fixed wing or a
 2 helicopter, they want to get this product into
 3 the market. They want to sell their machine,
 4 their product. How would they go about it?
 5 MR. STEPHENSON:
 6 A. Okay. So first my description will be from a
 7 layman's perspective. I'll try not to be too
 8 technical, mostly because I might make an
 9 error. It's not my intent to be exactly
 10 correct, but you can imagine you want to
 11 design an aircraft and market it around the
 12 world. There's a fairly robust process. It
 13 takes many, many years. I'm talking about an
 14 entire aircraft now for my discussion. It
 15 takes many, many years to do that. It starts
 16 with the drawing board, starts with an idea,
 17 starts with the drawing board. Hopefully
 18 earlier on, the--use the manufacturer, I mean
 19 the design organization--begins as early as
 20 they can, we like this, they start to interact
 21 with the regulator. Here, in Canada, we'll
 22 interact with them relatively soon to have
 23 preliminary discussions about what's on their
 24 mind or what they're planning to do. We try
 25 to familiarize ourselves with what it is

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1 they're trying to accomplish, what aircraft
 2 type it might be, what environment they might
 3 be interested in operating it in. Transport
 4 Canada will, earlier on, and it's a
 5 progressive process, but we'll determine where
 6 we want to become involved, directly involved.
 7 For example, if they're going to use a Pratt
 8 and Whitney engine for it, well, we have
 9 already done work, so maybe won't necessarily
 10 get directly involved in that particular
 11 piece, but they'll be choosing engines.
 12 They'll be choosing propellers. We'll be
 13 familiar with those sorts of things.
 14 The things that we're interested in are
 15 things that we may not be familiar with.
 16 They'll come with a testing regime to test
 17 their product or elements of their product.
 18 You can imagine the testing that goes on with
 19 an entire aircraft, the structures and the
 20 electrical systems, the hydraulics, the
 21 avionics, all the sorts of things that are
 22 going to go into this machine and how they're
 23 going to interact. So we'll want to know what
 24 type of testing is going on. We'll have some
 25 involvement in some of those areas. We'll

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1 determine that when we work with the designer
 2 and as I said, it takes many, many years to
 3 get to a process where they actually might
 4 have built a prototype and actually would get
 5 to testing the prototype. Literally flying
 6 it, there'd be a flight test regime around
 7 that. That's very complex. Transport Canada
 8 has a flight test section in Ottawa under the
 9 Aircraft Certification branch. So again, it's
 10 really, really complex.
 11 MS. FAGAN:
 12 Q. So if the designer decided "I'd like to start
 13 a helicopter from scratch" or a fixed wing jet
 14 from scratch, what would be the average or a
 15 range? I mean, when you say years, they come
 16 in with the design, the sketch, and they say
 17 "this is what we're going to do, and this is
 18 the components we think we're going to use."
 19 They're long before they've actually even
 20 built the prototype.
 21 MR. STEPHENSON:
 22 A. Right.
 23 MS. FAGAN:
 24 Q. So you're talking they come in with the paper,
 25 almost like an architect with the drawings.

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1 How many years would it be to take a
 2 helicopter or a jet from that piece of paper
 3 to a certification where it can actually be
 4 sold?
 5 MR. STEPHENSON:
 6 A. From Transport Canada's perspective, it's--
 7 well, I'll tell you, I think I may have
 8 mentioned it to you before. We actually have
 9 in our regulations, I refer to it as a stale
 10 period. It says in the regs, if it's been on
 11 our books for about five years, it becomes
 12 stale. In other words, we won't deal with it
 13 after that. There may be circumstances around
 14 that. So there's a method of extending that
 15 five-year period. I really can't answer your
 16 question because the person who has the idea
 17 and actually starts to interact with us, I
 18 wouldn't know how long that period was.
 19 MS. FAGAN:
 20 Q. Okay. From your interaction, from Transport
 21 Canada's perspective, how much time is
 22 involved?
 23 MR. STEPHENSON:
 24 A. Well, I would suggest it's ideally within that
 25 five-year period. So somebody set a five-year

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1 period based on their wisdom and the time we
 2 would actually like to have a file open on
 3 our--I'll say literally on our desk.
 4 MS. FAGAN:
 5 Q. So it's not months? It's years?
 6 MR. STEPHENSON:
 7 A. It's years, yes, yeah, and that's for an
 8 aircraft entirely, right.
 9 MS. FAGAN:
 10 Q. That's the entire aircraft. An engine, I take
 11 it, would be less time?
 12 MR. STEPHENSON:
 13 A. Actually, an engine is fairly complex. It
 14 could be years too, I suspect.
 15 MS. FAGAN:
 16 Q. What happens once it's passed all of the tests
 17 and Transport Canada is writing to certify the
 18 aircraft? What is that certification called?
 19 MR. STEPHENSON:
 20 A. It's a type certificate. It's a document that
 21 literally certifies the standard that was--it
 22 certifies that the aircraft design has met the
 23 standard as set out in the airworthiness
 24 manual that we have. Our airworthiness
 25 regulations point to the airworthiness manual

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1 and that's a document that lays out the
 2 standards of design and maintenance of
 3 aircraft as well. So it certifies that that
 4 particular aircraft meets the design standard.
 5 MS. FAGAN:
 6 Q. So it's a type certificate?
 7 MR. STEPHENSON:
 8 A. That's right, and I'll use the expression, it
 9 gets locked in. In other words, that's the
 10 design that's been approved. So if they start
 11 to modify, then we're into a different
 12 discussion.
 13 MS. FAGAN:
 14 Q. So then it's manufactured?
 15 MR. STEPHENSON:
 16 A. Right.
 17 MS. FAGAN:
 18 Q. Now when it's being manufactured, the region--
 19 you had led us through one of the slides that
 20 there was a maintenance and manufacturing
 21 section.
 22 MR. STEPHENSON:
 23 A. Right.
 24 MS. FAGAN:
 25 Q. So once it's being manufactured, whatever

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1 region in which it's being manufactured, that
 2 region would oversee the manufacturing?
 3 MR. STEPHENSON:
 4 A. Yeah, the manufacturing. So in the case of
 5 Bombardier, they hold a manufacturing
 6 certificate for their equipment. They
 7 probably also receive some of their parts from
 8 third parties, I suspect. As I said, an
 9 aircraft is a complex piece of equipment, so
 10 whoever produces their tires, for example,
 11 would come from somebody else. That tire
 12 manufacturer will have a manufacturing
 13 certificate to manufacture tires for aircraft,
 14 but Bombardier as a whole would have a
 15 manufacturing certificate and that will allow
 16 them to actually build the aircraft, and
 17 again, it's a fairly complex certification
 18 process because we want to make sure they're
 19 building the aircraft that was certified, in
 20 other words under the certificate or the type
 21 certificate, we want to make sure that
 22 actually that's what they're building, not
 23 something else.
 24 MS. FAGAN:
 25 Q. And so if it requires a certain part or a

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1 certain component, this oversight in the
 2 region would be ensuring that the manufacturer
 3 was building according to the specs?
 4 MR. STEPHENSON:
 5 A. Right.
 6 MS. FAGAN:
 7 Q. The specifications in that.
 8 MR. STEPHENSON:
 9 A. In simple terms, yes, that's correct.
 10 MS. FAGAN:
 11 Q. Okay. Now the aircraft has been manufactured
 12 by a certified manufacturer and it's ready to
 13 leave the--I guess, it's either a hangar or
 14 it's coming off the line.
 15 MR. STEPHENSON:
 16 A. Comes off the line, yeah.
 17 MS. FAGAN:
 18 Q. Now it's ready to be sold. What is Transport
 19 Canada's involvement once it's about to leave
 20 the control of the manufacturer?
 21 MR. STEPHENSON:
 22 A. So what we have is a type certificate that
 23 allows a manufacturer to think about
 24 manufacturing. We have a manufacturing
 25 certificate that allows somebody to actually

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1 build an aircraft. It's about to go off the
 2 line. Before it can actually leave the
 3 ground, each individual aircraft must have a
 4 flight authority of some sort. A flight
 5 authority comes in many, many forms. The
 6 primary one we would be talking about is the
 7 certificate of airworthiness. In Canada,
 8 that's the expression we use. Most countries
 9 that I'm aware of use a similar expression.
 10 That's a certificate that demonstrates or
 11 certifies that the aircraft, at that time, or
 12 that moment, meets the airworthiness--sorry,
 13 meets the standards at which the aircraft is
 14 originally intended for. In other words, it
 15 has a type certificate and it meets that type
 16 certificate standard. So it's, if I can use
 17 the expression, it's airworthy, in simple
 18 terms.
 19 MS. FAGAN:
 20 Q. So a certificate of airworthiness is
 21 individual to each particular aircraft?
 22 MR. STEPHENSON:
 23 A. Correct.
 24 MS. FAGAN:
 25 Q. And a type certificate is the certification of

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1 the model, the design, that would then apply
 2 to a number of aircraft that are built
 3 according to that design?
 4 MR. STEPHENSON:
 5 A. That's essentially correct, yeah.
 6 MS. FAGAN:
 7 Q. Okay. You've mentioned that this is an
 8 international type industry. It's a global
 9 industry.
 10 MR. STEPHENSON:
 11 A. Um-hm.
 12 MS. FAGAN:
 13 Q. In North America, our largest partner is the
 14 United States.
 15 MR. STEPHENSON:
 16 A. Right.
 17 MS. FAGAN:
 18 Q. And anybody who's in Canada is more than aware
 19 that we generally market and sell to the
 20 American companies and public. It's a large
 21 market. So let's say--I'm going to ask you to
 22 take the example of your jet that was built in
 23 Quebec and manufactured and all of this work
 24 is done. Now there is a United Airlines or
 25 another American airline company wants to use

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1 that Canadian-made jet in Florida. They want
 2 to take the jet that's made in Canada and they
 3 want to use it in the United States. Now an
 4 American operator, not a Canadian operator,
 5 because I understand a Canadian operator,
 6 that's a whole different thing, and we'll get
 7 to that in the organization. Just let's take
 8 the airplane and sell it to an American.
 9 What's the process?
 10 MR. STEPHENSON:
 11 A. Okay. So just to talk about where we are
 12 today. The product that now has a certificate
 13 of airworthiness, just to be clear, can be
 14 operated in Canada. It's ready to go. I'll
 15 just say that at once. You have to imagine,
 16 and you said it rightly so, when you design an
 17 aircraft for a market, market is not going to
 18 be Canada. Market certainly will be in
 19 Canada, as part of their plan, but it's
 20 probably not sufficient to sustain that
 21 particular investment. So they're going to be
 22 looking for markets probably earlier on. We
 23 probably won't get to the certificate of
 24 airworthiness and then look for another
 25 market. You can imagine they're going to be

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1 doing that earlier on. The US is a good
 2 example, Europeans, perhaps Asia as well. But
 3 we'll speak about the US, just because it's a
 4 simpler link, I think, and we have a
 5 relationship with the FAA, the Federal
 6 Aviation Administration in the US.
 7 MS. FAGAN:
 8 Q. Federal Aviation Administration in the US?
 9 MR. STEPHENSON:
 10 A. Yeah.
 11 MS. FAGAN:
 12 Q. Who are they?
 13 MR. STEPHENSON:
 14 A. They're Transport Canada's counterpart.
 15 MS. FAGAN:
 16 Q. So they are the US Transport Canada.
 17 MR. STEPHENSON:
 18 A. When I go to the US, they actually refer to us
 19 as the Canadian FAA, because otherwise, the
 20 American won't know who you are. They don't
 21 know who Transport Canada is. So yeah,
 22 they're our counterpart. So you can imagine
 23 the design and manufacturing company,
 24 particularly if they're the same, and they
 25 usually are, will begin a process early on of

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1 engaging a client and with that client,
 2 they'll also begin through us an engagement
 3 with the--through the authority in the
 4 particular country, in this case, the FAA, to
 5 begin a process to allow them to become
 6 familiar with our, meaning the Canadian design
 7 and the Canadian product that's being
 8 proposed. So they do the familiarization, I
 9 would suggest, almost in parallel to us in
 10 this example. They won't wait, because it's
 11 imperative that when they start to roll off
 12 the line, they can actually go to their
 13 clients, and quite typically you'll see no
 14 Canadian market at all initially, maybe in
 15 time, but the products will initially go
 16 outside of our borders. So you can imagine
 17 that that relationship starts early. So they
 18 begin to familiarize themselves and in the
 19 case of the US, we actually have bilateral
 20 agreements. So a lot of the work we do in our
 21 engineering group is accepted, not without
 22 some US scrutiny. They certainly will be
 23 looking at the product and they'll be asking
 24 questions and scrutinize themselves, but there
 25 is a familiarity with our process because we

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1 have that relationship. We've done those
 2 bilateral--had those bilateral discussions, so
 3 that they understand what our rigor is and how
 4 well we do and the areas that we focus on.
 5 MS. FAGAN:
 6 Q. Why is the client involved? Who would be the
 7 client? You had mentioned that the client in
 8 the US is engaged.
 9 MR. STEPHENSON:
 10 A. Can I ask you to ask that question when we
 11 flip this around?
 12 MS. FAGAN:
 13 Q. Okay.
 14 MR. STEPHENSON:
 15 A. Because that might be more appropriate,
 16 because it's a good question.
 17 MS. FAGAN:
 18 Q. Okay. We're now going to move to the flip
 19 around.
 20 MR. STEPHENSON:
 21 A. Okay.
 22 MS. FAGAN:
 23 Q. All right. The US designs and manufactures
 24 aircraft. Would that be fair?
 25 MR. STEPHENSON:

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1 A. That's fair.
 2 MS. FAGAN:
 3 Q. Okay. So they're also designing and
 4 manufacturing aircraft and because this is
 5 international, would it be also accurate to
 6 say that American designed and manufactured
 7 aircraft are purchased by Canadian operators
 8 and flown in Canada?
 9 MR. STEPHENSON:
 10 A. That's true.
 11 MS. FAGAN:
 12 Q. So can you describe the process if--flip it
 13 around. Let's say we're building the aircraft
 14 in the US.
 15 MR. STEPHENSON:
 16 A. Well, and again, it's essentially the same.
 17 There would be a Canadian purchaser or a
 18 Canadian market here. Somebody in Canada will
 19 have shown interest in that particular
 20 aircraft type. They will--and it may not be
 21 on our radar. If I use an example, an obscure
 22 aircraft or a product being designed in the
 23 country that might not ever have a connection
 24 to Canada, we're not going to chase it down.
 25 We're not going to be aware of and pursue each

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1 one. Even if we have a bilateral with that
 2 country, we may not be chasing each product
 3 that's being designed in their country because
 4 there's no market here and we only have so
 5 many resources. So we really do rely on a
 6 purchaser to say "we're interested in an
 7 aircraft type" and then that engagement
 8 begins. They become the sponsor, as it were.
 9 MS. FAGAN:
 10 Q. The sponsor. So when you had mentioned the
 11 client in the US, a Canadian product going to
 12 the US, would it be accurate to say that if
 13 there's a client or a customer in Canada, it
 14 would be the client or customer that generally
 15 would initiate Transport Canada's involvement?
 16 If there's no client or customer in Canada,
 17 Transport Canada is not going to take an
 18 interest in the certification?
 19 MR. STEPHENSON:
 20 A. That's correct. I mean, we know there are
 21 large transport jets being generated by large
 22 manufacturers today. I don't know this for a
 23 fact, but I suspect we haven't certified in
 24 this country every one of those, because there
 25 isn't a market here and someone's not likely

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1 to buy one of these monster jets, at least
 2 today in the Canadian market. It's possible,
 3 and once they do, we'll be there and we'll
 4 engage in this process. Keeping in mind
 5 again, we have bilaterals between us and the
 6 US, so it's important that everybody
 7 understands that we have this relationship, we
 8 know what their rigor is. We know what
 9 process they go through and so we start to do
 10 a familiarization with that product and then
 11 we will ask our questions and we'll engage
 12 possibly in some technical discussion about
 13 something that we have interest in.

14 MS. FAGAN:
 15 Q. So your description appears to me to be more
 16 than just you just accept their word for it.
 17 When you talk scrutiny or a discussion, could
 18 you give us an example, if there was a product
 19 coming into Canada or going to be sold to a
 20 Canadian operator, what do you mean by
 21 scrutiny? What do the Canadian -

22 MR. STEPHENSON:
 23 A. Well, I mean, we'll see the drawings. We'll
 24 see the testing. We can ask ourselves
 25 specifically about, you know, how a product is

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1 being tested, the part--we're talking about
 2 the whole aircraft, of course. You know, we
 3 might even send a representative down during
 4 flight testing. We have all of those options
 5 to do all of those things to satisfy ourselves
 6 that in the areas of our interest that things
 7 are being looked after. Now again, if it's an
 8 aircraft with Pratt and Whitney engine on,
 9 we're very familiar with that. We probably
 10 wouldn't be too concerned about it. But the
 11 interaction of the engine with the aircraft,
 12 we may have an interest in. So we'll probably
 13 maybe ask questions or be involved with some
 14 of that activity there.

15 MS. FAGAN:
 16 Q. Okay. We are going to drill down eventually
 17 into some other--the particular operations
 18 offshore Newfoundland, but for the purpose of
 19 this topic, which is the certification, I
 20 understand that currently the helicopter
 21 that's being used to transport the workers
 22 offshore is the Sikorsky S-92A.

23 MR. STEPHENSON:
 24 A. That's correct.

25 MS. FAGAN:

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1 Q. That's correct?
 2 MR. STEPHENSON:
 3 A. Yeah.

4 MS. FAGAN:
 5 Q. And do you know what country certified the
 6 design and the manufacture of that helicopter?
 7 MR. STEPHENSON:
 8 A. Sikorsky is in the US.

9 MS. FAGAN:
 10 Q. That's a US.

11 MR. STEPHENSON:
 12 A. Yes.

13 MS. FAGAN:
 14 Q. So this description, this flip side
 15 description and process, would that have been
 16 the process used for the Sikorsky S-92?
 17 MR. STEPHENSON:
 18 A. Yes.

19 MS. FAGAN:
 20 Q. Now we have another bullet on your slide and
 21 that is continued airworthiness.

22 MR. STEPHENSON:
 23 A. Yes.

24 MS. FAGAN:
 25 Q. So it's certified. Whether it's certified in

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1 the US and then certified again in Canada or
 2 it's the other way around, if we--what happens
 3 after the aircraft leaves the control of the
 4 manufacturer?
 5 MR. STEPHENSON:
 6 A. Okay, and I'll preface my statement with, and
 7 Commissioner Wells, if I can just repeat this
 8 again, this isn't the business that I carry
 9 out on a daily basis personally, so I'll try
 10 to describe to you from a layman's
 11 perspective. I know how the process works
 12 more than in general, as you can probably
 13 sense. It'll be the same thing with this
 14 particular description. It's not something
 15 that I do personally every day. So I'm going
 16 to describe it from a layman's perspective and
 17 I'm hoping that everybody--it'll give
 18 everybody a better chance, particularly those
 19 who are not in the aviation industry, to
 20 understand what I'm talking about.

21 So in essence, once the aircraft is
 22 designed, the aircraft is manufactured, it
 23 receives a certificate of airworthiness and it
 24 basically leaves the control of--it goes to
 25 the operator, whether it be a private

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1 individual, whether it be a certified air
 2 operator. The authorizing entity or the
 3 authorizing authority, that's Transport Canada
 4 in the case of Canada, or in the case of the
 5 US with the S-92 as you mentioned, or any
 6 other product they might design, they're the
 7 authorizing authority and the manufacturer
 8 that exists in the case of Canada, our
 9 examples that we've used here today. So let
 10 me talk about Canada. I think it'll probably
 11 make it simple.

12 So Canada, Transport Canada and the
 13 manufacturers here in Canada have an
 14 obligation to maintain contact with the
 15 aircraft, no matter where they're operated,
 16 and there is a flow of information that has to
 17 happen between, I'll say, all parties as the
 18 aircraft begins its life. If it has service
 19 difficulties, for example, we have a flow of
 20 information that happens back to the
 21 manufacturer, back to the entity, back to--the
 22 authorizing entity, in this case Transport
 23 Canada. We receive all of that information
 24 and just it's data. That's what we receive is
 25 data. Sometimes the issues are minor.

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1 Sometimes they're not minor, and that's our--
 2 in simple terms, our process to analyze the
 3 health of the fleet as it is out around the
 4 world.

5 The reverse is the case. If it's an
 6 aircraft, in our example, manufactured in the
 7 US, the authority of the FAA and the
 8 organization who designed and manufactured the
 9 aircraft have a responsibility to have the
 10 information flow to them, and then they do
 11 their analysis and then certain things may or
 12 may not come out of them to the operators and
 13 to the entity, such as Transport Canada. No
 14 matter what the aircraft type is, if it's
 15 designed and manufactured in the US, we would
 16 expect that information to come to us as well.
 17 So they go out to the operating--to the
 18 controlling entities or the Transport Canada's
 19 of the world as well.

20 MS. FAGAN:
 21 Q. So your Bombardier jet which is being operated
 22 by United Airlines in the Keys in Florida, if
 23 Canada was certifying the type certificate,
 24 certifying authority, it would be up to
 25 Transport Canada to get the information on

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1 that particular product and make sure it flows
 2 out to the FAA and to the operator, to the
 3 operators who are using that aircraft?
 4 MR. STEPHENSON:
 5 A. Essentially that's true. I'm not sure that it
 6 doesn't come from the manufacturer to the
 7 operators.
 8 MS. FAGAN:
 9 Q. But it might go to the manufacturer.
 10 MR. STEPHENSON:
 11 A. But that flow of information has to happen.
 12 MS. FAGAN:
 13 Q. The flow?
 14 MR. STEPHENSON:
 15 A. Yeah.
 16 MS. FAGAN:
 17 Q. And then it's the flip side, you've just
 18 explained.
 19 MR. STEPHENSON:
 20 A. Yeah.
 21 MS. FAGAN:
 22 Q. If it's a US manufactured item, it would be up
 23 to that US FAA to flow the information, and
 24 those manufacturers to flow the information
 25 out.

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1 MR. STEPHENSON:
 2 A. So it's a very integrated flow of information.
 3 As I said, I don't do that on a regular basis,
 4 so I couldn't tell you how the nuts and bolts
 5 of it work, but that's essentially the
 6 accountabilities and that's the way it's
 7 structured and it works quite well.
 8 MS. FAGAN:
 9 Q. Okay. In addition to the continued
 10 airworthiness, you have a--we're going to
 11 eventually move to modifications, but before
 12 we move to modifications, I understand there's
 13 another valuation beyond just the
 14 certification of the product itself and that
 15 would be the operational evaluation. Can you
 16 explain what an operational evaluation is?
 17 MR. STEPHENSON:
 18 A. Sure, and again, an operational evaluation
 19 isn't something we'd do for an aircraft
 20 unless--from Canada's perspective, unless
 21 there was a Canadian purchaser. In other
 22 words, somebody was going to actually purchase
 23 the aircraft. And again, normally earlier on
 24 in its design and the manufacturing process,
 25 but not necessarily, it might be later on,

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1 might be a decade later when somebody decides
 2 they're going to purchase an aircraft, but
 3 what we do is put together an operational
 4 team. There would be a sponsoring company
 5 again, usually the purchaser, the initial
 6 purchaser, and we put together a team. We
 7 actually go to where the aircraft is designed
 8 and manufactured, usually is the way it would
 9 work, and again, I'm simplifying, but we go
 10 and we evaluate the aircraft from an
 11 operational perspective.

12 Depending on what the aircraft is, what
 13 type of environment it might fly in, it might
 14 have some characteristics that are not
 15 conventional. It may have some flight
 16 characteristics that are not conventional. So
 17 we just evaluate the aircraft as a whole. It
 18 helps us to understand what type of training
 19 might be required for a flight crew, for
 20 example. It might help us understand what
 21 type of training might be required for a cabin
 22 crew in the back end, if there is a back end
 23 crew requirement for the aircraft type. It
 24 just gives us a general overview of the
 25 aircraft before it actually comes across into

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1 our country, so we don't have to then make
 2 those decisions. We do them ahead of time.

3 As you can imagine, once you've purchased
 4 the aircraft, you bring it into the country,
 5 you really do want to fly it, and so we just
 6 think it's a proactive way of getting ahead of
 7 that information so there's no surprises.

8 MS. FAGAN:
 9 Q. We're now going to move into modifications and
 10 I think before we start the topic of
 11 modifications and equipment, this might be a
 12 good time to break.

13 COMMISSIONER:
 14 Q. All right then, we'll break for 15 minutes.

15 MS. FAGAN:
 16 Q. Thank you.
 17 (BREAK)

18 COMMISSIONER:
 19 Q. Okay, Ms. Fagan.

20 MS. FAGAN:
 21 Q. Mr. Stephenson, before the break, I had
 22 mentioned modifications to products and from
 23 your earlier statement, I understand that if
 24 an aircraft leaves the manufacturer, all
 25 communications must be relayed with respect

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1 to, say, the operation or the maintenance of
 2 the aircraft. What if an operator who has an
 3 aircraft now, a certified aircraft in their
 4 possession, they're using it and they want to
 5 make a modification. For example, they want
 6 to add a fuel tank, they want to go extended
 7 distances and they decide they need an
 8 auxiliary fuel tank, what would that be and
 9 what would the process be if an operator came
 10 forward and said they wanted such a change
 11 made?

12 MR. STEPHENSON:
 13 A. Okay, so, and again this will be from a
 14 layman's perspective. There's two parties
 15 that probably would be interested in modifying
 16 an aircraft. First of all, the organization
 17 that originally designed it, they may make a
 18 choice to modify the aircraft. That seems
 19 reasonable. And they would go through almost
 20 an identical process that they went through to
 21 certify the aircraft as I described earlier in
 22 its simplest terms. As you can imagine, I
 23 said it would take years to design and
 24 manufacture an aircraft in its entirety. As
 25 you can imagine, a modification would be a

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1 simpler process, again depending on what
 2 modification we're talking about, a simple
 3 modification versus a major modification.

4 For example, if we decided to put a
 5 different type of wing onto an aircraft,
 6 obviously we're back into flight testing and
 7 all sorts of complexities. If we're simply
 8 putting a different type of door on an non-
 9 pressurized cabin like a helicopter or fixed
 10 wing, and most fixed wing aircraft are not
 11 pressurized, the ones that we normally fly in
 12 are pressurized, but as you can imagine, that
 13 would be, you know, a less onerous process to
 14 certify.

15 It is possible also for a third party,
 16 you mentioned the operator, could be the
 17 operator, it could be some other organization
 18 who has decided to--who have come up with an
 19 idea to modify an aircraft specifically in
 20 order to market a product, whatever that might
 21 be. It could be a different type of window,
 22 it could be a different type of--they might
 23 want to apply a winch to an aircraft type that
 24 wasn't originally designed. There could be
 25 any type of modification. It could be the

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1 addition of a piece of avionics, some sort of
 2 technical piece of equipment to navigate with.
 3 So they also can apply and create a
 4 modification to an aircraft, and again, the
 5 process is essentially similar to what I've
 6 described. They would receive a certificate,
 7 a modification certificate. Again, there's a
 8 number of technical terms we could use to
 9 apply to it. In Canada, we call them an STC
 10 or a--I'm trying to remember what the acronym
 11 is, I use it so often, yeah, supplemental type
 12 certificate or a limited type supplemental
 13 type certificate, and again to get into those
 14 intricacies I wouldn't be qualified to give a
 15 good definition of what those are, but it's an
 16 authorization to put a modification on an
 17 aircraft.
 18 MS. FAGAN:
 19 Q. And would that design and would there be the
 20 oversight of the manufacturer of the
 21 modification? Say it was the design for a
 22 window or a new door, would the manufacturer
 23 have to also be -
 24 MR. STEPHENSON:
 25 A. Certified, that's correct. So again, in it's

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1 simplest terms, to a lesser degree, we have a
 2 certificate that authorizes them to then go
 3 forward with manufacturing. A manufacturing
 4 certificate would be in place to manufacture,
 5 and there'd be oversight of the design and the
 6 approval of that certificate. There'd be also
 7 oversight of the manufacturing of that
 8 particular product.
 9 MS. FAGAN:
 10 Q. And could that be to an aircraft that was
 11 originally built in Canada or an aircraft that
 12 was designed in another country?
 13 MR. STEPHENSON:
 14 A. It will start to get complex and I'll probably
 15 have to back away from maybe part of this
 16 discussion, but let's talk about a Canadian
 17 aircraft. Obviously we would have
 18 responsibilities for that particular process.
 19 If it's an American certified aircraft to be
 20 designed and manufactured in the US, there is
 21 the process that if a Canadian wanted to
 22 create a modification to an American built
 23 aircraft, they can do that, and again, I'll
 24 get lost in the actual process. I'd have to
 25 make a--consult somebody if you want a very

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1 specific answer on how that process works, but
 2 it is essentially the same, and obviously an
 3 American product can be modified by an
 4 American as I've described for Canadians as
 5 well.
 6 MS. FAGAN:
 7 Q. But a modification must be--there's oversight?
 8 MR. STEPHENSON:
 9 A. There's oversight, yes.
 10 MS. FAGAN:
 11 Q. In that you can't just have a certified
 12 aircraft and then make all kinds of changes?
 13 MR. STEPHENSON:
 14 A. No.
 15 MS. FAGAN:
 16 Q. Without Transport Canada's involvement?
 17 MR. STEPHENSON:
 18 A. No, if you do that, the certificate of
 19 airworthiness technically collapses. Remember
 20 that certificate is a testament that the
 21 aircraft meets the airworthiness standards or
 22 the design standards of the aircraft. So as
 23 soon as you attach something to it or remove
 24 something from it, then the certificate of
 25 airworthiness technically collapses. It

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1 doesn't exist or doesn't stay in force.
 2 MS. FAGAN:
 3 Q. And this process of certifying a modification,
 4 is this also done for the most part in Ottawa
 5 at the headquarters, the same place where the
 6 aircraft would be?
 7 MR. STEPHENSON:
 8 A. It depends on how major a modification it is.
 9 So to answer your question, modifications or
 10 product--sorry, projects that a third party
 11 might want to engage in could quite typically
 12 be done in region. The oversight process is
 13 the same, but a major modification, if we got
 14 into significant changes to an existing
 15 aircraft type, and I'm changing the wings, as
 16 an example, that's an extreme condition
 17 obviously. It would probably find itself in
 18 headquarters. That would be a significant
 19 modification.
 20 MS. FAGAN:
 21 Q. I'd like you to go through equipment. So
 22 we've taken the aircraft and we've taken any
 23 changes to the aircraft. In addition to the
 24 aircraft itself, there's all kinds of
 25 equipment on an aircraft, such as there may be

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1 life rafts, survival suits, floatation
 2 devices, radios.
 3 MR. STEPHENSON:
 4 A. Right.
 5 MS. FAGAN:
 6 Q. I mean, there's all kinds of stuff on the
 7 aircraft that's not actually--some is
 8 attached, some is not attached. What is the
 9 regulation? I mean, who regulates the
 10 equipment, how does that work? What's
 11 Transport Canada's involvement in the
 12 equipment that's used on an aircraft?
 13 MR. STEPHENSON:
 14 A. Okay. So in simple terms, I'll look to the
 15 CARS, the Canadian Aviation Regulations. They
 16 specify the type of equipment that would be on
 17 board an aircraft, depending what type of
 18 operation it would be in or undergoing. For
 19 example, an aircraft operating at night would
 20 require certain equipment like lights and it
 21 would require--the pilot would be required to
 22 have a flashlight in his aircraft. There's a
 23 whole list of items for night time operations.
 24 If you're operating an aircraft over water,
 25 there's a requirement to have additional

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1 equipment and it's specified based on distance
 2 from dry land. There's also a regulation,
 3 which may be of interest to this group and
 4 you're probably aware of that, we talk about
 5 the temperature of the water. Not only are
 6 you over water, but also if the temperature of
 7 the water becomes to a certain point, the
 8 regulation is very specific -- I think it's
 9 ten degrees Celsius, that's just off the top
 10 of my head. I think it's probably accurate--
 11 where they have additional requirements for
 12 survival equipment, specifically the immersion
 13 suit, and so--and I could go on. There's
 14 other forms.
 15 MS. FAGAN:
 16 Q. So let's just take the example of flying over
 17 water, the cold water, because that's what the
 18 helicopters that transport workers do.
 19 MR. STEPHENSON:
 20 A. Yeah.
 21 MS. FAGAN:
 22 Q. It flies over water. It's a fairly
 23 significant distance, and the water is cold.
 24 So you may not--you know, and I wouldn't
 25 expect you to know all of the things, but

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1 could you give us an example? You've
 2 mentioned the suits. So what would the CARS,
 3 the regulations that Transport Canada have in
 4 place, say about the suits that must be worn?
 5 MR. STEPHENSON:
 6 A. Okay, so in anticipation of being here, I
 7 logically looked it up. So I am familiar.
 8 The CAR does specifically point to the
 9 requirement for a suit and it specifically
 10 points to a standard. You'll find in our
 11 regulations, our airworthiness manual
 12 specifically, you will not see a standard
 13 description, a description of the standard
 14 requirement for suits. It actually points to
 15 another standard. The standard, if I may have
 16 a quick peak at it, just so you're aware and
 17 again, I suspect you are, but I'll just share,
 18 the standard is developed by the Canadian
 19 General Standards Board. I have a copy of the
 20 standard with me. I've read it. I don't
 21 design suits, so a lot of it wasn't meaningful
 22 to me, but the regulations points to the
 23 standard. That's what we expect to see on
 24 board a helicopter is a suit meeting that
 25 standard.

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1 MS. FAGAN:
 2 Q. So if we look at the CARS, it's not going to
 3 say in the CARS a suit with a certain type of
 4 fabric?
 5 MR. STEPHENSON:
 6 A. No.
 7 MS. FAGAN:
 8 Q. And a suit with, you know, the ability -
 9 MR. STEPHENSON:
 10 A. No.
 11 MS. FAGAN:
 12 Q. - to float so many pounds?
 13 MR. STEPHENSON:
 14 A. That's correct.
 15 MS. FAGAN:
 16 Q. It will say the suit must meet a standard
 17 that's developed by somebody else?
 18 MR. STEPHENSON:
 19 A. That's correct.
 20 MS. FAGAN:
 21 Q. And then that standard, how would somebody
 22 find that standard? I mean, it's the--could
 23 you go through it again? It's the Canadian
 24 General -
 25 MR. STEPHENSON:

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1 A. It's in the Canadian Aviation Regulations.
 2 MS. FAGAN:
 3 Q. And then the standard?
 4 MR. STEPHENSON:
 5 A. Yeah, and it says basically it has to meet the
 6 standards of airworthiness and I believe it's
 7 referred right in the airworthiness manual
 8 you'll find the detail. It actually
 9 references--it references the standard that
 10 exists here. There's actually two of them,
 11 both developed by the Board, and I could
 12 recite them or I could share them with you
 13 afterwards, if you wish. I don't know if
 14 that's in evidence now.
 15 MS. FAGAN:
 16 Q. But the Board, that's readily available to
 17 find out what the standard is?
 18 MR. STEPHENSON:
 19 A. Correct. As I mentioned to you earlier in the
 20 week, I actually went and sought out the
 21 standard. I actually had to purchase it for
 22 \$70 or whatever it cost me and it was a
 23 worthwhile purchase. It wasn't that
 24 expensive.
 25 MS. FAGAN:

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1 Q. And I understand the reason you have to
 2 purchase the description is it's copyrighted?
 3 MR. STEPHENSON:
 4 A. It's copyrighted, which is fair.
 5 MS. FAGAN:
 6 Q. So beyond the suit which has to meet a certain
 7 standard, which is set by a board, what about
 8 floatation devices?
 9 MR. STEPHENSON:
 10 A. Floatation devices will basically be
 11 essentially the same thing. The regulations
 12 point to them under the same section of the
 13 regulations and again, they point to a
 14 standard. Transport Canada doesn't have a
 15 standard for floatation devices. They point
 16 to--I believe they point to another standard
 17 which then would be the basis for which
 18 somebody would design and manufacture and we
 19 would certify a particular piece of equipment.
 20 MS. FAGAN:
 21 Q. So as developments or improvements are made to
 22 floatation devices and then those developments
 23 or improvements are accepted by the board, by
 24 reference -
 25 MR. STEPHENSON:

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1 A. We would upgrade our -
 2 MS. FAGAN:
 3 Q. - an air operator would then have to step up
 4 and meet that particular standard? So as
 5 those standards are improving, the regulations
 6 don't have to be changed?
 7 MR. STEPHENSON:
 8 A. That's correct.
 9 MS. FAGAN:
 10 Q. You just have to make sure you're in step with
 11 whatever the current standard is?
 12 MR. STEPHENSON:
 13 A. That's correct.
 14 MS. FAGAN:
 15 Q. We've heard from the C-NLOPB that they have--
 16 they've not set standards. They have at
 17 least, in the authorizations, looked for
 18 certain items to be in place with respect to
 19 the transportation of workers, such as four-
 20 point seatbelts or harnesses.
 21 MR. STEPHENSON:
 22 A. Harnesses, yeah.
 23 MS. FAGAN:
 24 Q. They may look for versus a lap belt or they
 25 may look for high back seats or certain types

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1 of seats. They may also look for certain
 2 equipment to be on board. Would it be
 3 accurate to say that if the C-NLOPB had asked
 4 or required a certain item to be on an
 5 aircraft that that item would have to comply
 6 with the Transport Canada regulations?
 7 MR. STEPHENSON:
 8 A. That would be a fair statement, yes.
 9 MS. FAGAN:
 10 Q. Okay. So if a recommendation came forward to
 11 the C-NLOPB to have a certain item on board or
 12 certain modification made that before that
 13 could be carried out, it would have to meet a
 14 Transport Canada regulation?
 15 MR. STEPHENSON:
 16 A. I guess it depends on what we're talking
 17 about. Your example of the high back seat or
 18 your example of the four-point harness, if
 19 that's what's required in their requirements.
 20 It could very well be that the aircraft is
 21 already certified to have those. It could
 22 very well be that the manufacturer anticipated
 23 that when it was looking at the product and
 24 the manner which it was marketing it and
 25 perhaps they preempted that by having those

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1 options available for their aircraft. As you
 2 can imagine, an executive interior versus a
 3 transport of multiple people in an aircraft,
 4 and so it enters into all sorts of different
 5 markets. So very quickly, those items would
 6 have to be certified, either during the
 7 certification process of the aircraft
 8 originally or after the fact, and so that
 9 would have happened.

10 So a modification to an aircraft would in
 11 fact require the certification process, us to
 12 go through that certification process. If
 13 it's simply putting on board a piece of
 14 equipment that could simply be placed and
 15 stowed, provided it was stowed in a manner
 16 that didn't disrupt or change the
 17 certification standard of the aircraft, then
 18 we wouldn't have to certify the equipment.
 19 For example, whatever that might be, more--
 20 extra water on board for survival, for
 21 example. As long as it didn't interfere with
 22 that, we wouldn't have to engage in that
 23 discussion. But if it was, as you had gave
 24 me, seats that were attached to the aircraft,
 25 then we do enter into the discussion about how

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1 it's certified and that would be fulsome
 2 process.

3 MS. FAGAN:
 4 Q. What about changing the location of seats?
 5 Say a recommendation was a seat should be in
 6 the middle.

7 MR. STEPHENSON:
 8 A. Yes, again we would examine--the seat itself
 9 might be certified as it is. It might be a
 10 simpler process, but we would have to--they
 11 would have to apply. We do have to examine
 12 that modification to ensure that it didn't,
 13 again, disrupt the original basis for which
 14 the aircraft was certified. An example would
 15 be is it blocking an emergency exit or would
 16 it alter the structure of the aircraft in some
 17 manner? You know, you take a seat and strap
 18 it to a wall, if I could say that, you know,
 19 connect it somehow. All of a sudden you're
 20 changing the structure and so they would
 21 examine that piece. I'm being overly
 22 simplistic, but -

23 MS. FAGAN:
 24 Q. There's other communications that are involved
 25 beyond the modifications and equipments and

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1 what I'd like you to go into now is the
 2 communications that deal with service, and in
 3 particular, service bulletins and
 4 airworthiness directives. We now have an air
 5 operator who is using an aircraft. What are
 6 the requirements once that aircraft is in
 7 service? What types of communications and who
 8 will communicate with the operator, from a
 9 Transport Canada perspective?

10 MR. STEPHENSON:
 11 A. And again, we talked about--well, we talked
 12 about service, but actually we originally
 13 talked about the flow of information, the flow
 14 of information while an aircraft is out
 15 operating. What we'll often see is, from a
 16 positive perspective, we'll actually see best
 17 practices happening or we'll see service
 18 difficulty reports where an operator may say
 19 "it's difficult to maintain the aircraft in
 20 the manner you've described it. We find it
 21 better to approach it this way as opposed to
 22 that way." That would be information that
 23 would come through as data. At some point in
 24 time, the manufacturer might say "we're going
 25 to put a service bulletin out because we

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1 believe there's a better way to do this" and
 2 so they'll put that kind of information out,
 3 and again, I'm being simplistic. It can be
 4 something from simple to more complex.

5 At some point in time, the data might
 6 point to a significant difficulty with the
 7 aircraft or it could be a minor difficulty or
 8 a significant difficulty where the authorizing
 9 authority, that's Transport Canada in this
 10 example, might determine that a directive has
 11 to come out. In other words, we're not going
 12 to give a choice. We believe something needs
 13 to happen, whether it be an inspection or
 14 whether we believe a modification has to
 15 happen and so we will formally put that out.

16 A directive obviously, as it sounds, it's a
 17 directive. It has to be followed. Sometimes
 18 there is time periods put on directives. In
 19 other words, we would like it done within a
 20 period of time. Next inspection or you know,
 21 depending on what the issue is. There's a
 22 team in Ottawa that would go through that
 23 process of determining what's reasonable, what
 24 makes sense. They'll work with the
 25 manufacturer specifically and/or the person

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1 who holds the type certificate. There'll be
 2 that interaction. Transport Canada has the
 3 authority to issue that, those directives.
 4 The service bulletins, again they're
 5 service bulletins. It's just information for
 6 an operator to determine how they'll go about
 7 conducting themselves.
 8 MS. FAGAN:
 9 Q. The service bulletins, they are generated by
 10 the manufacturer?
 11 MR. STEPHENSON:
 12 A. I can't answer the question. I don't actually
 13 know.
 14 MS. FAGAN:
 15 Q. Okay.
 16 MR. STEPHENSON:
 17 A. I believe -
 18 MS. FAGAN:
 19 Q. I was just trying to get at where do the
 20 service bulletins come? Do they come from the
 21 manufacturer to the operator or do they go to
 22 Transport Canada?
 23 MR. STEPHENSON:
 24 A. Actually, do I have it in our notes here? I'd
 25 like to answer your question directly without

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1 having to seek it out. Again, this is not--
 2 yes, so by the manufacturer, specifically in
 3 my notes.
 4 MS. FAGAN:
 5 Q. Okay, and they -
 6 MR. STEPHENSON:
 7 A. And they're declared mandatory by the civil
 8 authority, in this case Transport Canada.
 9 MS. FAGAN:
 10 Q. So the manufacturer would issue the service
 11 bulletin and the service bulletin would go to
 12 who?
 13 MR. STEPHENSON:
 14 A. Whoever has an aircraft.
 15 MS. FAGAN:
 16 Q. Whoever has an aircraft.
 17 MR. STEPHENSON:
 18 A. And also the authority. We'll receive it as
 19 well.
 20 MS. FAGAN:
 21 Q. And the authority would be whoever certified
 22 that type?
 23 MR. STEPHENSON:
 24 A. That's correct.
 25 MS. FAGAN:

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1 Q. So if this was a Canadian designed and
 2 manufactured equipment, the service bulletin
 3 would go to the Canadian authority.
 4 MR. STEPHENSON:
 5 A. And they'll also find--it'll find its way to,
 6 in the case of the FAA, the FAA with find that
 7 they'll be in possession of the service
 8 bulletins as well, so they'll be able to see
 9 those as well.
 10 MS. FAGAN:
 11 Q. Okay. So if the aircraft has been certified
 12 in both--type certified in both jurisdictions,
 13 this flow of information from the manufacturer
 14 would end up -
 15 MR. STEPHENSON:
 16 A. It reaches everybody.
 17 MS. FAGAN:
 18 Q. It would reach both jurisdictions that type
 19 certified?
 20 MR. STEPHENSON:
 21 A. Correct, and each group, in the case of
 22 Transport Canada, will have a process around
 23 determining, you know, how to deal with the
 24 service bulletin. They'll read it. They'll
 25 analyze it. A team may look at it and then

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1 determine whether or not a directive is
 2 required or it's just information.
 3 MS. FAGAN:
 4 Q. And just to make sure we're clear, if it was
 5 an American designed and manufactured piece of
 6 equipment, an aircraft, say certified by the
 7 FAA and it's type certified in Canada, it's
 8 certified in both jurisdictions -
 9 MR. STEPHENSON:
 10 A. Yeah, we issue an authority here, yeah.
 11 MS. FAGAN:
 12 Q. The manufacturer would issue the service
 13 bulletin and it would eventually--that
 14 information would flow to those two
 15 authorities?
 16 MR. STEPHENSON:
 17 A. Yeah.
 18 MS. FAGAN:
 19 Q. Because they both type certified, and to the
 20 users?
 21 MR. STEPHENSON:
 22 A. To the users, correct.
 23 MS. FAGAN:
 24 Q. And if it was a Canadian manufactured,
 25 designed and both authorities had certified,

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1 the information would flow to both the
 2 Canadian and the FAA and to the users?
 3 MR. STEPHENSON:
 4 A. That's correct.
 5 MS. FAGAN:
 6 Q. Whether the users--the users could be
 7 anywhere?
 8 MR. STEPHENSON:
 9 A. That's correct.
 10 MS. FAGAN:
 11 Q. They could be -
 12 MR. STEPHENSON:
 13 A. Well, again, in the case of helicopter
 14 operations, they're worldwide, so eventually
 15 it'll find its way to where the helicopter is,
 16 but we would be obviously delivering our
 17 messages to the bases of those organizations
 18 and then their accountability is to make sure
 19 their system works too.
 20 MS. FAGAN:
 21 Q. So this is data when you receive it as a
 22 service bulletin?
 23 MR. STEPHENSON:
 24 A. Correct.
 25 MS. FAGAN:

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1 Q. But there is an analysis done?
 2 MR. STEPHENSON:
 3 A. An analysis process.
 4 MS. FAGAN:
 5 Q. And if it's significant through that analysis
 6 process, then a service bulletin can become--
 7 or an airworthiness directive is issued?
 8 MR. STEPHENSON:
 9 A. That's correct.
 10 MS. FAGAN:
 11 Q. By the type certifying authority?
 12 MR. STEPHENSON:
 13 A. That's correct.
 14 MS. FAGAN:
 15 Q. Okay. How does Transport Canada know if the
 16 directives are being followed?
 17 MR. STEPHENSON:
 18 A. Good question. We'll probably get to that
 19 maybe in a more fulsome way, but essentially
 20 the maintenance organizations, I'll talk about
 21 commercial operations, the maintenance
 22 organizations that are certified out there,
 23 they themselves have a process to receive and
 24 to do their analysis, in the case of service
 25 bulletins, and with respect to directives,

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1 your question, they have an obligation to
 2 carry them out. Our inspection program
 3 actually allows us to oversee that happening.
 4 In the case of a directive, we may even go as
 5 far as to have direct communication,
 6 particularly if we have a very small market.
 7 Where we might have a unique company in our
 8 midst and we know a directive's come out, our
 9 maintenance inspectors in our ranks probably
 10 would even reach out to the operator, because
 11 they're now aware of it. Airworthiness
 12 directives, particularly ones that are
 13 specific to an aircraft, they're not issued
 14 every day. So we take note of them and our
 15 field inspectors take note of them, and it
 16 wouldn't surprise me that they'd actually
 17 reach directly out immediately. Either way,
 18 they'll do it through the inspection process
 19 and it also is a process that allows us to
 20 gain confidence that the operators is actually
 21 doing their part in their systems operating.
 22 MS. FAGAN:
 23 Q. I'm going to eventually move to the
 24 organizations that use this equipment, these
 25 products, but before we do, the last area I'd

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1 like you to go through is airports, aerodromes
 2 and heliports, because that's something else
 3 that Transport Canada regulates and we don't
 4 need to spend a lot of time on it, but it is
 5 one of the areas and we are dealing with
 6 helicopter transportation, in particular
 7 helicopter transportation that leaves St.
 8 John's, where there is an airport, and
 9 transports workers to vessels which are FPSOs
 10 and to the gravity base structure and to some
 11 mobile drilling units. So can you define
 12 what's an airport, what's an aerodrome and
 13 what's a heliport, and how does Transport
 14 Canada regulate those things?
 15 MR. STEPHENSON:
 16 A. Sure. To your last question, they're
 17 regulated under the, again, the Aeronautics
 18 Act, Canadian Aviation Regulations. There's a
 19 section specifically set aside for that
 20 purpose. So that's your last question.
 21 A lot of people get confused about this
 22 issue. It's not that confusing. It's just
 23 it's fairly simple. I'll talk about airports
 24 first, if I may. As you can imagine, there
 25 are literally thousands of places where

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1 aircraft land in this country. I'm talking
 2 about Canada now, but it's consistent around
 3 the world to some degree, maybe not by
 4 definition. There are very few airports in
 5 this country actually, based on the number of
 6 actual places to land a fixed wing aircraft.
 7 I say that because an airport is a certified
 8 place to land an aircraft, an airplane
 9 specifically, I'm speaking of, and an airport
 10 certificate is issued to an airport operator
 11 when they meet a certain standard.

12 In this country, since the CARS have come
 13 into place in 1996 or thereabouts, we required
 14 an airport certificate whenever an airport was
 15 located inside of a built-up area, in other
 16 words, in the middle of a town, city, village
 17 or whatever or metropolitan area. We also
 18 require an airport certificate if there's
 19 scheduled service. Scheduled service by this
 20 definition meaning the general public can
 21 purchase a ticket and get on an airplane, so
 22 your typical airlines that we'll see around in
 23 our country and others. So that's an airport.
 24 If it doesn't meet those--there's actually a
 25 public interest standard that we also apply.

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1 It's a little bit controversial for some who
 2 had airport certificates--because when the
 3 rules were passed, we essentially said you
 4 don't need an airport certificate to many,
 5 many airports in this country. We just--they
 6 didn't require one.

7 So if you're flying fixed wing aircraft
 8 and you meet--you don't meet those two points
 9 or the third point, I guess, and if you don't
 10 hold a airport certificate, then the proper
 11 expression we use is aerodrome, okay, and an
 12 aerodrome is just simply a place set aside to
 13 take off and land aircraft and that could be a
 14 farmer's field set aside for aircraft or it
 15 could be anything else for that matter. It's
 16 a very general statement and there are
 17 literally thousands in this country, in
 18 Canada. We're a fairly big country and
 19 there's a lot of aerodromes. Some of them are
 20 very sophisticated where people come and go.
 21 So if I can set airports and aerodromes aside,
 22 we really want to talk about heliports.

23 Heliports have a very similar definition.
 24 If it's a heliport, it has a heliport
 25 certificate. A heliport certificate is

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1 required for essentially the same thing as an
 2 airport certificate. It has to have--if it's
 3 inside of a built-up area, we require an
 4 airport certificate, if it's receiving or has,
 5 within its midst, scheduled service where it's
 6 publicly available, somebody can buy a ticket.

7 There's a third criteria for heliports
 8 and that is if the heliport has a precision
 9 instrument approach to it. In my research
 10 before coming here, I've learned that there is
 11 no standard in Canada for a precision approach
 12 to a heliport, interestingly enough. So that
 13 third piece is kind of a red herring, if I can
 14 use that expression. It doesn't really enter
 15 into the discussion.

16 So it's really those two criteria. We do
 17 have heliports. We have many heliports in
 18 this country. A lot of heliports, as you can
 19 imagine are convenient to be inside built-up
 20 areas, so that's a logical place that will end
 21 up with airport certificates. There are, to
 22 my knowledge, very few with scheduled service.
 23 I think there's a few on the west coast, for
 24 example, in the Vancouver area. There may be
 25 some here that I'm not aware of.

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1 So if it doesn't meet any of that
 2 criteria, then it doesn't hold a heliport
 3 certificate. Natural question is does it
 4 become a helidrome. No, we don't use that
 5 expression. We use the expression aerodrome.
 6 We use the exact same expression. So every
 7 other heliport that does not have a
 8 certificate is an aerodrome. That's the
 9 expression we use.

10 Your question about heliport, at any
 11 airport where--I'll say a heliport, a place
 12 where helicopters might land at a certified
 13 airport, it's very common. Probably most
 14 major airports have helicopters coming and
 15 going. Helicopters that come and go at
 16 airports, particularly--and we'll talk about
 17 the less conventional ones, the ones that are
 18 flying in instrument conditions, the higher--
 19 the larger helicopters, the helicopters we're
 20 obviously interested in here, they would come
 21 and go at St. John's, for example. St. John's
 22 has an airport certificate. To my knowledge,
 23 it doesn't have a heliport certificate. It's
 24 just an airport. Just an airport, I don't
 25 mean that to suggest it's just an airport.

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1 But the helicopters that come and go probably
 2 use the instrument approaches that are there
 3 and designed typically for fixed wing, but
 4 helicopters are quite capable of using the
 5 same instrument approach procedures that a
 6 fixed wing aircraft would use. So they'll
 7 come and go and probably arrive and might even
 8 go as far as to land on the runways and the
 9 larger transport aircraft are obviously
 10 equipped with wheels and they can actually
 11 taxi around as a conventional aircraft can or
 12 a conventional fixed wing aircraft can. So
 13 they'll actually arrive and probably land on
 14 the runway, particularly when the weather's
 15 poor. If the weather's not poor, I don't know
 16 what their operational process is here. They
 17 may actually arrive and then go in flight
 18 directly to their landing pad. I don't know
 19 exactly how they operate. An aircraft that
 20 taxis in the air is actually in flight and
 21 therefore it's bound by the rules of flight.
 22 That might compel them to land on the runway
 23 if the weather's poor. They'll arrive on the
 24 runway and then taxi like a conventional fixed
 25 wing aircraft.

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1 It's fairly simple. Maybe I've
 2 simplified it not simple enough for--it's
 3 simple in my mind because I'm not a layman,
 4 but I hope I've described that for you.
 5 MS. FAGAN:
 6 Q. The St. John's component, the helicopters
 7 leave and land at the St. John's Airport.
 8 MR. STEPHENSON:
 9 A. Yes.
 10 MS. FAGAN:
 11 Q. Who regulates or where would you find the
 12 regulations that deal with where they're
 13 going? Because we have a vessel, the FPSO are
 14 ships. We have mobile drilling rigs such as
 15 the Sir Henry Goodridge, and then we have--
 16 that's what's out there, and we have the
 17 Hibernia gravity base structure.
 18 MR. STEPHENSON:
 19 A. Right.
 20 MS. FAGAN:
 21 Q. So is there a difference as to who would
 22 regulate the helicopter landing sites?
 23 They're not heliports, is that fair? They're
 24 not heliports? They're not certified -
 25 MR. STEPHENSON:

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1 A. That's correct. They're not heliports.
 2 MS. FAGAN:
 3 Q. They're not heliports, so -
 4 MR. STEPHENSON:
 5 A. I would express, use the expression aerodrome.
 6 They're aerodromes.
 7 MS. FAGAN:
 8 Q. Aerodromes. Where would you find the
 9 regulations that would cover those, and are
 10 they the same? Is it the same place? Same
 11 regulator?
 12 MR. STEPHENSON:
 13 A. Let me start by saying this. First of all,
 14 any helicopter operator in Canada is, in their
 15 certification, allows them to go anywhere in
 16 Canada and they may have the authority to go
 17 anywhere in the world, and helicopters, as
 18 they're designed to do, they're designed to
 19 land away from airports. They're designed to
 20 work in the field, to do different types of
 21 work. So any heliport or helicopter operator,
 22 that's their purpose. That's their purpose is
 23 to go out and conduct all sorts of different
 24 operations, whether it's transporting people
 25 and goods or whether it's actually working in

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1 the field lifting and whatever a helicopter
 2 might want to do. So they're all able to do
 3 that without a specific certification to
 4 operate out of any aerodrome. We don't say
 5 you can then operate at that aerodrome or that
 6 aerodrome or that aerodrome.
 7 That said, an operator generally has an
 8 obligation to tell us what they're going to be
 9 doing. If it's conventional, we really don't
 10 get into great detail about what they're going
 11 to do, but if they're going to operate
 12 internationally, they're going to operate in
 13 the Arctic or if they're going to operate
 14 offshore, we want to know about that. They're
 15 obliged to inform us as to what they're going
 16 to do. The regulations start by talking about
 17 how they're going to operate safely. In fact,
 18 the regs are very specific. They need to
 19 operate safely. So we ask, very simple,
 20 demonstrate to us how you're going to operate
 21 safely in this environment, whether it be
 22 Arctic or whether it be internationally or
 23 offshore. So we'll ask those questions
 24 specifically.
 25 In the case of the offshore, we're

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1 obviously interested in where they're going to
 2 land, and so they'll demonstrate to us, to the
 3 aviation section of Transport, the process
 4 which they're going to go through, and in this
 5 case, you mentioned Hibernia. Hibernia, again
 6 in my research, I've determined or have
 7 learned that it's a fixed platform that is
 8 stuck to the seabed. It's not floating and
 9 therefore it doesn't come under the purview
 10 another department of Transport, our marine
 11 safety branch, which I think is what you're
 12 getting at. I've come to it in a roundabout
 13 way, so forgive me. So the platform actually
 14 comes under our purview. Under our purview
 15 meaning we're the only department who has an
 16 interest in it and so we would look to the
 17 operator to demonstrate how they're going to
 18 operate safely and we would probably look at
 19 that heliport or sorry, heliport, wrong
 20 expression, that aerodrome, and we would look
 21 at ourselves and we would ask them how
 22 they're--demonstrate to us how they're going
 23 to operate safely.
 24 I'll finish the story and then we'll--
 25 maybe you might redirect a couple of

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1 questions.
 2 The floating platforms are a different
 3 creature. They are vessels and so they
 4 themselves, out of my site, are regulated by
 5 our marine safety branch. Marine safety does
 6 have a standard that they point to, my
 7 understanding, and it's a Transport Canada
 8 publication. We refer--you'll hear the
 9 expression TP, which is a Transport
 10 publication, 4414, and it refers to a standard
 11 and their concern, of course, is the safety of
 12 the vessel and obviously having a helicopter
 13 land on the vessel, it's not normal operations
 14 for most of the vessels out there. So they
 15 obviously have an interest in how that's going
 16 to be conducted safely from a marine safety
 17 perspective, and how the helicopter is going
 18 to be serviced while it's on the deck, on the
 19 helideck as they call that. So there is a
 20 standard. They have an interest and they look
 21 at it from that perspective.
 22 Our interest actually is very similar in
 23 that we would look to the same standard or a
 24 similar standard in order to show us how
 25 they're going to do it safely. I don't know

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1 if that helps or if that answered your
 2 question specifically.
 3 MS. FAGAN:
 4 Q. Well, you could tell me, if I understand you
 5 right, the gravity base structure, because
 6 it's attached to the ocean floor, would be
 7 purely under the aviation branch?
 8 MR. STEPHENSON:
 9 A. Correct.
 10 MS. FAGAN:
 11 Q. Because the floating platforms are actually
 12 vessels, then because that vessel is a
 13 structure that is regulated by the marine
 14 division, the marine division would deal with
 15 the helideck because it's attached to the
 16 vessel, from a vessel safety perspective?
 17 MR. STEPHENSON:
 18 A. That's correct.
 19 MS. FAGAN:
 20 Q. But the aviation branch would also take an
 21 interest because they want to make sure, from
 22 an operational perspective, the operator has
 23 laid out a plan that deals with landing
 24 safely?
 25 MR. STEPHENSON:

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1 A. That's correct, but let me be clear, we don't
 2 certify those aerodromes, but the part of the
 3 regulation I spoke of, the commuter
 4 regulations specifically allows us to ask very
 5 basic or complex questions about how they're
 6 going to operate safely. So in that respect,
 7 we can certainly delve into the operations
 8 offshore in respect to all of those platforms
 9 you talked about, and we have interest in all
 10 of them, because obviously that's what we're
 11 interested in and that it is, in simplistic
 12 terms, a safe operation.
 13 MS. FAGAN:
 14 Q. So your control mechanism is not that you've
 15 certified the landing site, but that you have
 16 received a satisfactory explanation and plan
 17 and process from the operator?
 18 MR. STEPHENSON:
 19 A. Yeah. They've demonstrated to us, in fact, I
 20 can tell you that--because I asked the
 21 question. I know the Atlantic region staff
 22 have physically gone to these platforms.
 23 They're aware of their existence, more than
 24 aware of their existence. They've had more
 25 than just drawings. They've actually gone to

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1 them. They've--I won't use the word
 2 "inspected" but they've observed the
 3 operation. They know what's being done in
 4 that particular case.
 5 MS. FAGAN:
 6 Q. It was pointed out to me that because we have
 7 the term "operators" being used quite a bit
 8 here, we have air operators, which in our
 9 particular situation would be Cougar
 10 Helicopters, and then we have the oil
 11 operators which the Board refers to as the
 12 operators. So I know it's a little awkward.
 13 MR. STEPHENSON:
 14 A. Am I using air operator? I think I am most of
 15 the time.
 16 MS. FAGAN:
 17 Q. I think most of the time you are.
 18 MR. STEPHENSON:
 19 A. Okay.
 20 MS. FAGAN:
 21 Q. But just we may be reminded every once in a
 22 while if we slip into the generic operator.
 23 MR. STEPHENSON:
 24 A. You can be assured when I say operator, I'm
 25 only talking about air operators because I

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1 don't know much about oil operators.
 2 MS. FAGAN:
 3 Q. Fair enough. Well, that leads us right into
 4 commercial air operators. So now that we've
 5 dealt with the landing site and you've talked
 6 a little bit about the plans, I'm going to--
 7 the plan is part of the process. I'm going to
 8 ask you to step right back to the beginning
 9 and I'd like you to take us from the time a
 10 Canadian would-be or hopeful operator wants to
 11 start up, and I'm talking about an air
 12 operator.
 13 MR. STEPHENSON:
 14 A. So again, you'll have to forgive me and I'd
 15 appreciate if you actually stop me.
 16 Commissioner, you're in my wheelhouse now, and
 17 I'll be able to give you specifics and it
 18 might be more specifics than you want. So
 19 I'll make an effort to try and stay high level
 20 and we'll see if we can accomplish that.
 21 So an air operator, and I'll talk about
 22 the commuter air operator in that class, and
 23 if I can go back to the beginning. We have
 24 different levels of air operations. We all
 25 know airline operations and that would be the

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1 large transport category aircraft that are
 2 moving 95 percent of the passengers in this
 3 country around. When we drop below that,
 4 we're into the commuter regulations, which
 5 talks about a middle class of operation. In
 6 this case, related to this accident, that is
 7 the commuter regulations we're talking about.
 8 The next level down is the air taxi and it
 9 sounds kind of taxi-ish, but that's exactly
 10 what it is. It's smaller aircraft and moving-
 11 -transporting people around and then the next
 12 level down is our aerial work. It's one that
 13 creates confusion in the minds of some. Any
 14 aircraft can actually operate in the aerial
 15 work category. Helicopters are in fact
 16 specifically designed to do that. When I say
 17 aerial work, it can be from crop spraying to
 18 banner towing to fire surveillance, flying
 19 around just looking for fires, anything where
 20 a helicopter is lifting things, and fixed wing
 21 can do this too. They do a lot of this type
 22 of work as well. So it's--we call it aerial
 23 work and it's because they work in the air.
 24 That's our aerial work section. I'm going to
 25 talk about the commuter regulations.

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1 MS. FAGAN:
 2 Q. So that we're clear, the commuter regulations
 3 would be the regulations that would apply to
 4 the transportation of the workers by
 5 helicopter offshore?
 6 MR. STEPHENSON:
 7 A. That's correct. So it's the transport of
 8 persons or cargo, right, so it's transporting
 9 is the proper term we use from A to B. Not A
 10 to A. Sorry, it's A to B.
 11 MS. FAGAN:
 12 Q. What do you mean by A to A?
 13 MR. STEPHENSON:
 14 A. A to A is sightseeing or some other form.
 15 MS. FAGAN:
 16 Q. They have to get off?
 17 MR. STEPHENSON:
 18 A. They have to get off some place other than
 19 where they took off from. It's very technical
 20 and maybe it's of no relevance here, but I
 21 feel obliged to say it.
 22 So somebody decides--and I'm going to go
 23 from scratch. Somebody decides they want to
 24 get into the business of and be an air
 25 operator. They have to make application. The

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1 regulation is very clear on what the form of
 2 an application is. It goes through very
 3 detailed items. I'll just give you some
 4 samples, I won't give you the whole thing,
 5 otherwise I'll have to read it. They pay a
 6 fee to us that initiates the process, but it's
 7 not a complete application. They have to give
 8 us a number of things. They have to give us
 9 parts of themselves to demonstrate to us that
 10 they have the components that they require in
 11 the regulation to conduct an air service.
 12 They need to tell us who their principals are,
 13 who the accountable executive is, who's the
 14 person at the top. They need to tell us who
 15 the chief pilot is going to be, who the
 16 director of flight operations is, who the
 17 director of maintenance is, as examples. They
 18 need to give us a series of manuals, operating
 19 manuals that tells us how they're going to
 20 conduct their business. In a very simplistic
 21 term, it's an operational manual, how the
 22 pilots are going to be trained so there'll be
 23 a series of training manuals and how they're
 24 going to operate, how the pilots are going to
 25 operate in the system. They need to give us a

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1 series of manuals related to maintenance. How
 2 are they going to maintain their aircraft, how
 3 they're going to control the maintenance of
 4 their aircraft, how they're going to interact
 5 if they happen to have multiple bases. The
 6 manuals that talk about the complexities of
 7 having multiple bases.
 8 If there's a special type, thing to the
 9 operation, offshore as an example, we're going
 10 to want to see specifics about how they're
 11 going to conduct offshore safely. If they're
 12 going to operate in the Arctic, if they're
 13 going to operate off ships. Our Canadian
 14 Coast Guard vessels have helicopters operating
 15 off them all the time. They actually are
 16 operated by Transport Canada. Most people
 17 don't know that. They think they're Coast
 18 Guard helicopters. They're actually under our
 19 authority. They hold a certificate. So
 20 anything that's complex or unusual, then
 21 there'll be something outside the normal
 22 operation of aircraft. We'll want to see that
 23 in the operating manuals, and this is just in
 24 their application.
 25 We're going to interview the individuals

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1 who are the principals. We want to know if
 2 they're actually qualified. They say on paper
 3 they're qualified. We're going to want to see
 4 a resume. We're going to interview them to
 5 see if they're knowledgeable. We're going to
 6 want to know where they're going to operate.
 7 If they say St. John's, I want a letter from
 8 St. John's that says they can actually be
 9 there. We've had operators say "we're going
 10 to operate out of so-and-so airport" and we
 11 have an operator of the airport says "they're
 12 not coming here." Well, I can't issue an
 13 authority to somebody who has no home. So we
 14 need to know where they're operating.
 15 We need to know what they're going to
 16 operate, what aircraft type or types. It
 17 could be more than one aircraft type. We want
 18 to know what type of operation they're going
 19 to conduct. Are they going to do aerial work?
 20 Are they going to just transport? Are they
 21 just going to do cargo only? Are they going
 22 to operate at night? Are they going to
 23 operate in instrument conditions? So there's
 24 a whole series of questions that have to come
 25 to us in the application, and it could be a

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1 basic application initially and then companies
 2 over time add additional aircraft, they make
 3 choices to operate at night later on and so on
 4 and so forth. That process is very similar to
 5 what I'm talking about, but more simplistic.
 6 Once we've received that application, and
 7 we actually meet with the principals, they may
 8 not have even hired, in a full-time basis,
 9 these individuals yet as they go through that
 10 process. We'll begin to interact with them.
 11 We'll interview them. We'll go to their site
 12 and start to conduct a series of inspections
 13 to see if they actually are on the site, if
 14 they actually have a hangar. From the
 15 maintenance perspective, we get very, very
 16 specific. You're going to operate a fleet of
 17 five aircraft and you got on AME, maintenance
 18 engineer, how is that going to work? Oh,
 19 we're contracting out. Okay. So you're going
 20 to contract your maintenance out, which you
 21 can do, so we'll look for that contract and
 22 that arrangement. It's very, very complex and
 23 I'm just giving you just a thumbnail of how
 24 that goes, and we go through a process to get
 25 to a point where we're satisfied that they now

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1 can conduct a safe operation. We'll then
 2 issue an air operator certificate.

3 I mentioned maintenance and you're going
 4 to probably ask me about maintenance, which I
 5 won't go into in great detail, but directly
 6 linked to the air operator certificate, we
 7 need to know that they can actually conduct
 8 maintenance. They either have to be certified
 9 themselves or they have to have a contract or
 10 a connection to an approved maintenance
 11 organization in order to keep their fleet
 12 serviceable, keep it airworthy, keep the
 13 certificates of airworthiness valid.

14 Once they're issued the certificate, and
 15 there are other processes outside that. I
 16 don't know if you're going to ask me about the
 17 Canadian Transportation Agency or not, but
 18 that's separate from us. Once they receive
 19 their certificate, and again, it depends on
 20 the complexity of the organization. If it's a
 21 one-aircraft, one-person operation, and they
 22 exist, somebody might run a very small
 23 sightseeing service or a very small float
 24 plane operation, our interaction with them at
 25 that time will be probably limited because we

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1 might even know the individual. We know they
 2 can fly an aircraft. We know they can conduct
 3 themselves. A complex operation is probably
 4 going to have us there as soon as they begin
 5 operation. We'll be there during that
 6 process. We'll have targeted the places we
 7 want to see, the places we want to go with
 8 them. The systems they have in place, we'll
 9 want to see them operate. So we'll actually
 10 set up ourselves a very simple or complex
 11 oversight program as they initially begin to
 12 operate, and then as we gain confidence, we'll
 13 back away from sections and put them into a
 14 normal oversight program.

15 MS. FAGAN:
 16 Q. The maintenance, you'd mentioned an approved
 17 maintenance organization. Can you just
 18 elaborate a little bit on what goes into the
 19 maintenance of an aircraft?

20 MR. STEPHENSON:
 21 A. Sure. It's not completely the same, but it's
 22 essentially the same in the application
 23 process. Somebody wants to start up a
 24 maintenance organization, and we'll see large
 25 air operators do the--they'll do it in

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1 parallel. They'll begin the application
 2 process for an AMO, an approved maintenance
 3 organization. So they'll start that process
 4 at the same time because they're going to be
 5 seeking that same certificate in parallel
 6 because when they begin operation, they're
 7 going to want to have both in place in order
 8 to operate. Smaller operators, it's not
 9 untypical, as I suggested, that they don't
 10 engage in the production of an AMO. They
 11 don't apply for an AMO. They'll find an
 12 organization that does maintenance and they'll
 13 contract with them. There is a maintenance
 14 piece to the air operator certificate in that
 15 case, because when you contract maintenance,
 16 you don't contract the accountability to the
 17 maintenance organization. The accountability
 18 rests with the air operator and so inside that
 19 air operator, if they're contracting, we
 20 expect to see a person responsible for
 21 maintenance in the organization. They're the
 22 ones who are responsible for tracking the
 23 maintenance of their own aircraft within their
 24 fleet. They can seek, particularly in a
 25 smaller organization, they'll actually seek

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1 some of the assistance in developing that
 2 process from the AMO they work with. That's
 3 not unusual. But the accountability still
 4 rests with the person responsible for
 5 maintenance and the AMO. In the case of a
 6 complex organization, usually they produce
 7 their own or generate their own AMO
 8 application and get certified to do both
 9 operations and maintenance.

10 MS. FAGAN:
 11 Q. So the maintenance program itself must be
 12 certified or approved?

13 MR. STEPHENSON:
 14 A. Correct.

15 MS. FAGAN:
 16 Q. It's not --it's connected, but it's an entire
 17 process in its own right besides the
 18 operator's certificate?

19 MR. STEPHENSON:
 20 A. Right. The certificates are separate. There
 21 is an inter-dependency. In other words, an
 22 air operator cannot continue to function
 23 unless they have maintenance from some place,
 24 either their own certificate or somebody else.

25 MS. FAGAN:

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1 Q. So an air operator's certificate, they require
 2 an approved maintenance organization to do the
 3 maintenance, whether it's their own certified
 4 group.
 5 MR. STEPHENSON:
 6 A. Right.
 7 MS. FAGAN:
 8 Q. You also mentioned manuals. Can you describe
 9 the manuals? Just go through them again with
 10 what types of manuals must be in place for the
 11 air operator's certificate.
 12 MR. STEPHENSON:
 13 A. Sure, and again, Commissioner, I'm a little
 14 bit out of my wheelhouse, but they do need a
 15 maintenance manual. They need a policy
 16 manual, and these manuals describe the manner
 17 in which they're going to conduct themselves
 18 as is the case with the maintenance, the air
 19 operator certificate, and the manuals
 20 organized there.
 21 In the case of maintenance, as you can
 22 imagine, particularly in helicopter
 23 operations, which are designed not to operate
 24 out of one place, that may be the case in this
 25 particular example that we're talking about

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1 here today, but a lot of helicopter operators
 2 operate elsewhere, other than their main base.
 3 So the complexity of the AMO's manuals is very
 4 descriptive in how they're going to operate in
 5 the middle of, you know, an African country or
 6 some place on the west coast of Canada when
 7 their main base is here. So it'll be very
 8 descriptive. They may actually contract some
 9 of their maintenance to another organization
 10 because they only want to put one or two
 11 people there and yet from time to time, they
 12 might have five or six people's worth of work.
 13 They may transport people there or they may
 14 have a connection to another approved
 15 maintenance organization and they could
 16 contract some of that work as well. So they
 17 decide how they're going to do it. They
 18 demonstrate to us through the manuals. They
 19 describe it in their manuals and then we
 20 inspect them based on their description of how
 21 they're going to operate.
 22 MS. FAGAN:
 23 Q. Can an individual, just the general public,
 24 can they find out what an air operator is
 25 certified to do?

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1 MR. STEPHENSON:
 2 A. Yes.
 3 MS. FAGAN:
 4 Q. I mean if I want to find out what can the
 5 current operator do, where would I find that?
 6 MR. STEPHENSON:
 7 A. You can find it on the web. In fact, Lucille,
 8 if you don't mind--she'll bring it up for us,
 9 if that's okay?
 10 MS. FAGAN:
 11 Q. Yeah. So if--because some of the people at
 12 home may not be able to see this, if somebody
 13 wanted to--they're going to take a flight
 14 tomorrow on an airline or they wanted to find
 15 out what Cougar Helicopters is authorized to
 16 do, what website would they go to?
 17 MR. STEPHENSON:
 18 A. Well, the website www.tc.gc.ca, so tc as in
 19 Transport Canada, gc as in Government of
 20 Canada, ca as in Canada.
 21 MS. FAGAN:
 22 Q. Okay.
 23 MR. STEPHENSON:
 24 A. And they can navigate using, from the main
 25 page, modes of transportation, aviation

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1 safety, Lucille's helping with, application
 2 portal and air operator list search.
 3 MS. FAGAN:
 4 Q. So this would be all the air operators?
 5 MR. STEPHENSON:
 6 A. Yeah, select English or French, if you wish,
 7 and you can do a search on a company and you
 8 can see what they're authorized to do, and
 9 it's--I won't say it's just tombstone data,
 10 but there's some basic data there that'll tell
 11 you what type of aircraft. I've mentioned to
 12 you the types of operation, commuter, aerial
 13 work. You'll see the numbers there. I'm not
 14 sure if we actually have the words there
 15 besides the numbers.
 16 MS. FAGAN:
 17 Q. Can we -
 18 MR. STEPHENSON:
 19 A. Commuter is 704. Did you want to bring one up
 20 specifically?
 21 MS. FAGAN:
 22 Q. Yeah, can we just bring up the Cougar
 23 Helicopters?
 24 MR. STEPHENSON:
 25 A. Yeah, it'll be--it's fairly conventional

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1 information. It's publicly available.
 2 MS. FAGAN:
 3 Q. So just under the name, you'd put in Cougar?
 4 MR. STEPHENSON:
 5 A. Yeah. It'll bring up--if she puts in Cougar,
 6 it'll bring all sorts of cougars, if there's
 7 more than one. It turns out there's only one.
 8 MS. FAGAN:
 9 Q. But if there was more than one?
 10 MR. STEPHENSON:
 11 A. You'll see five Cougars, something, something,
 12 something. She just put the search word in.
 13 It's fairly intuitive. She'll select details
 14 and then you can see the file number. It's
 15 also--that's for our reference. I don't know
 16 why we put the file number there. It's just
 17 there. It's data out of a database. Tells
 18 you the region that the operator is--oversees
 19 it. In this case, it's the Atlantic region.
 20 It tells you the legal name of the company,
 21 which is important to us. Specifically, we
 22 want to know who we're certifying. So in this
 23 case Cougar Helicopters Inc. If it has any
 24 trade names. So most people aren't familiar
 25 with that, but a lot of companies operate

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1 under trade names. You know, if you--I don't
 2 know if--Cougar has no trade names indicated
 3 here, but I don't want to single out any
 4 airline, but you know, there's trade names.
 5 They come up with a fancy name for what they
 6 might be. But we want to know what that is,
 7 because if they're talking to the public,
 8 they're something, and they're really somebody
 9 else. Address and obviously phone numbers and
 10 contact information. If you look at the
 11 detail, you see if they're a float operator.
 12 Cougar's not a float operator. Most
 13 helicopters don't operate off floats. That's
 14 not--that's more for conventional fixed wing.
 15 Can they transport dangerous goods? The
 16 answer is yes. Air operator certificate,
 17 approved, and preferred language, obviously
 18 that's their preference. We like to know that
 19 so we can communicate to them clearly and
 20 they've preferred English, so that's what they
 21 get. And if you can just slide down a little
 22 bit.
 23 MS. FAGAN:
 24 Q. And then you can see -
 25 MR. STEPHENSON:

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1 A. You can see the different types of aircraft
 2 they're authorized to operate. You get a
 3 little sense of how heavy they are. A layman
 4 may not know if that's heavy or light for a
 5 helicopter. I can assure you they're heavy
 6 helicopters. You'll see the reference to the
 7 number and the number unfortunately in this
 8 particular case doesn't give you much. 702 is
 9 aerial work. 704 is commuter operations. You
 10 can see that they're authorized to operate in
 11 both realms with the Puma, for example. VFR
 12 over the top, we'll see that in all of them.
 13 That means that they can fly over top of
 14 cloud. VFR, it's not really of any
 15 significance.
 16 MS. FAGAN:
 17 Q. And I'll get you just to slow down, because
 18 this would be the--over the webcast, I don't
 19 know if they're going to be able to see this.
 20 MR. STEPHENSON:
 21 A. Fair ball, yeah.
 22 MS. FAGAN:
 23 Q. So right now, we're looking at a table and
 24 that table is headed aircraft type and then
 25 the weight and the regulations and then VFR

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1 and I'll get you to describe that, but before
 2 we go to that, we have a number of aircraft
 3 types. So just for the record, and really
 4 it's for people who can't see this table.
 5 MR. STEPHENSON:
 6 A. Sure.
 7 MS. FAGAN:
 8 Q. Could you just name, I believe there's four
 9 types there, what those types--and are they
 10 all helicopters?
 11 MR. STEPHENSON:
 12 A. They're all helicopters and again, I'm not a
 13 helicopter pilot, but I'm qualified to say
 14 that they're all helicopters. The S332 Puma
 15 is a helicopter. The Sikorsky 61 is a
 16 helicopter. The Sikorsky 76 is a smaller
 17 helicopter. It's not a very big helicopter.
 18 It's quite typically used for air ambulance or
 19 executive type operations, but it's used for
 20 transport as well. I don't know how many it
 21 sits actually. I've seen them in executive
 22 seating four or six in the back. So it's that
 23 small. And then Sikorsky 92, which is a
 24 fairly heavy helicopter. It's the heavier of
 25 the bunch there.

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1 MS. FAGAN:
 2 Q. And then you've mentioned weight?
 3 MR. STEPHENSON:
 4 A. Yes.
 5 MS. FAGAN:
 6 Q. We see numbers of 19,000, 22, 11, being that
 7 lighter smaller one and then the largest
 8 26,150. Now I don't know if they're large or
 9 small in size. What does weight, what do
 10 these weights, what would that tell the
 11 viewer?
 12 MR. STEPHENSON:
 13 A. Yeah, that's the maximum weight that the
 14 aircraft is able to be loaded in--what the
 15 aircraft and what's inside it would weigh and
 16 when we type certify an aircraft, we type
 17 certify it for a certain weight limit. In
 18 other words, once you start getting heavier
 19 than that, you're outside the certification
 20 standard of the aircraft. So that's done
 21 through flight testing and all of that
 22 process.
 23 MS. FAGAN:
 24 Q. You mentioned the term "heavy"
 25 MR. STEPHENSON:

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1 A. Yes.
 2 MS. FAGAN:
 3 Q. Heavy lift.
 4 MR. STEPHENSON:
 5 A. Yeah.
 6 MS. FAGAN:
 7 Q. Would these be heavy lift or at least are some
 8 of them heavy lift?
 9 MR. STEPHENSON:
 10 A. We're starting to go into areas I'm not
 11 necessarily qualified. I suspect that they're
 12 heavy ones. I know the 76 is not a heavy
 13 helicopter. It may be a medium--maybe folks
 14 from Cougar eventually can probably answer
 15 that specific question.
 16 MS. FAGAN:
 17 Q. Okay. The 702 and the 704, you'd said that
 18 the 704 is commuter?
 19 MR. STEPHENSON:
 20 A. Correct.
 21 MS. FAGAN:
 22 Q. So that would be transporting A to B people or
 23 cargo?
 24 MR. STEPHENSON:
 25 A. Correct.

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1 MS. FAGAN:
 2 Q. And then the 702 is the aerial work? Is that
 3 -
 4 MR. STEPHENSON:
 5 A. That's correct.
 6 MS. FAGAN:
 7 Q. So that's the section under the regulations
 8 that would govern or authorize them to do what
 9 they're doing?
 10 MR. STEPHENSON:
 11 A. That's right, and I'll say it's common
 12 practice for even a fixed wing operator when
 13 they apply for 704 for an aircraft that falls
 14 in that category, they'll normally always put
 15 a 702 connection to it as well. That gives
 16 them the ability to do work outside of the
 17 normal transport work. So they could do fire-
 18 -not firefighting. They could do fire
 19 surveillance. They could do sightseeing.
 20 They could do all of those extra things that
 21 they might do, that they might find a market
 22 for.
 23 MS. FAGAN:
 24 Q. So they could aerial work as in they could go
 25 out and report back on ice conditions or

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1 weather conditions?
 2 MR. STEPHENSON:
 3 A. Right.
 4 MS. FAGAN:
 5 Q. That type of thing, and not actually be
 6 transporting people or cargo?
 7 MR. STEPHENSON:
 8 A. That's correct.
 9 MS. FAGAN:
 10 Q. Okay. Now VFROTT, what does that mean?
 11 MR. STEPHENSON:
 12 A. That's an acronym. VFR is visual flight
 13 rules. That means the aircraft and the pilot
 14 would be flying with visual reference to the
 15 ground or the water and there are--there's a
 16 specific standard once you surpass that,
 17 you're now into the IFR regime or IFR
 18 environment.
 19 MS. FAGAN:
 20 Q. And what -
 21 MR. STEPHENSON:
 22 A. And we'll normally authorize--an operator
 23 that's authorized to operate IFR almost gets--
 24 it's just automatic thing, you get VFR. It
 25 doesn't go the other way automatically.

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1 MS. FAGAN:
 2 Q. And what's IFR?
 3 MR. STEPHENSON:
 4 A. Well, let me just finish. You asked me what
 5 OTT was and it's -
 6 MS. FAGAN:
 7 Q. Oh yes, sorry.
 8 MR. STEPHENSON:
 9 A. - that's over the top. That authorizes the
 10 company to fly above the clouds, but they
 11 maintain a VFR environment. It's a complex
 12 thing which I'm not sure it's relevant to this
 13 discussion, but the IFR one is the one you're
 14 really interested in or the VFR at night. VFR
 15 at night is a complex one for a layman. It's
 16 really you're flying with visual reference to
 17 the ground or water and sometimes at night,
 18 that's difficult, and in fact, even if the
 19 visibility is 15 and 20 miles, if you can't
 20 see anything, there's the belief you're not
 21 VFR any more. But by definition, you could be
 22 considered to be VFR. That's a discussion we
 23 can have.
 24 Most operators who operate in that
 25 environment also have IFR on their certificate

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1 and that's the case here with all of these
 2 aircraft. That means they can fly without
 3 reference to the ground or water. They can
 4 actually take off from the St. John's Airport.
 5 They can enter into the cloud. They do it at
 6 daytime, night time, it doesn't make any
 7 difference. They can navigate to a
 8 destination. They can arrive at the
 9 destination and navigate to the runway without
 10 seeing it until it comes time to actually land
 11 and they'll approach to a certain position off
 12 the ground where they should then have visual
 13 reference and then they'll navigate or
 14 manoeuvre their aircraft for landing, and
 15 there are certain requirements for an IFR
 16 operation, not just with the aircraft, but
 17 also the pilots themselves and also the
 18 company needs certain things in place.
 19 MS. FAGAN:
 20 Q. The passenger category, just to complete the
 21 table, especially since it may not be visual
 22 over the web, for the 702 category, it says no
 23 passengers and for the 704, the indicator is
 24 yes for passengers.
 25 MR. STEPHENSON:

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1 A. And again 702 is aerial work. We don't allow
 2 passengers on board when an aircraft is
 3 conducting aerial work. That doesn't mean
 4 somebody other than the pilots cannot be on
 5 board. For example, if you're doing search
 6 and rescue, if you're doing fire surveillance
 7 or any type of surveillance, you will have an
 8 observer on board. He's not considered a
 9 passenger. He's considered to be a worker on
 10 board. He has a duty to be on board and a
 11 duty while he's on board, even if it's as
 12 simple as looking outside. So a passenger out
 13 for a joy ride would be unacceptable, but a
 14 worker, somebody who's there to do something.
 15 Quite typically you mentioned ice -
 16 MS. FAGAN:
 17 Q. Ice observation.
 18 MR. STEPHENSON:
 19 A. - observation. You may have technicians on
 20 board who are actually working equipment in
 21 the back of the aircraft, radar and so on and
 22 so forth. So they would be considered workers
 23 and not passengers.
 24 MS. FAGAN:
 25 Q. And the same for cargo?

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1 MR. STEPHENSON:
 2 A. And the cargo, yeah, exactly. We don't
 3 transport cargo in aerial work operations.
 4 MS. FAGAN:
 5 Q. Because you're not -
 6 MR. STEPHENSON:
 7 A. Transporting.
 8 MS. FAGAN:
 9 Q. - you're not going from A to B.
 10 MR. STEPHENSON:
 11 A. That's right. That's correct.
 12 MS. FAGAN:
 13 Q. Okay, and I don't know if there's anything
 14 else on this screen, but I think that probably
 15 covers what's available there.
 16 MR. STEPHENSON:
 17 A. Yeah, your point was you can access this on
 18 the web today and search on any certified air
 19 operator in Canada.
 20 MS. FAGAN:
 21 Q. So if somebody was going to take a flight
 22 tomorrow on a commercial airline, fixed wing -
 23 MR. STEPHENSON:
 24 A. If they're operating an Airbus, they could go
 25 and see that they actually operate Airbuses

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1 and they can carry passengers, as an example.
 2 MS. FAGAN:
 3 Q. And you had mentioned earlier, since the
 4 website is now up, that the Canadian Aviation-
 5 -the Civil Aviation Regulations, the CARS, are
 6 available. Would Mrs. Kamal--just take us
 7 back, Ms. Kamal, to the beginning, just so
 8 that you could highlight where those
 9 regulations would be found? She'd go back to
 10 the home page, would that be fair?
 11 MR. STEPHENSON:
 12 A. Yeah, it would go right back to www.tc.gc.ca,
 13 select English or French, and navigate modes
 14 of transportation, aviation safety and you'll
 15 see under reference material, there's a very
 16 good graphic which you can see actually talks
 17 about the regulatory documents. There are--we
 18 refer to this as external and our internal
 19 documents, you can see on the right-hand side
 20 of the pyramid. At the top are the regulatory
 21 documents. You can see the Acts. If she
 22 selected those, you'd see the various acts
 23 that regulate us or we pay attention to, the
 24 Aeronautics Act being the top of the list, and
 25 you can see further down, the Canadian

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1 Aviation Regulations on that list, and you--
 2 hopefully on that page, you'll actually see
 3 the standards some place. Once you go into a
 4 reg, I guess. Yeah, there you go, and then
 5 it'll mention the standards on that page, as
 6 an example. So it's fairly intuitive once
 7 you've kind of navigated around. It's like
 8 any other website, you need to kind of
 9 navigate it.
 10 MS. FAGAN:
 11 Q. So if you were looking for a 704 operator,
 12 you'd go to part seven?
 13 MR. STEPHENSON:
 14 A. Part seven, yeah.
 15 MS. FAGAN:
 16 Q. And that's where you'd find -
 17 MR. STEPHENSON:
 18 A. Sub part four, commuter operations, and you'll
 19 have the standards that would be associated
 20 with this particular group. Now I should
 21 point out, and it's--if it's not obvious now,
 22 if you can see it in your screen, in the
 23 standard, it's divisioned. First of all, in
 24 the regulations, they'll often refer to
 25 aircraft and then they'll sometimes refer to

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1 aeroplanes or helicopters and they'll be very
 2 specific. The standard, we have two standards
 3 for commuter. We have an aeroplane standard
 4 and a helicopter standard. So that way
 5 they're separated and it's a little easier for
 6 the user to use. You're not sifting through
 7 is that aircraft or is that aeroplane, you
 8 know, it's specific to helicopters. It was a
 9 cleaner thing to do.
 10 MS. FAGAN:
 11 Q. I would like you now to turn to personnel and
 12 the qualifications and licensing of pilots,
 13 aircraft maintenance engineers, and I believe
 14 you also deal with dispatchers?
 15 MR. STEPHENSON:
 16 A. Yes, dispatcher.
 17 MS. FAGAN:
 18 Q. So we'll start with pilots and you had
 19 mentioned when you're going through the
 20 certificate that applied to Cougar
 21 Helicopters, the flight instrument type
 22 landing and as we go through pilots, when we
 23 get a little further down, we can then move
 24 into how that all fits into what the pilots
 25 must have. So the first thing I'd like you to

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1 do is what is necessary to become a pilot, and
 2 the different types of pilots, and then
 3 eventually lead us to the type of pilot or the
 4 license that a pilot would need to transport
 5 workers offshore by helicopter.
 6 MR. STEPHENSON:
 7 A. Okay. So just to be clear, I'm talking about
 8 a person who makes a choice to become a pilot,
 9 and this is before they become employed by
 10 anybody. In other words, this is on their own
 11 accord. An individual, a man or woman,
 12 decides they want to be a pilot. Typically
 13 what an individual would do will be to present
 14 themselves at an authorized or certified
 15 flight training unit, and there is, in this
 16 country, another path and that's through some
 17 academic colleges that actually do some of
 18 that. There's a few and I won't name them. I
 19 only know a couple of them. I think Mount
 20 Royal in Calgary, Seneca College in Toronto,
 21 and there may be others. So forgive me. But
 22 we have authorized or certified flight
 23 training units. So they present themselves
 24 there. Even the colleges have certified
 25 flight training units, so not to mislead you,

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1 and usually whether it be fixed wing or
 2 whether it be helicopter, what I'm going to
 3 talk about is essentially the same.
 4 They present themselves. It's obviously
 5 a commercial aspect of business that these
 6 flight training units are in, so there's an
 7 exchange of pleasantries and money and then we
 8 begin the process. The first goal of anybody
 9 is obviously to acquire the first level of
 10 license, which is a private pilot's license,
 11 whether it be fixed wing or whether it be
 12 helicopter, and so there's a number of
 13 elements to that. First of all, there's the
 14 medical piece of the application. The person
 15 needs to be physically fit to do that.
 16 Obviously we want our pilots fit. So there's
 17 a certification process around that. Around
 18 this country, we have a number of designated
 19 doctors who are--we do that for, as part of
 20 their practice, they're directly linked to the
 21 Minister, to the regional offices, and they
 22 are certified to do the proper examinations
 23 that we would require for aviation medicine.
 24 They would receive that certification and
 25 that's--not to go into the administration

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1 process, but they see the individual, they
 2 fill out the proper documentation. It finds
 3 it's way to our office where we have medical
 4 doctors that look at the evaluation, agree or
 5 disagree and eventually certify the
 6 individual.
 7 MS. FAGAN:
 8 Q. So just so that we're clear, the school itself
 9 is certified or has to have a certificate from
 10 Transport Canada?
 11 MR. STEPHENSON:
 12 A. Yeah, correct.
 13 MS. FAGAN:
 14 Q. So not anybody can just open up a shop and say
 15 "I'm going to start training pilots."
 16 MR. STEPHENSON:
 17 A. That's correct.
 18 MS. FAGAN:
 19 Q. So they have to be certified and then the
 20 medical process is they are doctors that must
 21 meet certain qualifications or end up on a
 22 roster and Transport Canada gives them
 23 direction as to what's required in order to
 24 provide the medical for the potential pilot?
 25 MR. STEPHENSON:

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1 A. Right. The doctors receive specialized
 2 training, seminars, whatever. There's a
 3 collaboration to completely understand what it
 4 is we're looking for in the aviation world.
 5 In other words, once we go into air, into the
 6 air, high level, there's things that apply to
 7 your body that might not apply to you on the
 8 ground. So we familiarize them with that and
 9 we have specialists who do that and work with
 10 the doctors. So that's--and we issue a
 11 medical certificate to the individual and so
 12 the individual is certified. It has a time
 13 life. I'm an airline transport rated pilot
 14 and I'm old, so I need it every six months.
 15 Whereas somebody who's young might get it
 16 every year or two, depending on their age and
 17 the type of license they might hold. The
 18 Commissioner's laughing at me.
 19 MS. FAGAN:
 20 Q. So as you get older you have to be tested more
 21 often?
 22 MR. STEPHENSON:
 23 A. That's right. That's correct. I'm not quite
 24 sure what part of my body that they want to
 25 see every year, but they seem to examine the

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1 whole thing. So that's that certificate. Go
 2 back to the flight training unit, you're
 3 right, the flight training unit themselves are
 4 certified. They go through the exact same
 5 process and I won't go through that, but they
 6 go through the same process as an air operator
 7 would. They have to employ the right people.
 8 They need flight instructors who are
 9 certified. They need a curriculum and so on
 10 and so forth. So you enter the doors of the
 11 flight training unit and they start you
 12 through their process. There's the academic
 13 piece. You need obviously to learn about
 14 things. You need to know about the machines,
 15 the mechanics of the machine. You need to
 16 learn about weather. Weather is a significant
 17 part of being a pilot, as you can imagine.
 18 You need to learn about all the regulations
 19 and you need to learn about all the stacks and
 20 stacks of books that are presented in front of
 21 you. That's typically done in ground school,
 22 but a lot of the onus rests with the pilot to
 23 study and come back and eventually the
 24 organization will lead you to the place where
 25 you actually have to enter my doors or the

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1 doors of the delegate where you actually have
 2 to write an exam or a series of exams,
 3 depending on what we're talking about. And so
 4 the exams will be written, that's the academic
 5 piece. The flight training piece is, as you
 6 can imagine, you need to actually physically
 7 learn how to fly the aircraft, so you'll be
 8 set up with a flight training instructor or a
 9 number of them, if possible, and you will
 10 learn to fly in the simply small conventional
 11 aircraft. You will learn the basics of
 12 manoeuvring and navigating and dealing with
 13 the weather and talking on the radio and
 14 dealing with air traffic control, there's a
 15 lot of inputs into a pilot that I'm sure you
 16 can appreciate happen and it's possible to
 17 learn it at a grass field and it's possible to
 18 learn at a complex airport, so there's all of
 19 those aspects. And if you're at a grass
 20 field, you're going to introduce your students
 21 to that, that other extreme and vice versa, if
 22 you're at an airport like St. John's, you'll
 23 take them to a grass field so they can learn
 24 all aspects. So all of that curriculum goes
 25 forward. There are minimum standards set for

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1 the number of hours we want to see them
 2 flying, a minimum hours we want to see in the
 3 academic, so there are minimums, and we have
 4 minimum standards. Typically you'll see more
 5 than that in the student if they want to
 6 become a more fulsome student. And not
 7 everybody is as sharp as an eighteen year old
 8 graduate out of high school and they are
 9 really sharp or, you know, some people take to
 10 flying quicker than others, so we'll see a
 11 broad number of hours spent flying. So that
 12 will take you to the point where you actually
 13 do a, physically do a flight test and you'll
 14 be flight tested by a designated flight
 15 testing examiner, so combine that with your
 16 academic piece where you've successfully
 17 passed your exams, put those things together
 18 with a proper certificate, a medical
 19 certificate and you make application for your
 20 pilot's license and then you'll get a private
 21 pilot's license. I won't go into extremes on
 22 the commercial pilot's license, but the next
 23 level up is the commercial pilot's license for
 24 both fixed wing and helicopter, it's exactly
 25 the same licensing standard, except it's a

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1 different mode of transportation, of course,
 2 and I'm sure I don't need to tell you when
 3 you're teaching a helicopter pilot to fly,
 4 you're actually putting him in a helicopter
 5 and vice versa, in a fixed wing. But
 6 essentially the principles are the same. The
 7 commercial license, there's just simply more
 8 to the academic, there's more to the flight
 9 training. We expect a higher standard, we
 10 expect more experience and when we write the
 11 exam, it's that much more harder and we ask
 12 questions that are a little bit more about
 13 being on your own and not being connected to,
 14 you know, your home base and you've obviously
 15 operating in different environments as a
 16 commercial pilot, so we get into more
 17 difficult aspects. The standard in the
 18 evaluation is higher in the case of a written
 19 exam and in the case of a physical evaluation
 20 of your flying skills, the standard is higher,
 21 as we would like to think that be the case.
 22 Now the medical examination, there is also a
 23 change to that as well, there's more--not
 24 necessarily more rigor to it, but the time
 25 period is less, again depending on age and so

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1 on and so forth. And the third category we
 2 have in both cases is the airline transport
 3 license. The airline transport license is,
 4 again, more rigor to the flight training, more
 5 rigor to the academic. In fixed wing, I'm not
 6 going to say for helicopter and I'll get a
 7 wink from my colleagues from Cougar, I believe
 8 both require an instrument rating valid, so
 9 you need to fly in instrument conditions, I'm
 10 getting a nod, so that's correct, and so
 11 flying in instrument conditions is an aspect
 12 of the airline transport license. And when
 13 you get into flying IFR, you're just going
 14 into a whole different realm of how you
 15 operate an aircraft and it's fairly complex
 16 and I can tell you most pilots in this country
 17 do not have instrument ratings, that's a fact,
 18 by a number--I forget what the number, 16,000
 19 pilots or something like that in this country,
 20 most of them are private pilots, as you can
 21 imagine, and when we get into the
 22 professionals, we'll get into people who
 23 actually fly in the IFR realm. So, and if I
 24 can go back, forgive me, unless you want to
 25 stop me because I'm on a roll.

1 MS. FAGAN:
 2 Q. No, carry on.
 3 MR. STEPHENSON:
 4 A. Let me just talk about what the private pilot
 5 can do. The private pilot obviously the
 6 description is very clear, it's a private
 7 pilot, he can fly for himself and he can't
 8 take any type of reward for his services. He
 9 can acquire and there are private pilots who
 10 can fly at night, who fly in instrument
 11 conditions and there are ratings that are
 12 attached to their pilot license and that's a
 13 lot of work for a private pilot who might have
 14 bare bones minimum, but a lot of private
 15 pilots have a lot of experience in this
 16 country. 75,000 licensed pilots--I said
 17 16,000, boy, did I miss that mark. So that's
 18 the private pilot. When you want to actually
 19 fly for a living; in other words, be paid and
 20 there are a lot of private pilots who fly
 21 privately who actually hold commercial
 22 licenses, you can do that. A commercial pilot
 23 or an airline transport pilot can fly
 24 privately, we're not limited to just
 25 commercial operations, but if you want to be

1 commercial pilot can be a co-pilot, but he
 2 cannot be the captain. I believe that's the
 3 way it works, based on my quick research on
 4 helicopters and I'm not sure if that's really
 5 relevant here, but that gives you a
 6 description of what the pilots can and cannot
 7 do.
 8 MS. FAGAN:
 9 Q. If the--and we will hear more later from
 10 Cougar, if the S92 requires two pilots, I know
 11 there are spots, I mean I know there's a pilot
 12 and a co-pilot, I know there's two spots, I
 13 don't know if they require two pilots, but if
 14 that required two pilots, the captain would
 15 have to have the airline designation and the
 16 co-pilot could either be airlined, but at
 17 least -
 18 MR. STEPHENSON:
 19 A. Correct.
 20 MS. FAGAN:
 21 Q. Have to have the commercial.
 22 MR. STEPHENSON:
 23 A. Correct, it's not unusual to see, in fact,
 24 most pilots eventually find their way, their
 25 desire is to have the ATR, the Airline

1 paid for flying an aircraft for a living, you
 2 need to acquire at least a commercial license
 3 in both fixed wing or helicopter. You do have
 4 limitations in what you can do. In the case
 5 of a fixed wing aircraft, you're limited to
 6 being a captain up to a maximum weight
 7 category and once you enter the next weight
 8 category, you need to have an airline
 9 transport license. In the case of a fixed
 10 wing, I believe it's 12,500 pounds, I don't
 11 think they've changed that rule on me. I was
 12 interested to know what the helicopter was, so
 13 I looked it up and again, somebody can throw
 14 something at me if I get that wrong, but
 15 basically a helicopter is marked based on the
 16 number of crew that the aircraft is typed
 17 certified for. A helicopter that's certified
 18 for one pilot will have, you need a commercial
 19 pilot license to captain it. If you want a
 20 captain an aircraft that requires by typed
 21 certificate two pilots, and they exist, as do
 22 fixed wing, some fixed wing require two
 23 pilots, but in a helicopter we draw the line
 24 at whether or not you need one pilot or two
 25 pilots. If you need two pilots, then the

1 Transport Rating, ATPL or Airline Transport
 2 Pilot License, and so they'll find their way
 3 there. Some companies won't accept a pilot
 4 unless they have it. That may be the case
 5 here, you certainly get asked the question,
 6 but from Transport Canada's perspective, our
 7 licensing standard is as I've described it.
 8 MS. FAGAN:
 9 Q. So they are the three categories -
 10 MR. STEPHENSON:
 11 A. Yes.
 12 MS. FAGAN:
 13 Q. And then the aircraft or whether your money,
 14 you know, whether it's commercial and that
 15 there's a paid, that would then dictate what
 16 level--what designation, I mean, the three
 17 standards are there and then it depends on
 18 what you're doing as to what standard is
 19 required?
 20 MR. STEPHENSON:
 21 A. The requirement to have a commercial air
 22 operator's certificate, we use the expression
 23 hire or reward, it probably applies to a pilot
 24 as well. If they're being hired or rewarded
 25 in any way, they require the commercial

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1 license or the airline transport license.
 2 MS. FAGAN:
 3 Q. So the airline transport, that would be the
 4 highest -
 5 MR. STEPHENSON:
 6 A. That's the highest, correct.
 7 MS. FAGAN:
 8 Q. Now, you've--with training, I'd just like to
 9 ask you a couple of questions on simulators
 10 because I've heard the term "simulator", can
 11 you just describe what a simulator is and how
 12 does simulator training, how does that impact
 13 or affect what a pilot can do?
 14 MR. STEPHENSON:
 15 A. Sure. Simulators is, as you can imagine, we
 16 know technology has improved over the last--
 17 significantly over the last decade or two now,
 18 simulators have been around for a long, long
 19 time, as far back as the pre-war they were
 20 using simulators. People like myself and
 21 others laugh at them because they were quite
 22 silly looking, but they were simulators
 23 nonetheless. But with technology we have been
 24 able to simulate conditions that you would
 25 otherwise simply really simulate in an

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1 aircraft. In other words, we can create real
 2 conditions in an aircraft, not just with the
 3 mechanical parts of the aircraft, if you get
 4 into a typical simulator today and if you
 5 don't look beyond the limits of, like if you
 6 don't look behind you, you will think that
 7 you're in a real aircraft because they use the
 8 real aircraft parts, they don't use fake
 9 parts, they don't use something like this.
 10 They use the real parts so the pilot has and
 11 touches and uses the switches. And behind
 12 those switches and dials and levers is a lot
 13 of technology. There was old technology, now
 14 we're into new technology. The visual
 15 capabilities now allows us to see--in the old
 16 days, we'd simply do nighttime simulation
 17 because it was very realistic or quite
 18 realistic for nighttime, but we couldn't
 19 simulate daytime or dusk very well. The
 20 simulations have gotten better and better and
 21 better. Now we can actually simulate daytime
 22 and nighttime, but the real issue is you can
 23 put a crew into an aircraft simulator and you
 24 can simulate a real condition. You could
 25 simulate an emergency where in the aircraft

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1 you would say it, pretend that or you'd say
 2 "simulated engine failure" or "simulated
 3 engine fire" or "simulated electrical fire".
 4 You can actually do that in a simulator, you
 5 push a button and an engine quits like, and
 6 then you sit back and as an examiner, I'm an
 7 examiner, I would sit back and then watch the
 8 crew perform. I mean, it's the perfect way--
 9 it's the perfect training aid, it's the
 10 perfect evaluation process to allow us to see
 11 a real crew really do their thing and you
 12 don't interact. When you're in the aircraft,
 13 we either simulate the condition by doing it
 14 verbally or if we do it, in the case we would
 15 simulate the failure of an engine, we would
 16 bring an engine lever to idle, but it would
 17 still be running because we want to stay safe,
 18 we don't want to put ourselves in that
 19 condition, and so we would simulate that and
 20 it doesn't quite create the same environment
 21 because everybody knows the engine is running,
 22 and so they don't really--in the simulator,
 23 they'll go through the process of actually
 24 shutting the engine down so you'll end up
 25 flying single engine. We see that for real,

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1 it's a great way to do it. We don't do that
 2 in the aircraft, we'll continue and we'll
 3 pretend we've shut it down, pretend you turned
 4 the switch off, pretend, pretend, pretend.
 5 It's actually interesting to see the crew
 6 perform and it allows them in a training
 7 environment to do all of those things. And
 8 hydraulic failures, I mean, you can shut the
 9 hydraulics off in a helicopter, but you know,
 10 I've done it, I've spent some time in a
 11 helicopter and it's not something you want to
 12 be doing on a regular basis, but in a
 13 simulator, you can do whatever you want and
 14 watch the crew train, be trained. They can
 15 experience it and then you can watch the crew
 16 be evaluated that way too.
 17 MS. FAGAN:
 18 Q. Does a simulator training allow a pilot to do
 19 more or to fly in conditions that they
 20 wouldn't otherwise be able to do without
 21 simulator training, and you may or may not
 22 know -
 23 MR. STEPHENSON:
 24 A. Yeah, I do know and I would suggest that
 25 statement is not quite true, but it does allow

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1 us to evaluate them in low visibility, the IFR
 2 conditions, for example. You know, today
 3 we're going to fly IFR, well the sun is
 4 shining, so how do we do that, right. In the
 5 old days we would wear a hood and pretend we
 6 couldn't see outside, but we don't do that, in
 7 a simulator you program the weather, the
 8 weather is bad, even if it's sunny out. You
 9 can program wind, so you can do all of those
 10 things. If we want to do, in the case of
 11 instrument flying specifically and this is
 12 where it really shows itself, we can actually
 13 bring the visibility conditions down to the
 14 lowest that the air operator might be
 15 certified to do or the airport might be
 16 certified to do, and so they can do the real
 17 approach and arrive at the airport, or in this
 18 case, we can talk about, you know, an offshore
 19 rig. I mean, they can go to a platform and
 20 they can simulate that and I would be
 21 surprised if those things aren't already
 22 programmed into the simulations that offshore
 23 operators are using today. It's very simple
 24 to do that. And so they can actually simulate
 25 that exercise. And once they become visual,

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1 they can even simulate the visual manoeuvring
 2 around and the simulators are as good as you
 3 can actually simulate the landing on a
 4 platform.
 5 MS. FAGAN:
 6 Q. So would it be fair to say you are, you would
 7 endorse simulator training?
 8 MR. STEPHENSON:
 9 A. It's required by regulation in certain
 10 sectors, I can't say that it's required in
 11 this particular example, but we've moved it
 12 into aircraft that, I would say, I think about
 13 15 years ago we made it an option and we've
 14 taken it out of being an option for certain
 15 types of operations. I'll ask that question
 16 to Cougar if you'd like to know that, because
 17 I don't intuitively know that because I don't
 18 know helicopters. In fixed wing, we require
 19 them for sure.
 20 MS. FAGAN:
 21 Q. That would be where I would like to break
 22 because we're moving to another topic, but
 23 prior to the break, I understand that the
 24 Commissioner would like to have a couple of
 25 minutes with those who are present after we

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1 have shut down the -
 2 COMMISSIONER:
 3 Q. Yes, if we just shut down the equipment for a
 4 moment and then we can talk to you about the
 5 couple of housekeeping matters, as it were.
 6 MS. FAGAN:
 7 Q. Thank you.
 8 (OFF RECORD)
 9 COMMISSIONER:
 10 Q. Okay, Ms. Fagan.
 11 MS. FAGAN:
 12 Q. Before the break, we were talking about
 13 pilots, and I have a couple of more questions
 14 on the pilot topic before we move to Aircraft
 15 Maintenance Engineers, and your description
 16 before lunch dealt with the pilot in his or
 17 her own right obtaining their licenses, and
 18 the types of licences, and as I understand
 19 this, that this may very well take place
 20 before the pilot obtains a job, or when the
 21 pilot is trying to obtain a job, so the pilot
 22 has their licenses to do various activities,
 23 but is that the end of it? I mean, once the
 24 pilot now walks into an employer's offices and
 25 is hired, especially by an airline, and we're

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1 dealing with the commuter type service, is
 2 there any additional training or any other
 3 requirements?
 4 MR. STEPHENSON:
 5 Q. Sure, and if I may, I'll just stay strictly
 6 with helicopters because, anyhow, it's the
 7 discussion for today and for as we move
 8 forward. I'll just qualify one point on
 9 helicopter flight training as it's defined and
 10 required under the regulations here in Canada.
 11 It's essentially a training protocol program,
 12 a curriculum that deals with conventional
 13 operation of the aircraft, take off and land,
 14 transporting people around, basically the
 15 operation of the aircraft. The regulations,
 16 in simple terms, don't require that the flight
 17 training unit train the pilot to do things
 18 like slinging and--that means picking
 19 something up underneath the helicopter and
 20 moving it around. Helicopters do all sorts of
 21 aerial work as we've discussed earlier, so
 22 that's not part of the licensing protocol.
 23 Some flight training units actually put that
 24 into their program. They'll actually teach a
 25 student. It's a logical thing to do to teach

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1 a student to lift something and move it and
 2 set it down, and very simple conventional
 3 things that a helicopter pilot might need to
 4 know. When they take their first job, it's a
 5 good thing for a pilot to have, so to your
 6 point, to your question. Once the pilot has
 7 his license and he presents himself at the
 8 door of an air operator to seek employment,
 9 he's going to either learn these things before
 10 he gets in the door, and he's going to have to
 11 seek that out, or what a lot of air operators
 12 will do, will start a person at a junior level
 13 and then will move them into their--bring them
 14 into their organization. They're licensed
 15 pilots, so they can actually fly the aircraft,
 16 or not. They may not have a rating on a
 17 specific aircraft type that the air operator
 18 is operating, but they'll take possession of
 19 that pilot as a licensed pilot and then
 20 they'll train them. They'll have their own
 21 approved curriculum that the air operator has
 22 that's approved by Transport Canada on the
 23 aircraft specific, and then also on the type
 24 of operation they carry out. I mentioned
 25 lifting things. Well, yeah, they might not

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1 lift things on a short line, but there's a
 2 whole different process when you're lifting
 3 something on a long line, which is having a
 4 helicopter hover at a high altitude and lift,
 5 and you can imagine working with a crew on the
 6 ground, and all the safety issues that go
 7 around those aspects, and there's other things
 8 that helicopters do, and so the air operator
 9 would be responsible to make sure that that
 10 newly hired pilot has the skills and training
 11 that they require in order to carry out their
 12 operation, meaning the air operator's
 13 operation. It's also possible somebody comes
 14 into their organization with lots of
 15 experience in contrast to the brand new pilot
 16 who has lots of experience on long-line work
 17 or whatever the air operator might be doing.
 18 The air operator still has that responsibility
 19 to ensure the individual in fact demonstrates
 20 that skill, so they'll put them through
 21 perhaps a curriculum that might be slightly
 22 modified, but they're still required to assure
 23 that the individual has the training, so I
 24 don't know if that's clear.
 25 MS. FAGAN:

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1 Q. Well, that's what I'm interested in learning.
 2 MR. STEPHENSON:
 3 Q. Right.
 4 MS. FAGAN:
 5 Q. And in particular, take the situation that
 6 this inquiry is dealing with, which is the
 7 transportation of workers offshore. This is
 8 an "A" to "B," and the workers are going to be
 9 in helicopters flying over water, and you've
 10 said that if it's cold temperatures and water
 11 there's going to be, you know, certain other
 12 things that are required such as survival
 13 suits, but what I'm looking at is the pilots.
 14 You know, is that beyond a normal "A" to "B"?
 15 Do you know if there would have to be anything
 16 required in the way of training for those
 17 pilots, and if there is a requirement where
 18 would that be? Where would the requirement
 19 be? Would you find it in the regulations or
 20 in their processes?
 21 MR. STEPHENSON:
 22 Q. Sure, and again, and we've talked about this
 23 earlier in general terms, and I won't be that
 24 specific, but the air operator would be
 25 obliged to demonstrate to Transport Canada a

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1 couple of things with relationship to the
 2 aircraft proper. They're now going out to a
 3 platform, something that a helicopter pilot
 4 may not have ever done. They certainly may
 5 have landed in a confined space. That's what
 6 helicopters do, but it is a confined space,
 7 probably or, as you can imagine, in an
 8 environment that might be somewhat different,
 9 usually higher winds, low visibility
 10 conditions and so on and so forth, so there
 11 would be a training program around how they
 12 would go about doing that. The other aspect,
 13 and you touched on that a little bit, is the
 14 emergency equipment on board the aircraft.
 15 You simply wouldn't put the pilots in the
 16 aircraft and send them on their way. They're
 17 actually an integral part of the crew. They
 18 are the crew in the aircraft. They have a
 19 responsibility to the back-end passengers, and
 20 so the training program will describe the use
 21 of all the emergency equipment, all the
 22 protocols around how one might go about doing
 23 certain things while getting on board.
 24 Perhaps the pilots might be involved with the
 25 briefings that might be done prior to.

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1 Passengers will be trained in this case. I
 2 know they're highly trained before they get on
 3 board the aircraft, so a lot of that work is
 4 done ahead of time. Some companies might not
 5 work that way. You might show up, and you
 6 might be trained by the pilots. That's not
 7 untypical of other operators where you're
 8 shown how to put on the life-preserver and so
 9 on and so forth. We all are familiar with
 10 those types of briefings in an airliner, but
 11 in an organization or an operation like this
 12 it's a lot more robust, but the crew still are
 13 a part of that emergency process of whatever
 14 takes place in the aircraft, and they'll have
 15 protocols for certain scenarios, whatever that
 16 might be.

17 MS. FAGAN:
 18 Q. Well, for the C-N-L-O-P-B the key document is
 19 the authorization, and as I understand it for
 20 an air operator the key document is this
 21 certificate

22 MR. STEPHENSON:
 23 Q. Right.

24 MS. FAGAN:
 25 Q. The COA.

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1 MR. STEPHENSON:
 2 Q. Right.

3 MS. FAGAN:
 4 Q. And the COA has a number of components, this
 5 certificate to operate, so would this training
 6 process be a manual or a process that's
 7 described and be a requirement for that
 8 operating certificate? Is that how it works?

9 MR. STEPHENSON:
 10 Q. Yeah, and again you're asking me to get into
 11 Cougar's operation, which I don't know how
 12 it's structured. By the regulation and the
 13 staff that we would put on a file like that,
 14 we would be looking to be assured that
 15 training programs are in place. Our
 16 documentation, our training manuals that we
 17 would approve would be more robust in certain
 18 areas but based on our regulations, so we
 19 would want to training around the use of the
 20 emergency suits and so on and so forth, and
 21 how that's going to be trained. Would that
 22 appear in our document, or would we accept it
 23 in another document? I think we probably
 24 would. We're reasonably flexible in that
 25 regard, but quite typically the regulations

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1 refer to a training manual, and you might find
 2 multiple manuals, in our minds, linked
 3 directly to the training manual. So if
 4 there's a requirement over and above what we
 5 would require, it might find its way into our
 6 approved manuals or it might be elsewhere, and
 7 I think we would be okay with that.

8 MS. FAGAN:
 9 Q. Okay.

10 MR. STEPHENSON:
 11 Q. Yeah.

12 MS. FAGAN:
 13 Q. If the operator has a training program that
 14 has been approved or it meets Transport
 15 Canada's satisfaction, do you view the
 16 training, observe the training? I mean, do
 17 you do any inspections or checks to see how
 18 they're implementing that training, or do you
 19 just take the process. It's in a manual.
 20 This is what they say they're going to do, and
 21 that's the end of it. I mean, what type of
 22 oversight is there?

23 MR. STEPHENSON:
 24 Q. Sure, yeah, I'll say helicopters broadly right
 25 across the country, we wouldn't normally

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1 oversee all training aspects of a training
 2 organization of what a company might give to
 3 their pilots or they might give to their
 4 ground crew or whatever. We wouldn't do that.
 5 Simply, that's the accountability of the
 6 operator. That said, based on assessment of
 7 risk, we probably would in fact engage in an
 8 operation such as this one. We probably would
 9 go and actually participate maybe even as a
 10 student in that environment. We would
 11 actually take training. Maybe we might take
 12 the training elsewhere, or we might actually
 13 participate as a full participant in the
 14 training. That wouldn't surprise me. We do
 15 that with a lot of our training programs. It
 16 puts you right into it, and you then get a
 17 good flavour of how well the training is done.
 18 Most of our people have a training or
 19 instructing background. They know what
 20 teachers should be doing. They know what a
 21 curriculum should look like, so they'll
 22 actually delve right into it so it wouldn't
 23 surprise me that that's what happened in this
 24 case, but I don't know that it did.

25 MS. FAGAN:

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1 Q. Okay. You mentioned--I think you used the
 2 word, "type," or "rating."
 3 MR. STEPHENSON:
 4 Q. Yes.
 5 MS. FAGAN:
 6 Q. When an airline pilot or a pilot that's going
 7 to operate a significant aircraft, is there
 8 any training that is related directly to the
 9 type of aircraft or the machine? I mean, he
 10 can commute. He can deal with the
 11 transportation of passengers, but is there any
 12 training that's specific to the machine, not
 13 just the activity, which is over water?
 14 MR. STEPHENSON:
 15 Q. Sure, so I'll back our pilot out of the air
 16 operator, and a fixed wing pilot when he
 17 receives his first license, he is normally
 18 authorized to fly single engine aircraft up to
 19 a certain weight, 12,500 pounds actually.
 20 It's a grouping and that's what he's allowed
 21 to do. It's probably not true, the 12. A
 22 private pilot, I think, is only authorized--
 23 I'm going to pull a number out of my head,
 24 6,000 pounds. It's a lot lighter so, forgive
 25 me, I don't remember that number, but they're

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1 allowed to operate a lighter aircraft, but are
 2 grouped, so any single engine aircraft in that
 3 grouping. A commercial pilot can go up to
 4 12,500 pounds, any grouping. Any aircraft
 5 over the top of that number, 12,500 pounds, a
 6 fixed wing pilot needs a type rating on each
 7 individual aircraft so he needs to go through
 8 some sort of program to be certified.
 9 Normally, people don't do that on their own
 10 accord. They'll do that when they walk into
 11 the organization that they're operating with.
 12 That company will take them, train them
 13 specifically on the aircraft, and two things
 14 happen. They'll have a--some academic, and
 15 they'll have an actual flight test, and
 16 they'll be certified on that aircraft
 17 specifically, so I'll say a Boeing 747 or a a
 18 Gates Learjet, or something in that category
 19 which both of those fall into, and they'll be
 20 certified. That airplane will be endorsed on
 21 their license. It'll stay there for the rest
 22 of their lives. I have eight aircraft on my
 23 own license, which will never be removed, so
 24 that's a type rating, and the type rating is
 25 actually of no real value. It's kind of a

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1 resume for a pilot for future, and so it says
 2 I was trained on the aircraft and endorsed.
 3 The training is generally only valid for a
 4 year or a specific period of time, and the
 5 pilot needs to retrain regularly and needs to
 6 be re-certified on a regular basis. That
 7 fixed wing aside for a second, in the case of
 8 the helicopters, and I don't believe they've
 9 changed these rules since I've delved into
 10 them, any helicopter, it doesn't matter what
 11 it is, requires a type rating on the
 12 helicopter pilot's license, so it would be
 13 Bell 206, which is a very light helicopter, or
 14 the Puma or the Sikorski. They are all
 15 separate type ratings where a pilot needs to
 16 be trained, and he receives a proficiency
 17 check on the aircraft, and that gets type-
 18 rated on his license, and if I understand it
 19 it's exactly the same thing. Once it's on
 20 your license, it's never removed, but it's
 21 only valid for a period of time. The training
 22 and the proficiency check is only valid for a
 23 period of time, and then you need to be
 24 retrained and rechecked, and that's normally
 25 done inside an air operator, not always but

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1 normally. It's an expensive thing for an
 2 individual to do on their own.
 3 MS. FAGAN:
 4 Q. And you have mentioned three different types
 5 of helicopters. They would be the brand
 6 names.
 7 MR. STEPHENSON:
 8 Q. Yes.
 9 MS. FAGAN:
 10 Q. The Bell or the Puma or the Sikorski, but
 11 within those brand names or those designers,
 12 manufacturers, they have different models or
 13 types.
 14 MR. STEPHENSON:
 15 Q. That's correct.
 16 MS. FAGAN:
 17 Q. And so when you talk about a type endorsement,
 18 it wouldn't just apply to the brand name. It
 19 would apply, as I understand it, to the
 20 particular aircraft itself.
 21 MR. STEPHENSON:
 22 Q. Right. In the case of Bell, I was specific,
 23 Bell 206, indicates a Sikorski. I did say
 24 Sikorski, so you're correct. Some helicopters
 25 are so similar that we group them. It's a

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1 reasonable thing to do. Bell 206, Bell 206
 2 LongRanger, I don't think there's a separate
 3 type rating, as an example, because one is a
 4 little bit longer. I don't think there's a
 5 significant difference but, yes, they're
 6 specified. They're actually, I believe, in
 7 our regulations where we actually talk about
 8 the specific type ratings--and you'll see a
 9 long list of fixed wing aircraft. You'll see
 10 a long list of helicopters, and so you'll see
 11 those endorsements. I'm type-rated on the
 12 Boeing 737, which, oddly enough, gives me the
 13 whole gamut, and that sounds like that's not a
 14 good thing, but the reality is I still need to
 15 be trained in the aircraft specifically, and
 16 even if there's a difference between, let's
 17 say, the helicopter, one helicopter type and
 18 another--sorry, the type--and they're grouped,
 19 if there's differences the company is
 20 required--even though you're type-rated,
 21 they're required to give the differences
 22 training between the two types. So if it was
 23 a Bell 206 and a Bell 206 LongRanger--if
 24 there's a difference, then they're required to
 25 train the difference, and that might be

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1 something as simple as being aware of the
 2 weight differences, and they're required to
 3 make--it's the company's obligation to make
 4 sure the pilot flying the aircraft knows
 5 there's a weight difference. It may be as
 6 simple as that, or there might be small flight
 7 characteristic differences. Obviously, when
 8 we go into the heavier machines, it gets more
 9 complex.
 10 MS. FAGAN:
 11 Q. I'd now like to move to the maintenance of the
 12 aircraft.
 13 MR. STEPHENSON:
 14 Q. Sure.
 15 MS. FAGAN:
 16 Q. Because I understand there's a fairly
 17 rigorous--I wouldn't say complicated, but a
 18 sophisticated system for licensing Aircraft
 19 Maintenance Engineers. This is a very
 20 specialized field.
 21 MR. STEPHENSON:
 22 Q. Right.
 23 MS. FAGAN:
 24 Q. And I'd like you to explain the importance and
 25 the process. You gave a very good description

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1 of pilots and what they have to do. Now I
 2 understand the maintenance engineers have to
 3 do something similar. It might not be exactly
 4 the same, but can you go through that process?
 5 MR. STEPHENSON:
 6 Q. Sure, and again a little bit out of my
 7 wheelhouse because I'm not a licensed AME, but
 8 I am certainly familiar with the process, and
 9 not to go into it in great detail because it
 10 would be redundant, but the AME, or the
 11 Aircraft Maintenance Engineer, goes through
 12 the same process. An individual decides they
 13 want to become an AME. In this case, they
 14 usually present themselves at one of the many
 15 colleges we have across this country is a
 16 common practice where they receive the
 17 academic training that they would get to be an
 18 AME. During that program, they actually do
 19 lots of hands on. The college may have a Co-
 20 op Program, so they'll actually be assigned to
 21 a company where they actually might work in a
 22 shop and start to get some actual hands-on
 23 experience, but they go through the academic
 24 and receive that academic piece. They write
 25 exams similar to a pilot, and then an AME, the

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1 licensing portion of the AME is really about
 2 not flying an aircraft, obviously. It's about
 3 apprenticing, and I'm sure most of us who have
 4 worked in any kind of industrial area
 5 understands apprenticing in that you can't
 6 learn everything in a week or a month or a
 7 year. It comes to you in time. You'll be
 8 supervised by a licensed AME, so there's a
 9 process there. At some point in time during
 10 that process the exams will be written. The
 11 academic will be written. You'll present
 12 yourself to Transport Canada with your
 13 academic, your written exams, and your
 14 experience in the way you were apprenticed or
 15 you were monitored and supervised. You make
 16 your application, and then you will receive
 17 your license.
 18 MS. FAGAN:
 19 Q. So a certified Aircraft Maintenance Engineer
 20 could then take a student or a junior, an
 21 apprentice under their wing.
 22 MR. STEPHENSON:
 23 Q. Yes.
 24 MS. FAGAN:
 25 Q. And supervise them and teach them, on the job

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1 training.
 2 MR. STEPHENSON:
 3 Q. That's correct.
 4 MS. FAGAN:
 5 Q. And when that, you know, potential Aircraft
 6 Maintenance Engineer presents themselves at
 7 Transport Canada, they would have some type of
 8 history or certification or proof--
 9 MR. STEPHENSON:
 10 Q. Right.
 11 MS. FAGAN:
 12 Q. --that not only have they written the exams,
 13 but that they have spent this time under the
 14 guidance of a certified engineer.
 15 MR. STEPHENSON:
 16 Q. That's correct.
 17 MS. FAGAN:
 18 Q. And who can perform maintenance on an
 19 aircraft?
 20 MR. STEPHENSON:
 21 Q. Sorry, it's a complicated question in the
 22 sense that anybody can perform maintenance of
 23 an aircraft. The question is really who can
 24 perform maintenance on an aircraft
 25 unsupervised, and that would be a maintenance

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1 engineer, a licensed maintenance engineer?
 2 There's two aspects of this, and again it's
 3 not my direct area of expertise, but I know I
 4 have this correct. There's the work, and
 5 there's the person who certifies that the work
 6 is done appropriately, and in both cases the
 7 person who can work unsupervised is a licensed
 8 AME. The person who can sign out is a
 9 licensed AME. Sign the work off, certify that
 10 the work has been carried out in accordance
 11 with the proper procedures, and they'll link
 12 that directly to the proper references in the
 13 air worthiness manual.
 14 MS. FAGAN:
 15 Q. So the signing of an aircraft, and I know this
 16 may not be your area.
 17 MR. STEPHENSON:
 18 Q. Okay.
 19 MS. FAGAN:
 20 Q. And we're only trying to explain the systems
 21 and what's in place.
 22 MR. STEPHENSON:
 23 Q. Yeah.
 24 MS. FAGAN:
 25 Q. Can you just explain? A helicopter lands,

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1 finished for the day or it needs some type of
 2 servicing. Can you just describe the process,
 3 and what do you mean by "signing out?"
 4 MR. STEPHENSON:
 5 Q. Sure. Well, first of all, any aircraft,
 6 particularly when it gets more complex, has a
 7 very rigorous and Transport Canada approved
 8 schedule of maintenance, right? So, you know,
 9 all the parts of the aircraft need to be
 10 inspected at a certain point in time during
 11 its life, and so that structure is there so an
 12 aircraft, as you said, arrives. It's
 13 scheduled for maintenance, and so the
 14 maintenance process would begin. Maintenance
 15 engineers would perform their duties.
 16 Apprentices would be involved, and the work is
 17 performed. It's critical that the work that's
 18 performed is properly documented. In other
 19 words, we have a record of what took place,
 20 what was inspected, how it was inspected, what
 21 parts might have been replaced, or removed and
 22 replaced, and so that documentation is
 23 important, and then once that's complete then
 24 the document is released to service. It's
 25 done in a proper manner. They actually have

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1 specific statements that they'll use, or
 2 similar statements that they'll use to
 3 properly release the aircraft, and all of that
 4 documentation is done by an authorized or an
 5 approved maintenance engineer.
 6 MS. FAGAN:
 7 Q. So that would be the certified -
 8 MR. STEPHENSON:
 9 Q. An Aircraft Maintenance Engineer, that's
 10 right.
 11 MS. FAGAN:
 12 Q. That would be the certified Aircraft
 13 Maintenance Engineer.
 14 MR. STEPHENSON:
 15 Q. Yeah.
 16 MS. FAGAN:
 17 Q. They're the only ones that can sign out or
 18 release.
 19 MR. STEPHENSON:
 20 Q. Yeah. You see--yeah.
 21 MS. FAGAN:
 22 Q. In the commercial commuter context.
 23 MR. STEPHENSON:
 24 Q. Yeah, the maintenance I'm talking about,
 25 that's the person who would release the

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1 aircraft to service. There's some other
 2 technical issues about releasing an aircraft
 3 based on other flight authorities, and that's-
 4 -we're going to back to manufacturers and so
 5 and so forth which -
 6 MS. FAGAN:
 7 Q. Well, from the maintenance -
 8 MR. STEPHENSON:
 9 Q. That's complicated things so -
 10 MS. FAGAN:
 11 Q. Right.
 12 MR. STEPHENSON:
 13 Q. But from an air operator's concern, that's the
 14 way it would work, yeah.
 15 MS. FAGAN:
 16 Q. The two areas I want to cover, I don't know
 17 which one you want to deal with first. One is
 18 particular aircraft. I mean, if you're a
 19 certified Aircraft Maintenance Engineer, can
 20 you release and perform maintenance on all the
 21 helicopters that exist, or is there any
 22 connection--you've said that a pilot, once you
 23 get into a certain category, must have type
 24 endorsements.
 25 MR. STEPHENSON:

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1 Q. Right.
 2 MS. FAGAN:
 3 Q. What about the engineers?
 4 MR. STEPHENSON:
 5 Q. Right, so in the case of the engineers, and
 6 again I'll reserve my response with just a bit
 7 of a catch because I suggest you ask that
 8 question again of somebody else who could
 9 confirm it for you, but an AME as a pilot
 10 would have a blanket authority to fly
 11 aircraft. In the case of the pilot, well, the
 12 maintenance engineer can obviously work on all
 13 sorts of light aircraft. That's not
 14 untypical. They wouldn't be endorsed on every
 15 small aircraft that exists, but in the case of
 16 larger aircraft the licenses are typically
 17 endorsed for the aircraft specifically. There
 18 may be a training program. There may be a
 19 written exam. There's a certification
 20 process, and the license of the AME would be
 21 endorsed for that specific aircraft.
 22 MS. FAGAN:
 23 Q. So the engineer may need, depending on the
 24 complexity of the aircraft -
 25 MR. STEPHENSON:

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1 Q. Yeah.
 2 MS. FAGAN:
 3 Q. May need an endorsement.
 4 MR. STEPHENSON:
 5 Q. Yeah, and I don't know where that line is and
 6 -
 7 MS. FAGAN:
 8 Q. Where the line is.
 9 MR. STEPHENSON:
 10 Q. Yeah.
 11 MS. FAGAN:
 12 Q. But once you get into the--
 13 MR. STEPHENSON:
 14 Q. Yeah.
 15 MS. FAGAN:
 16 Q. --more complicated, heavier, larger machinery,
 17 there is a process where endorsements are
 18 required.
 19 MR. STEPHENSON:
 20 Q. Right, and in the fixed wing world, that's the
 21 one I know better, I know there are type
 22 ratings for--or type endorsements for specific
 23 heavy aircraft.
 24 MS. FAGAN:
 25 Q. Okay. The Approved Maintenance Organization,

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1 we had heard about that earlier.
 2 MR. STEPHENSON:
 3 Q. Yeah.
 4 MS. FAGAN:
 5 Q. In order for an operator to have its
 6 certificate, one of the things it needs to
 7 have besides its manuals and its processes and
 8 its plans is it must have an Approved
 9 Maintenance Organization. We've heard that
 10 term and we've heard about the licensed
 11 Aircraft Maintenance Engineer, so we have the
 12 engineers and we have this thing called the
 13 maintenance organization. Can you please
 14 explain how the engineers fit with the
 15 organization?
 16 MR. STEPHENSON:
 17 Q. Sure. Sure, and again I'll describe it
 18 similar to the pilot. The pilot went through
 19 his--or, sorry, the--yeah, the pilot went
 20 through his own personal licensing process
 21 before he was employed. The engineer
 22 typically does the same thing. "Typically,"
 23 meaning some people actually grow up inside an
 24 AMO as a floor sweeper, and they're sponsored
 25 and they do it in that way, but essentially

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1 you're licensed. You enter the doors of the
 2 AMO, the Approved Maintenance Organization,
 3 and they take hold of you as their employee,
 4 as their maintenance engineer, and they're
 5 obliged to train you equally as they do pilots
 6 to train you to their systems of doing
 7 maintenance. If they have an aircraft,
 8 specific type that they operate that you don't
 9 have, over time they'll probably bring you to
 10 a point where you can actually be endorsed on
 11 that license, so they may sponsor you and give
 12 you training and/or sponsor you at a training
 13 organization to receive that academic piece.
 14 They'll give you the experience that you need.
 15 You'll write your exams. You'll become
 16 endorsed, but they'll do that inside of their
 17 organization. Just that little piece aside, I
 18 think it's really important to focus on their
 19 system. Not every AMO operates the same way.
 20 I put my tools over here. You put your tools
 21 over there. "No, no, I want you to put your
 22 tools where I tell you to put your tools. I
 23 want you to manage the tools the way I tell
 24 you to manage the tools." As you can imagine,
 25 like surgery it's important to manage the

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1 tools of a maintenance engineer. You want to
 2 make sure they're in the box when the aircraft
 3 flies away and obviously not in the aircraft,
 4 so companies are very strict on how they
 5 manage tools, just as an example, but there
 6 are other aspects of an organization. How we
 7 move our paper around, how we document, and
 8 how we certify, "I want you to do it the way
 9 we do it," so there'll be a training protocol
 10 around that. How we supervise, "You're a
 11 licensed AME." "I want you to supervise those
 12 two apprentices, so this is the curriculum we
 13 use for our apprentices," so you might go
 14 through that process. That's training that a
 15 AMO would be obliged to give to a new employee
 16 who might have worked elsewhere, or maybe not
 17 worked anywhere.
 18 MS. FAGAN:
 19 Q. So the certificate for an air operator to
 20 operate, its authority to operate is dependent
 21 on having an Approved Maintenance
 22 Organization.
 23 MR. STEPHENSON:
 24 Q. Right.
 25 MS. FAGAN:

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1 Q. And the Approved Maintenance Organization is
 2 an approved system, an approved program for
 3 maintaining that air operator's equipment, and
 4 therefore when an engineer comes in the
 5 engineer must comply and follow that Approved
 6 Maintenance Organization.
 7 MR. STEPHENSON:
 8 Q. Their process.
 9 MS. FAGAN:
 10 Q. That process.
 11 MR. STEPHENSON:
 12 Q. Yeah.
 13 MS. FAGAN:
 14 Q. Because if that process is not followed, that
 15 puts that approval--the entire approval
 16 process is now -
 17 MR. STEPHENSON:
 18 Q. Well, again bring in the regulator. One of
 19 the things the regulator does is we pick up
 20 their documents, and we see the way the manner
 21 in which they're going to operate. Something
 22 that's very to the heart of the maintenance
 23 organization is quality control through
 24 quality assurance. They specify how they're

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1 going to do that, so we actually do a fair
 2 amount of research and we review their
 3 procedures, and then we step out into the
 4 floor. We're going to start administratively.
 5 We're going to talk to senior directors,
 6 managers, and we might step out on the floor
 7 and talk to an AME and say, "How do you do
 8 this," and if they give you a completely
 9 different answer, if it's like--"Well, no,
 10 that's not what it says here," and so it's
 11 important that the people who work inside
 12 understand the AMO or the maintenance
 13 organizations procedures of--if it's quality
 14 and quality assurance, or any other procedure,
 15 it's documented and that's what we inspect
 16 too.
 17 MS. FAGAN:
 18 Q. Okay.
 19 MR. STEPHENSON:
 20 Q. And expect to see.
 21 MS. FAGAN:
 22 Q. The approval is based upon that process.
 23 MR. STEPHENSON:
 24 Q. That's correct.
 25 MS. FAGAN:

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1 Q. So everybody working under that process must
 2 comply.
 3 MR. STEPHENSON:
 4 Q. That's correct.
 5 MS. FAGAN:
 6 Q. Okay. The last group that I've asked you to
 7 go through are the flight dispatchers, because
 8 I understand that there's a whole area called
 9 the dispatch of the aircraft.
 10 MR. STEPHENSON:
 11 Q. Right.
 12 MS. FAGAN:
 13 Q. I mean, we've flown it. We've dealt with the
 14 flying, and we've dealt with the maintenance.
 15 MR. STEPHENSON:
 16 Q. Right.
 17 MS. FAGAN:
 18 Q. But there's a dispatch system, so I'm going to
 19 ask you to go through how Transport Canada
 20 certifies flight dispatchers.
 21 MR. STEPHENSON:
 22 Q. Okay.
 23 MS. FAGAN:
 24 Q. And before that perhaps you could explain what
 25 is a flight dispatcher?

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1 MR. STEPHENSON:
 2 Q. Yeah, I think that's probably a good order to
 3 go in. We'll talk about the people who work
 4 in it later. You know, when you're operating
 5 a commercial air service, just so everybody
 6 understands what we're talking about, the
 7 manner in which you allow an aircraft to
 8 prepare itself and take off and go someplace,
 9 land and do its work, and hopefully come home
 10 at some point in time is--it's a complex
 11 process. In the case of helicopter
 12 operations, and I'll stay to that, but it
 13 could be fixed wing operations as well.
 14 Particularly in the smaller aircraft world,
 15 pilots generally operate with some autonomy.
 16 In other words, they're expected to check the
 17 weather themselves. They're expected to do
 18 their flight planning themselves. They're
 19 expected to decide how much fuel they need.
 20 They're expected to do all sorts of things
 21 around the flight. That's what they learned
 22 as a basic, licensed pilot, and when they
 23 enter into a commercial air service there's
 24 some expectation that they can be self-
 25 sustainable. That is pilot self-dispatch, and

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1 it's as simple as that, and commercial air
 2 operators are authorized to do that. I won't
 3 get into the description of what that is.
 4 They actually have letters for it, but it's
 5 not really that important. The point is there
 6 is are certain things that the pilot is
 7 expected to do. An air operator will describe
 8 in their manuals the manner in which they
 9 dispatch themselves, and we review that
 10 document, make sure it's compliant with the
 11 regulations, and then we'll actually go and
 12 look at it and see if they are actually doing
 13 that. We'll look for documentation. We'll
 14 also again interview pilots and see how they
 15 dispatch. We might talk to somebody.
 16 Usually, smaller companies also have a flight
 17 follower, somebody who's aware of an aircraft
 18 that just left. I'm simplifying, but I'd like
 19 to keep it that way if I can. They follow the
 20 aircraft where it's going, and I don't mean
 21 they can see it. Modern technology has
 22 actually allowed us to actually see it now
 23 with GPS, and you can actually watch your
 24 aircraft on a screen and see--and it updates
 25 on a regular basis, a very, very good process

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1 to flight follow. We don't require that in
 2 the law, but they have a sense the aircraft
 3 is--they know the aircraft is going someplace.
 4 The individual pilot lands. If the company
 5 says he'll call back when he's there, they
 6 call back, so that's a very simple process for
 7 a company to comply with. They're basically
 8 the rules we have in place up to and including
 9 commuter operations, so with commuter, air
 10 taxi and on down.
 11 MS. FAGAN:
 12 Q. So just so that we're clear -
 13 MR. STEPHENSON:
 14 Q. Yeah.
 15 MS. FAGAN:
 16 Q. The regulations for the current situation that
 17 this inquiry is looking at, which is the
 18 transportation of workers offshore by
 19 helicopter -
 20 MR. STEPHENSON:
 21 Q. Uh-hm.
 22 MS. FAGAN:
 23 Q. That's a commuter process, so what you're--
 24 just correct me if I'm wrong, but what I'm
 25 hearing is that the regulations would allow

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1 the pilot to self-dispatch.
 2 MR. STEPHENSON:
 3 Q. That's correct.
 4 MS. FAGAN:
 5 Q. And the pilot on his or her own can--
 6 MR. STEPHENSON:
 7 Q. Right.
 8 MS. FAGAN:
 9 Q. --can make those decisions on fuel, look at
 10 the weather, do the flight plan.
 11 MR. STEPHENSON:
 12 Q. Right.
 13 MS. FAGAN:
 14 Q. All those things you described.
 15 MR. STEPHENSON:
 16 Q. Right.
 17 MS. FAGAN:
 18 Q. Is there a process that is beyond or involves
 19 more than just the pilot, because we've heard
 20 about these people called dispatchers.
 21 MR. STEPHENSON:
 22 Q. Right.
 23 MS. FAGAN:
 24 Q. So is there a process? What is a dispatcher,
 25 and what's that process?

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1 MR. STEPHENSON:
 2 Q. Sure, so if I enter the airline world under
 3 the airline regulations, they make reference
 4 to something we call a co-dispatch system, and
 5 I'll describe it and it'll probably come clear
 6 to you very quickly. Now I described pilot
 7 self-dispatch where he's accountable for
 8 making the decisions to whether he can go or
 9 not. That's not to say the company can't say,
 10 "No, you're not going," but the pilot relies
 11 on the--or, sorry, the company relies on the
 12 pilot to make those decisions. In a co-
 13 dispatch system, the company is now relying on
 14 more than one individual to compile the
 15 information, evaluate the situation and then
 16 make a decision to dispatch, and I'm really
 17 simplifying, but basically it requires two
 18 people to sign off and say, "We're able to
 19 go." "We're good to go," and what that does
 20 for a company, I think, is it puts a little
 21 bit of--takes a little of the accountability
 22 off--or onus on the pilot only--it relieves
 23 him of some of that burden. It gives the
 24 company some confidence that the load is being
 25 reduced off the pilot. He's not having to do

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1 everything, which is important in, you know,
 2 an organization that's busy and the load is
 3 high. The weather might be an issue, and the
 4 decisions are a little more critical. You can
 5 imagine in an organization where the aircraft-
 6 or the company is huge or big, and typically-
 7 and we're talking about airlines now--it gets
 8 a lot more complex, so the pilot might
 9 typically arrive in a airline where the
 10 dispatcher has done all the work. I say "all
 11 the work," meaning he's compiled the weather.
 12 He's already done the fuel estimates. He has
 13 told him exactly what he needs to know. He
 14 hands him documentation. The pilot goes,
 15 "Yeah, we're going to there." "Yeah, I know
 16 what the weather is. Yeah, yeah, okay, that's
 17 fine. There is the fuel. Yeah, I agree with
 18 that." The pilot actually has an opportunity
 19 to disagree. He can't disagree and say, "No,
 20 I want less fuel," but he can say, "I think
 21 I'm going to take on more fuel," and in fact
 22 it would be the opposite. The pilot could
 23 actually come up with a fuel load, and the
 24 dispatcher could say, "No, I think you need
 25 more fuel." And there's a discussion that

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1 could take place between the two, but it
 2 creates a little bit more of a collaborative
 3 decision-making process. Nobody can really
 4 overrule the other, except on the side of
 5 safety, at least that's the way it should be
 6 designed, and so, it requires both people to
 7 sign off, right. So I agree, you agree, away
 8 we go. And it might be one of us says, you
 9 know, the weather is not good enough, we're
 10 not going to go in and the person wouldn't
 11 override, he'd say, oh, okay. He might
 12 disagree, but the process should control it so
 13 that either one can make that decision or at
 14 least impose their will in that case. And
 15 again, I'm oversimplifying.
 16 MS. FAGAN:
 17 Q. Would a co-dispatch system improve safety,
 18 would it be an improvement on safety or how
 19 would it impact safety?
 20 MR. STEPHENSON:
 21 A. Well I think just this whole issue of
 22 offloading the pilot certainly would have,
 23 would contribute to the pilot being available
 24 to focus on other things. You could argue
 25 that that would enhance the safety of the

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1 operation for sure. And I don't mean to imply
 2 power itself dispatch is unsafe, because it's
 3 not. Pilots have been and will continue to do
 4 that for a long, long time, but if the
 5 opportunity is there to share the load,
 6 particularly in an organization that has a
 7 fairly heavy burden, it's a good thing.

8 MS. FAGAN:
 9 Q. In our situation, just so that I'm clear, the
 10 airlines say, you know, Air Canada, WestJet,
 11 the big airlines, they would have a co-
 12 dispatch system, they'd be required because of
 13 the type of organization -

14 MR. STEPHENSON:
 15 A. Right.

16 MS. FAGAN:
 17 Q. - and the requirement for the flying of
 18 offshore helicopter, a seven, part seven or
 19 704 helicopter operator would not have to have
 20 a co-dispatch in the regulation?

21 MR. STEPHENSON:
 22 A. That's correct.

23 MS. FAGAN:
 24 Q. Do you know if there is a co-dispatch system
 25 in place now for the current situation for

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1 flying offshore?

2 MR. STEPHENSON:
 3 A. For Cougar specifically?

4 MS. FAGAN:
 5 Q. Yes.

6 MR. STEPHENSON:
 7 A. I am aware that there is a co-dispatch system
 8 there.

9 MS. FAGAN:
 10 Q. So that would be -

11 MR. STEPHENSON:
 12 A. I haven't looked at it, but I am aware of
 13 that.

14 MS. FAGAN:
 15 Q. So that would be beyond what's required in the
 16 regulations?

17 MR. STEPHENSON:
 18 A. That's correct. And there would have been a
 19 discussion that took place, I'm sure somebody
 20 asked could we do that and I'm sure Atlantic
 21 was probably pleased that they were to do that
 22 and how they went about certifying it, I don't
 23 know.

24 MS. FAGAN:
 25 Q. But it would have been a certified--it would

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1 have been certified?

2 MR. STEPHENSON:
 3 A. They would have accepted--yeah, they would
 4 have approved the dispatch program that they
 5 suggested. If, for example, if I went to a
 6 self-dispatch program and I looked at the law
 7 that's required and somebody gave me something
 8 that was more robust, I would not not approve
 9 it, I would approve it and that's what's
 10 happened, they've approved it, right.

11 MS. FAGAN:
 12 Q. So if someone wants to go beyond what's in the
 13 regulation, as long as it's approved -

14 MR. STEPHENSON:
 15 A. And it meets the requirement, minimum
 16 requirement of 704, there would be no issue,
 17 yeah.

18 MS. FAGAN:
 19 Q. The dispatchers themselves, are the
 20 dispatchers certified, is there any training,
 21 education process for the dispatchers?

22 MR. STEPHENSON:
 23 A. Yeah, the dispatchers are not licensed,
 24 they're certified, they receive certificates,
 25 I believe. And a dispatcher and again, it's--

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1 the curriculum for dispatcher is described in
 2 the regulation, what somebody actually
 3 provides to a dispatcher probably would be
 4 more robust than what's in the regulation,
 5 which is the case with most of our minimum
 6 requirements, but they would go through a
 7 program, an air operator may actually provide
 8 that training program to a dispatcher. I
 9 believe there's some commercial entities out
 10 there that will actually do it for an
 11 individual who is interested in being
 12 certified and then they could walk around with
 13 their certificate and seek employment. But,
 14 just like the pilot and the engineer, once
 15 they find themselves inside the company,
 16 they'll have to be trained, right. They will
 17 have to be out or be retrained to suit the
 18 company. So how each company does it really,
 19 is up to them, but there's an academic,
 20 there's a series of written exams and then
 21 there's an evaluation of the individual's
 22 performance and that's done usually through
 23 some process and they become certified.

24 MS. FAGAN:
 25 Q. Certified. So the co-dispatch system or

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1 whatever the system is, if that's been
 2 approved, then the dispatcher that comes into
 3 the organization and starts working for the
 4 organization must learn that system and then
 5 comply with that system.
 6 MR. STEPHENSON:
 7 A. Yes, that's correct.
 8 MS. FAGAN:
 9 Q. Just like the pilot -
 10 MR. STEPHENSON:
 11 A. You wouldn't do your own thing.
 12 MS. FAGAN:
 13 Q. You don't do your own thing.
 14 MR. STEPHENSON:
 15 A. That's right.
 16 MS. FAGAN:
 17 Q. And the aircraft maintenance engineer must
 18 comply with the approved organization and the
 19 pilots must, you know, learn that helicopter
 20 or that aircraft and be approved for that
 21 specific activity?
 22 MR. STEPHENSON:
 23 A. That's right.
 24 MS. FAGAN:
 25 Q. Safety oversight, we can call it audit, call

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1 it surveillance, I don't know what Transport
 2 Canada calls it, but you've mentioned a number
 3 of times we review, we inspect, we oversee,
 4 what is the different types of oversights?
 5 How does Transport Canada go about making sure
 6 that all of this--all these processes are
 7 complied with?
 8 MR. STEPHENSON:
 9 A. Okay, so I'll speak to the air operator
 10 certificate and the AMO certificate, the
 11 approved maintenance organization certificate
 12 because the processes are essentially the
 13 same. And again, I will oversimplify or I'll
 14 simplify, I won't give you all the different
 15 names or the different things we have because
 16 I'm not sure that that's important, but if
 17 there's something you'd like to know, please,
 18 please ask me. I'll start in headquarters.
 19 Essentially in headquarters and I'm just
 20 bringing you there because that's the national
 21 table where the civil aviation directors from
 22 the region sit as well, and you'll just have
 23 to imagine virtually it has occurred in years
 24 gone by, certain decisions have been taken on
 25 where we want to focus our resources in

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1 aviation. I mentioned to you earlier today 95
 2 percent of all passengers in this country fly
 3 on the major airlines, so you can imagine we
 4 have dedicated resources to that aspect of
 5 aviation, both from a flight operation's
 6 perspective and a maintenance perspective. I
 7 showed you the org. chart earlier. We
 8 actually have a dedicated group. We don't
 9 tap, we don't siphon off resources for there
 10 to work in the other areas of the
 11 organization, so they're there, that's been
 12 decided. The question is now what do we do
 13 with the rest of aviation in the country? And
 14 we've had a similar evaluation of that, it's
 15 been done over the years, where are the areas
 16 that we want to focus our resources to
 17 mitigate or reduce the risks in aviation and
 18 just bring them down, down, down to as low as
 19 we can. So, for example, we would be focusing
 20 on our class 1 airports, which are our biggest
 21 airports, we'd spend a lot of time there. We
 22 have dedicated people who spend a lot of time
 23 there. But as you go to a region, Atlantic
 24 region, for example, that's where we get into
 25 another discussion at the regional level, they

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1 know what is going on in aviation in Atlantic,
 2 so they will have looked at all of the
 3 organizations and said what's important,
 4 what's--where are the risks, where are--where
 5 is it worthwhile us putting our resources?
 6 And of course, they would spend time at an
 7 airline, if they have one, which they actually
 8 do, there's an airline--there's a number of
 9 airlines in that category that they look
 10 after, so they'd be focusing there and they'd
 11 have dedicated resources to those. And they
 12 would look at all the other aspects of the
 13 organization. If I could talk about
 14 helicopters, if I broadly look at helicopters
 15 in any region, you know, on a grand scale, I
 16 mean they're an organization that require
 17 resources dedicated to them. The question
 18 they'd be asking is where specifically should
 19 I put my resources. Offshore would be clearly
 20 one of them, I can tell you clearly offshore
 21 was one of them and remains one of them, and
 22 so they'll have resources, not specific, a
 23 group of individuals dedicated only to
 24 offshore, but that will certainly be a file
 25 that they'll be reviewing constantly, and

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1 they'll develop an oversight plan from year to
 2 year to year, where they'll actually spend
 3 their time. And again, they'll analyze the
 4 offshore operation and they'll determine where
 5 they want to spend their time within that as
 6 well and where they think they could gain some
 7 confidence and perhaps spend some time with
 8 the operator. That's essentially what we do
 9 with all of our operations and, as I said,
 10 some of them we might see once a year where we
 11 would actually go and do an inspection or a
 12 more robust audit and again, in a very small
 13 one aircraft operator, we might not spend a
 14 whole lot of time there where if we have a
 15 robust--sorry, a larger organization, we might
 16 spend, well I might spend a day with the one
 17 airplane, one aircraft operator, I might spend
 18 four or five days focusing on certain things
 19 in a year and to a lesser frequency, I might
 20 do a full blown audit or focused inspection on
 21 the organization broadly, which would mean I'd
 22 bring more people and I would spend a lot more
 23 time there. The people that would come to
 24 that, I already suggested that would be the
 25 operational people, the maintenance people.

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1 We have people who are dedicated to the
 2 transportation of dangerous goods inside our
 3 organization, they would probably spend some
 4 time there. We have cabin safety people who
 5 have expertise even for companies that do not
 6 carry flight attendants, they help our
 7 operational people deal with the cabin safety
 8 aspects of an aircraft that's completely
 9 managed and supervised by the flight crew,
 10 which is the case with most smaller aircraft
 11 that are not airlines, like a Boeing or
 12 whatever. We also have in our ranks and
 13 responsibility for labour on board the
 14 aircraft when it's in operation, so we have
 15 people who actually spend a little bit time
 16 talking about what's going on board the
 17 aircraft and what's happening there. That's a
 18 whole patch we could talk about later, but
 19 that, you can imagine that there is some
 20 interaction there. So it's, it just depends
 21 on the organization that we're going to see
 22 and then we basically develop an annual plan
 23 and then we'll obviously try to carry out that
 24 plan and as the year goes on, the plan
 25 obviously changes, that's based on what's

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1 going on in the industry, where it's drawing
 2 our attention elsewhere perhaps.
 3 MS. FAGAN:
 4 Q. So if you go in and do an audit, a full audit
 5 would, as you've just said, would bring a
 6 number of different people from Transport
 7 Canada with those specialized skills or
 8 knowledge base -
 9 MR. STEPHENSON:
 10 A. Right.
 11 MS. FAGAN:
 12 Q. What would they do, because I don't want there
 13 to be an assumption that the people know what
 14 an audit is or what a Transport Canada audit
 15 is?
 16 MR. STEPHENSON:
 17 A. That's fair, that's fair.
 18 MS. FAGAN:
 19 Q. Physically can you take us through -
 20 MR. STEPHENSON:
 21 A. Sure, before I go there I'll just also say
 22 that, you know, I've talked about a structure
 23 or a program plan at the beginning of the
 24 year. Notwithstanding that, depending on the
 25 size of the operator, opportunities present

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1 themselves all the time so that it will draw
 2 us to the company. It might be just something
 3 that's going on in the industry, we'll go and
 4 have a discussion with them and then we'll
 5 inject ourselves into their organization in a
 6 particular area. We may happen to be there
 7 and from a transportation convenience
 8 perspective, if we happen to be in St. John's,
 9 for example, we may actually spend a few extra
 10 days and visit a couple of operators because
 11 it's just economic and makes sense. To your
 12 question, though, and I'll talk something a
 13 little bit more robust; in other words, an
 14 audit or a focused inspection with something
 15 we call program validations, which is a
 16 focused area. We've picked areas of the
 17 organization that we'd like to spend some time
 18 on. We usually begin with a team, the team
 19 actually has a fulsome discussion about the
 20 organization, what's been going on. Some
 21 people may come to the table who don't have
 22 direct knowledge about the company, so
 23 there'll be some briefings about what the
 24 company is about and they'll spend a lot of
 25 time in the documentation that we have from

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1 the company. We'll study their systems, we'll
 2 look the systems they have in place. We'll
 3 actually develop check sheets or a plan, so
 4 you know, we've decided where we want to
 5 focus. We'll look at the systems they have in
 6 place around those particular systems and then
 7 we'll develop an inspection plan specifically
 8 tailored for that, and then the team will--
 9 there's a communication, obviously, between us
 10 and the operator, we're going to be there next
 11 week, we've got a team of five, six, four,
 12 three, one, depending on how big they are, it
 13 depends on what we're doing. And so the team
 14 will be educated before they leave, they'll
 15 transport themselves, again if a company has
 16 got multiple bases, we might actually spread
 17 out and go to multiple bases at the same time
 18 or maybe not, maybe over a period of time.
 19 That time could be over days, weeks or--and
 20 sometimes we'll even do pre-work beforehand.
 21 I'm going to Africa, why not take the time to
 22 look at their maintenance base. We'll connect
 23 it directly to, and it will give us some data
 24 as we go and do the audit the next month or
 25 something. So those types of things can and

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1 do happen and so once they arrive on site,
 2 there's really literally a formal greeting.
 3 We talk to the operator about what we're there
 4 for, we talk to them about what we're going to
 5 do and the operators are usually quite
 6 cooperative and they provide us space in the
 7 organization where we can actually hang our
 8 hats and spread our books out and they know
 9 we're going to interact with their staff, so
 10 there's a little bit of communication, I would
 11 suspect on their side, and then the audit
 12 would begin. We will access their
 13 documentation, we'll access their people in
 14 particular, we'll evaluate their systems
 15 verses what they're actually doing. We'll
 16 evaluate, you know, all sorts of areas from a
 17 maintenance side or the flight operations side
 18 or all the other areas that I spoke of when I
 19 said we bring people to the team, they'll go
 20 into their areas of expertise.
 21 MS. FAGAN:
 22 Q. What are your options when the audit process
 23 is completed? If there's a problem, you
 24 mentioned enforcement, what is the gamut when
 25 the audit is done, you have the results, how

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1 do you go about communicating with the
 2 results, how do you go about ensuring anything
 3 that needs to be corrected is corrected? And
 4 I know you may just have to deal with a range
 5 or some examples.
 6 MR. STEPHENSON:
 7 A. Yeah, so the--and you're right, in a complex
 8 operation, the audit team didn't do a very
 9 good job if they come out with nothing, I
 10 mean, even if I didn't go in there, an
 11 organization that's large has their own
 12 quality controls, quality assurance in place,
 13 that process alone should be finding things
 14 within their organization. That's what
 15 quality control, quality assurance is all
 16 about. One of the places we'll actually look
 17 at, specifically in maintenance to show--we'd
 18 go directly to quality control, quality
 19 assurance. We look for their own internal
 20 audits, we look to see what their findings
 21 were, we look to see what their results were,
 22 we look to see what their corrective action
 23 plans were. That tells me they have a robust
 24 system that's functioning. If you go into a
 25 complex organization with a quality control,

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1 quality assurance program in place and they
 2 have nothing, it's not working. You can't run
 3 a complex program and not have--if you're
 4 doing quality control properly, quality
 5 assurance properly, you will have things that
 6 you find, that's just what it's about. So
 7 because it's about continuous improvement, so
 8 we look for those things. But to answer your
 9 question, I'll take us right to the end of the
 10 audit, same thing, with a large audit, our
 11 people will always come out with something
 12 that--we'll come up with observations or
 13 findings, we don't make observations, we only
 14 have findings. So we'll work for and I'll
 15 focus on quality control, quality assurance
 16 specifically because it's, from the
 17 maintenance perspective, it's one of the
 18 biggest things that gives us confidence that
 19 an organization is doing its business
 20 properly. So if we have findings in that
 21 area, we'll, again, it depends on what that
 22 is. My first example, if we found there was
 23 no quality assurance happening, that's a major
 24 element of an AMO, it has to be there. It's
 25 like not having wings on your airplane, it

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1 can't fly. And same thing with maintenance,
 2 you must have quality assurance. But it's
 3 possible to have some findings in their
 4 quality assurance and again, we're interested
 5 in what they're going to do about it and if
 6 the atmosphere is co-operative and we present
 7 our findings, they accept the findings, we--
 8 our major focus is on what they're going to do
 9 about it, so they'll--and this is air
 10 operators broadly, they will look for a
 11 corrective action plan, an immediate
 12 corrective action plan if it requires that.
 13 Some of our findings don't require immediate
 14 corrective action plan, but more importantly
 15 we want a root cause analysis of what went on,
 16 we want to see that and we want to see what
 17 their long-term plan is, so that it won't
 18 reoccur. So from an audit perspective, that's
 19 the idea, the findings are presented, the
 20 company takes them as they are, they examine
 21 themselves, they find out the root cause, they
 22 present us with their corrective action plan
 23 and generally that's the end of it, other than
 24 we will do follow up on the findings to make
 25 sure their corrective action plan actually

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1 worked, that it's continuing now and it's not
 2 reoccurring. And again, that's another aspect
 3 that gives us confidence that their own
 4 systems are working, right. You talked about
 5 enforcement, I don't know if you want to talk
 6 about that, but -
 7 MS. FAGAN:
 8 Q. Well, I take it that enforcement is another
 9 way of dealing with compliance, I mean, you've
 10 done your inspections, you've done your audit,
 11 you've looked for corrective action, if
 12 necessary and you follow up.
 13 MR. STEPHENSON:
 14 A. Right.
 15 MS. FAGAN:
 16 Q. When and what is the enforcement aspect? I
 17 mean, what does that division do?
 18 MR. STEPHENSON:
 19 A. Right. Well let's leave the division aside
 20 for a second because they do have a specific
 21 function, but enforcement comes in various
 22 ways. One of them is simply what I've just
 23 described to you, some people would tell you
 24 that's enforcement. We give them an audit
 25 report and they comply. We have a number of

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1 tools in our tool box in order to have an air
 2 operator comply who is not--who is resistant
 3 to comply. One other course is we have
 4 control over their operating certificate and
 5 that's probably the most severe of any of the
 6 tools I have in the box. I can simply suspend
 7 their certificate. I can also simply lay a
 8 charge and fine them and that can work, I find
 9 with commercial air operators or approved
 10 maintenance organizations, that's not an
 11 effective way of doing it, simply giving
 12 somebody a hundred dollar fine or a thousand
 13 dollar fine or whatever, that's just paying
 14 your way. But it is used, but it's not the
 15 most effective. Usually a discussion and a
 16 discussion about compliance is usually all it
 17 ever takes, but occasionally we'll simply go
 18 to these operating certificate and we will--
 19 and the tool we use often are suspension
 20 notices. We'll actually give them a
 21 suspension notice, it will be a document that
 22 will be written, it will be very clear. It
 23 will say if in the next 30 days you don't
 24 satisfy me that you are in compliance, and we
 25 give them very specific requirements, then the

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1 suspension notice comes into force, and the
 2 certificate that they're holding then becomes
 3 invalid. And that's the most effective tool
 4 we use for commercial air operators or
 5 maintenance organizations. Not to say we
 6 don't lay charges and issue fines, we do that,
 7 but not very often. We find the other is much
 8 more powerful and much more effective.
 9 MS. FAGAN:
 10 Q. You have mentioned systems and you look at
 11 their systems. There's a term that's being
 12 used, especially in the airline industry and
 13 internationally and that's a safety management
 14 system.
 15 MR. STEPHENSON:
 16 A. Yes.
 17 MS. FAGAN:
 18 Q. And we've also heard about the terms of a
 19 safety culture.
 20 MR. STEPHENSON:
 21 A. Yes.
 22 MS. FAGAN:
 23 Q. So I'd like you to first explain what a safety
 24 management system is in the aviation industry.
 25 MR. STEPHENSON:

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1 A. Sure. So in Canada and some of you may or may
 2 not be aware, so I'll just talk a little bit
 3 about that and some people get a little
 4 concerned about, it's a fancy word for
 5 something that might be said a little more
 6 simply and I don't disagree, actually, so I
 7 will make reference to management systems or
 8 systems and I'll contrast it to something that
 9 I might call compliance. If I were to do a
 10 compliance audit, I would go into an air
 11 operator and I'm talking purely a compliance
 12 audit and I'll be very simplistic for this. I
 13 would see that they actually still employ the
 14 chief pilot. That might sound silly, but I've
 15 been to air operators and found out they
 16 resigned two years ago, right, and so it's
 17 like, you know, what are you going to do with
 18 that? Well, we usually suspend immediately
 19 because it's not like they didn't know he
 20 resigned two years ago. So when you talk
 21 about a compliance audit, we'll look for the
 22 components that an air operators is supposed
 23 to have or an AMO is supposed to have, and you
 24 can back away from that and say they're in
 25 compliance or you can go a little bit further,

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1 and you've heard me talk about things like
 2 quality assurance, quality controls, that's
 3 when you get into something a little bit more
 4 systemic or system, a system of quality
 5 control, a system of quality assurance. And
 6 that happens to be one of the integral parts
 7 of a safety management system. It exists
 8 today in regulation already for our
 9 maintenance organizations; it does not exist
 10 today in the case by law for the operational
 11 parts of an air operator certificate. Now,
 12 that is not to say quality assurance doesn't
 13 exist in operations, we know quality control
 14 things exist, we have control, like we train
 15 the pilots and we check them, that's quality
 16 control in its simplest form. The question is
 17 are they doing anything about the results of
 18 their check rides? No pilot gets checked
 19 without a comment. If we have comments on the
 20 check ride in a particular area, quality
 21 assurance, it would require me to analyze that
 22 and figure out why are the pilots having
 23 issues in that particular area and I would
 24 apply training in that area and I would try
 25 and remove that from the check rides, that's

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1 quality assurance in its simplest form as
 2 well. But we don't regulate that in an air
 3 operator. So I'll bring me back to my points,
 4 that's the compliance audit verses the system
 5 piece. So what we have done here in Canada
 6 and there have been countries already talking
 7 about safety management systems long before
 8 Canada did and again, Mr. Commissioner, I
 9 noticed you mentioned somebody from Australia
 10 coming to see us at some point in time here in
 11 the future and Australia is a country that has
 12 been delving in safety management systems for
 13 many, many years. They didn't put it in
 14 regulation and we're the first country in the
 15 world to put it in regulation. We've only
 16 done that in the airline operations and it's
 17 been in place for almost four years now, I'm
 18 not sure of the exact date. When the
 19 regulations came into place, we actually
 20 overlaid all of the companies with an
 21 exemption to the regulation. That might sound
 22 a little bit counterproductive, but once the
 23 law came into place, everybody was out of
 24 compliance because they didn't have a safety
 25 management system. And if you know anything

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1 about a management system, you can't put it in
 2 place in a day, a week, a month or even a
 3 year, it takes a number of years. We gave the
 4 airlines three years and ninety days, actually
 5 that might sound a little odd, the ninety days
 6 was the initial part of the exemption, so it
 7 was actually ninety days and three years, but
 8 it doesn't flow out of me that way. So the
 9 first ninety days they were required to do
 10 certain elements to get them started and so
 11 they communicated with us and we monitored
 12 them throughout that exemption period. That
 13 three years and ninety days has gone by and
 14 we've been evaluating the airlines as they've
 15 been putting them in place. And again, even
 16 after three years and ninety days, if you know
 17 anything about a management system,
 18 particularly in a large company, it's not a
 19 simple thing to do. So you begin the process
 20 and over time, although it's not referenced in
 21 the regulation, the Commissioner made mention
 22 of the culture has to begin to change and
 23 there's elements in the safety management
 24 system which can be difficult for some people
 25 to simply get onto, and that is the reporting

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1 culture, the culture of actually reporting
 2 what's going on in your organization, being
 3 dedicated to that process and actually
 4 reporting. I was at an air operator--albeit
 5 it wasn't an airline operator, it was a small
 6 air operator who declared themselves compliant
 7 with our SMS regulations, and I said, oh, that
 8 was nice and he was telling me about it and he
 9 said to me, "Yes, just last month we got a
 10 report." And I went, "Oh, that's good, that's
 11 good for you. Let me know when you've got 50
 12 reports"--because this is a big company--"let
 13 me know when you got 50 reports and that will
 14 tell me it's really starting to take hold, the
 15 culture is starting to take hold." But most
 16 companies would in fact start with one or two
 17 reports, the risk, of course, is getting an
 18 onslaught of reports and then having to
 19 analyze it and deal with that kind of data.
 20 But most importantly it's the trust that has
 21 to be built up between the employees who are
 22 now being asked to report and having
 23 confidence that a system will be in place,
 24 that's another integral part of a safety
 25 management system and so in the case of an

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1 evaluation of a safety management system, once
 2 of the things you will look for are reports.
 3 We'll look to see that they're actually
 4 getting them in all areas of their company,
 5 not just maintenance, it's got to be the
 6 entire operation, the operational part as
 7 well. And we'll look to the manner at which
 8 they're dealing with those reports, keeping in
 9 mind when reports start coming, you're going
 10 to get reports that simply are data, they're
 11 called data, but some of it is important data,
 12 some of them are more significant, right, and
 13 the company is going to have to do triage and
 14 what's important, what's not important, that's
 15 their obligation. We're going to look at them
 16 and how they do that and then, of course, for
 17 the significant events or even a pile of data
 18 that says the same thing repetitively, we're
 19 going to want to know what they're doing with
 20 that. Are you analysing it, does it--is it
 21 relevant, is it important, how are you dealing
 22 with that, what process, root cause analysis,
 23 are they sophisticated or do they have a very
 24 simple system, simple and sophisticated isn't
 25 necessarily a contradiction, but is it working

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1 and are they applying what they found out as
 2 root cause analysis and are they putting it to
 3 their own organization to resolve what it is
 4 they found. A lot of that is reactive and
 5 then, of course, some of the systems we'll
 6 look for are something a little bit more
 7 proactive. A company might reach out to, if
 8 you're operating an aircraft type, you might
 9 reach out to the manufacturer and say what's
 10 ever happening with everybody else, I've only
 11 got one, they've got 12, so there's more data
 12 of the operator with 12. That would be more
 13 proactive. They're the things we'll look for
 14 as a safety management system becomes more
 15 mature in an organization.
 16 MS. FAGAN:
 17 Q. So why does a, I mean, why does a safety
 18 management system assist or improve or promote
 19 a culture of safety? Can you just--you had
 20 said the reporting -
 21 MR. STEPHENSON:
 22 A. Yes.
 23 MS. FAGAN:
 24 Q. - part of the system requires reporting and
 25 you mentioned a trust that something is going

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1 to be done with the reporting. Could you
 2 just, if you could, I mean, you may have
 3 already covered this.
 4 MR. STEPHENSON:
 5 A. Sure.
 6 MS. FAGAN:
 7 Q. How does that promote that sort of attitude of
 8 safety within the organization?
 9 MR. STEPHENSON:
 10 A. Well let's talk about it from the regulator's
 11 perspective, which is me. When I go into an
 12 air operator that's large, what you must
 13 understand is I can't be everywhere in the
 14 organization all day long. One of the things
 15 that gives me confidence is not that I've just
 16 done a compliance check and everything is
 17 there and I've tested some of it and it seems
 18 to be working; in fact, I've gone further with
 19 a--and I'll do that, they have to have those
 20 processes, the inspection program will always
 21 look at those elements to make sure they're
 22 there and we'll also bore down to make sure
 23 they're actually physically working. But when
 24 I'm not there, which is most of the time
 25 and/or if it's a large organization with, you

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1 know, 10,000 employees, I put five, six, eight
 2 people in, I can't be everywhere, so I need
 3 the confidence now and it gives me confidence
 4 that their systems are in place. I'll
 5 literally, "I" meaning our staff, will
 6 literally when they evaluate a safety
 7 management system, they'll go right down to a
 8 shop floor and ask questions, you know, have
 9 you ever put in a report? Yes, I have. Did
 10 you ever get any feedback from the report?
 11 No, I haven't. Yes, I have. You might
 12 actually get the person's name and go find
 13 that report and track it through the system,
 14 particularly if it's something that would be
 15 of some significance to track. As I said,
 16 reports come and the more people get
 17 comfortable with the organization and
 18 confidence that they're going to do something,
 19 they're going to report almost everything.
 20 And the risk is, of course, you get inundated
 21 with data, and so--and that's a communication
 22 piece with your employees, they need to
 23 understand you can't deal with everything, but
 24 we want the reports anyway. You know, a
 25 simple example at an airport would be, you

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1 know, a bird strike. Well you get a bird
 2 strike, okay, we have bird strikes. If I have
 3 fourteen today, that might tell me something,
 4 or I have a whole bunch during a short period
 5 of time, well maybe it's migration season or
 6 something, it's just data that you can say,
 7 okay, I can explain that, there's mitigations
 8 we can do, an airport can do with that or even
 9 an air operator, they might, as a proactive
 10 they might reach out to an airport and say
 11 what are the reports out of that airport. So
 12 that's the proactive things that I would look
 13 for and say, okay, that's good and again, it
 14 gives you confidence that while you're not
 15 present, which is most of the time, the
 16 company is actually operating and operating
 17 with some integrity, if I can use that
 18 expression.
 19 MS. FAGAN:
 20 Q. The airline industry is now required by law to
 21 have a safety management system.
 22 MR. STEPHENSON:
 23 A. Right.
 24 MS. FAGAN:
 25 Q. And it takes, as you said a long time, the

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1 industry that we are looking at right now is
 2 the helicopter commuter service.
 3 MR. STEPHENSON:
 4 A. Right.
 5 MS. FAGAN:
 6 Q. And would it be accurate to say that the law
 7 in Canada right now is that they do not have
 8 to have a safety management system in place?
 9 MR. STEPHENSON:
 10 A. By the definitions I know, that's correct.
 11 MS. FAGAN:
 12 Q. But, is there anything that would prevent the-
 13 -an operator, an air operator from having a
 14 system in place, choosing to put such a system
 15 in place if they wanted to, without having a
 16 regulation there, they just say this is a good
 17 idea -
 18 MR. STEPHENSON:
 19 A. Right.
 20 MS. FAGAN:
 21 Q. And we want to put a system in place.
 22 MR. STEPHENSON:
 23 A. Right, that can happen, it has happened. We
 24 haven't evaluated those individuals who've put
 25 in place from a regulatory perspective, but

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1 we've become aware of it, we actually are
 2 intrigued because we like to know about that
 3 sort of thing, so when you're actually in the
 4 operation, usually they're quite proud of it,
 5 so they will share that information with you,
 6 I shared an example and I was kind to the
 7 individual who told me they had one report,
 8 but they're speaking about it and they're
 9 making an effort and they did a proper
 10 evaluation of the one report. And I knew the
 11 individual well, so I commented that, you
 12 know, that's good and you should be getting
 13 more and encourage them to continue down that
 14 path. But from a regulator's perspective, we
 15 wouldn't evaluate it, but we certainly would
 16 not discourage it.
 17 MS. FAGAN:
 18 Q. So an air operator could choose of their own
 19 volition to put one in place, or it could end
 20 up being a requirement of another, either
 21 through contract or through the regulator, for
 22 example, the C-NLOPB could entertain looking
 23 at making that a requirement of, you know, the
 24 process that's in place and there would be
 25 nothing to prevent, from a Transport Canada

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1 perspective, they wouldn't be prevented from
 2 taking such a step?
 3 MR. STEPHENSON:
 4 A. No, and we've seen through contract, other
 5 requirements made by contract companies, for
 6 example, I talked to you about single pilot
 7 operations. We've seen corporations require
 8 two pilots, for example. While we don't
 9 require it under regulation, that maybe a
 10 little simplistic, but they require two
 11 pilots, so they require two engines, where the
 12 law doesn't require two engines. They may
 13 require IFR rated pilots, they're not required
 14 to have by law IFR rates pilots in the
 15 environment they're flying, and certainly
 16 safety managements systems I know have been
 17 required by some organizations worldwide and
 18 I'm not sure what reg. they would point to in
 19 this country other than the airline regulation
 20 or they might point to a draft of what we
 21 probably have on the drafting board initially
 22 or they might give them something specific, I
 23 don't know. They might say quality assurance
 24 and quality controls on operations, as an
 25 example, where it's not required today.

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1 MS. FAGAN:
 2 Q. Do you, it's required in the airline industry,
 3 in the helicopter industry generally, do you
 4 have any knowledge or sense as to the uptake
 5 or the acceptance or the sort of the
 6 initiation because the helicopter industry
 7 right now is not regulated in Canada.
 8 MR. STEPHENSON:
 9 A. Right.
 10 MS. FAGAN:
 11 Q. They're not required to have it.
 12 MR. STEPHENSON:
 13 A. That's right.
 14 MS. FAGAN:
 15 Q. But are you aware if they're at least
 16 exploring it or implementing it?
 17 MR. STEPHENSON:
 18 A. Yes, and again, I paid attention to the
 19 Commissioner's opening remarks, he made a
 20 comment about a seminar or a conference that
 21 he went to. I have been to similar
 22 conferences involved with the International
 23 Helicopter Association, I think they're
 24 properly called, they, in connection with HAC,
 25 the Helicopter Association of Canada, those

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1 two associations and other ones worldwide have
 2 recognized that a safety management system
 3 would in fact be a good thing for their
 4 industry. They've made some very, very broad
 5 commitments to reducing their helicopter
 6 accident rate worldwide, and I'm talking
 7 broadly all helicopter operations. So, and I
 8 think that's a good commitment that they've
 9 made. They are completely supportive of it.
 10 As I said, if you make your way down through--
 11 I didn't say it, so I'll say it now, if you
 12 make your way down through the helicopter
 13 operators, not just in this country but
 14 worldwide, you'll find some helicopter
 15 operators are unaware of what an SMS is, they
 16 won't be able to articulate it to you, that's
 17 okay. They won't even know they have elements
 18 of it in place already and that's okay too,
 19 but with that kind of leadership, I think it's
 20 probably a good sign that that industry will
 21 be supportive if we move it into the
 22 regulations at some point in time ourselves,
 23 whether we get it right down to the smallest
 24 air taxi operators or perhaps will delay that,
 25 I don't know, see how that rule making process

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1 goes, but if it's driven by major associations
 2 like that, at least we'll see the philosophies
 3 and the culture begin to change, which I think
 4 is powerful and positive.
 5 MS. FAGAN:
 6 Q. Are there plans to implement the requirement
 7 for a safety management system in the
 8 Canadian, the civil aviation regulations?
 9 MR. STEPHENSON:
 10 A. Yes, there is and we talked about the airline
 11 already and it's, we've past that point where
 12 it needs to be in place. They're moving into
 13 the--so the regulatory rule making process, as
 14 you can imagine, is not fast. So, but we are
 15 moving down the road with the commuter rules
 16 specifically. It will probably come next, I
 17 should have mentioned it's already in place
 18 for our class 1 airports, class 1 being, you
 19 know Vancouver, Toronto, Montreal, maybe even
 20 St. John's, I don't know if it's class 1 or
 21 not, I say class 1, but the larger airports.
 22 That's in place now and they're in the process
 23 of moving down that road. Halifax, I believe,
 24 is class 1 for sure. And it will eventually
 25 find its way to the smaller airports over

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1 time, but in doing what we're doing, we're
 2 building some expertise, actually, at the
 3 airport level and at the airline level which
 4 is helping gain support for the concept,
 5 because as I said, most people who have
 6 trouble with it, still haven't figured out
 7 what it is and that's okay. It just takes a
 8 matter of time.
 9 MS. FAGAN:
 10 Q. So the plan is to eventually regulate, require
 11 a safety management system for the helicopter
 12 commuter industry?
 13 MR. STEPHENSON:
 14 A. That's currently our plan, yes, that's
 15 correct, it is in the rule-making process.
 16 MS. FAGAN:
 17 Q. This would be a good time to break and I'm
 18 almost through the questions for Mr.
 19 Stephenson.
 20 COMMISSIONER:
 21 Q. All right, we'll take 15 minutes.
 22 (RECESS)
 23 MS. FAGAN:
 24 Q. Mr. Stephenson, there's one area that I'd like
 25 to go back to just a little bit because I

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1 don't know if I led enough questions to make
 2 the process clear, and that has to deal with
 3 the certification, the type certification of
 4 the aircraft, which you went to really this
 5 morning, early this morning.
 6 MR. STEPHENSON:
 7 A. Yeah.
 8 MS. FAGAN:
 9 Q. And the reporting when it comes to service
 10 bulletins and the airworthiness directives.
 11 So you gave an example of the Canadian
 12 Bombardier Jet that is designed and
 13 manufactured in Canada and then being used in
 14 Canada and used potentially in other areas.
 15 One question, if it's type certified in Canada
 16 because that's what was designed and
 17 manufactured, is it -- and then it's going to
 18 be used by an American operator, is it type
 19 certified by the Federal Aviation Authority?
 20 MR. STEPHENSON:
 21 A. So first of all to your point, it was probably
 22 me who didn't give enough information, so I
 23 apologize for that. In your example, a
 24 Bombardier, RJ, for example, going to the US,
 25 the FAA would issue a type certificate and

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1 give that to Bombardier. So it would be an
 2 FAA type certificate, as would any other
 3 country that certified the aircraft in their
 4 country. So Bombardier, and their office in
 5 Montreal, would have a stack of type
 6 certificates based on all the countries that
 7 had certified it.
 8 MS. FAGAN:
 9 Q. So, for example, if this jet is being used by
 10 an American operator, it would have a type
 11 certificate from the FAA?
 12 MR. STEPHENSON:
 13 A. Correct.
 14 MS. FAGAN:
 15 Q. And then if this jet, an operator in the UK
 16 decided they would like to use the jet, they
 17 want to buy five or six Bombardier, that would
 18 be certified somewhere in the UK?
 19 MR. STEPHENSON:
 20 A. The CAA, the British CAA would certify it as
 21 well.
 22 MS. FAGAN:
 23 Q. So that would be another type certificate?
 24 MR. STEPHENSON:
 25 A. That's correct.

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1 MS. FAGAN:
 2 Q. And if it was then used in France, and then
 3 used in Portugal?
 4 MR. STEPHENSON:
 5 A. Right.
 6 MS. FAGAN:
 7 Q. So let's say this jet is purchased and used by
 8 eight different operators in eight different
 9 countries, there would be eight type
 10 certificates?
 11 MR. STEPHENSON:
 12 A. That's correct.
 13 MS. FAGAN:
 14 Q. And one for each country?
 15 MR. STEPHENSON:
 16 A. That's right, and not to go back to it in
 17 great detail, but just to remind ourselves
 18 that every country, if we have a bilateral
 19 agreement with them, will accept a certain
 20 amount of the work that we've done on their
 21 behalf. They will have their own process to
 22 familiarize themselves with the aircraft, and
 23 they may, in fact, insist on or ask for more
 24 detail, or whatever, or in the case of
 25 Bombardier aircraft and the FAA, which is our

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1 example, the market is there. FAA would be
 2 directly involved, they would be on site when
 3 the aircraft is being initially certified. In
 4 that example, I'm sure that was the case.
 5 Just because that's the market, Bombardier
 6 would like to see the aircraft certified in
 7 the US almost immediately. So the FAA
 8 wouldn't certify first, and it might sound
 9 like semantics, but Transport Canada would
 10 certify first and the FAA would certify
 11 second. That's the way that would work
 12 because Bombardier is here.

13 MS. FAGAN:
 14 Q. Another example, and I may be a little awkward
 15 clumsy in these examples, but you had said
 16 that a Canadian operator, once that Canadian
 17 operator receives, is using a aircraft that's
 18 been certified by Canada, then that operator
 19 can use that aircraft -- they don't have to
 20 just use that aircraft in Canada?

21 MR. STEPHENSON:
 22 A. That's correct.

23 MS. FAGAN:
 24 Q. So if I was a Canadian operator and I had four
 25 helicopters on my operating certificate, I

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1 could then take those four helicopters,
 2 they're certified in Canada, type certificate,
 3 and I don't have to fly them just in Canada?

4 MR. STEPHENSON:
 5 A. That's correct.

6 MS. FAGAN:
 7 Q. I could fly them somewhere else?

8 MR. STEPHENSON:
 9 A. That's almost --

10 MS. FAGAN:
 11 Q. Like, into the United States?

12 MR. STEPHENSON:
 13 A. That's almost correct. Relative to the
 14 aircraft, you're correct. To go into the US,
 15 there's another certificate that the operator
 16 would have to secure and that would be an air
 17 operator's certificate from the country, not
 18 necessarily directly related to the type
 19 certificate we're talking about, it's about
 20 them imposing themselves in a foreign country
 21 and we have a process to do that, as we do for
 22 foreign operators coming to Canada.

23 MS. FAGAN:
 24 Q. So the operator has to get a certificate, a
 25 foreign operator's certificate?

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1 MR. STEPHENSON:
 2 A. Yeah.

3 MS. FAGAN:
 4 Q. But that operator doesn't have to get all of
 5 their aircraft type certified?

6 MR. STEPHENSON:
 7 A. That's correct.

8 MS. FAGAN:
 9 Q. Okay, and I know this may --

10 MR. STEPHENSON:
 11 A. So in other words, the aircraft in Canada can
 12 fly domestically and around the world by a
 13 Canadian air operator, right.

14 MS. FAGAN:
 15 Q. And another example, an even larger example,
 16 okay, and this is where, you know, it may have
 17 been a little bit of confusion between
 18 certifying the operator and certifying -- type
 19 certifying the aircraft. Let's take a really,
 20 really large, a big, big operator, United
 21 Airlines, or one of the big US carriers. Now
 22 they might have hundreds of aircraft, and they
 23 might fly -- make hundreds of flights into
 24 Canada, and they might fly into all kinds of
 25 different airports all over the world. Does

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1 the aircraft itself have to be type certified
 2 or is it the operator that gets the permission
 3 to go into the country?

4 MR. STEPHENSON:
 5 A. It would be the operator, and so your example,
 6 United Airlines, although they have hundreds
 7 of aircraft, they may only have, I'll say, ten
 8 types of aircraft. Out of the ten, seven may
 9 be already certified coincidentally in Canada,
 10 three may not be, and that's okay. They could
 11 continue to come and go with all ten, and that
 12 would not be an issue. We see a lot of
 13 aircraft types that are type certified going
 14 back years, but from the eastern block
 15 countries who would not have engaged in the
 16 western world, and yet we allowed them to fly
 17 their aircraft here, and that was okay. We
 18 certified the carrier, or authorized the
 19 carrier, but we didn't necessarily certify the
 20 aircraft under a type certificate, a Canadian
 21 type certificate, because we didn't have to.

22 MS. FAGAN:
 23 Q. And the reason the seven aircraft, types of
 24 aircraft, that a foreign operator may use is
 25 certified in Canada, is not because the

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1 foreign operator is using that type, it may be
 2 just a coincidence because a Canadian operator
 3 has sought to have that type certified because
 4 it's the Canadian operator that seeks the
 5 aircraft certification?
 6 MR. STEPHENSON:
 7 A. That is correct.
 8 MS. FAGAN:
 9 Q. Now the communications, we have our Bombardier
 10 type certificates and that's the design
 11 manufacturer, and they have, I don't know if
 12 you said eight or twelve, let's say there are
 13 eight countries, they have eight type -- eight
 14 different countries for the one type of
 15 aircraft and that's in their headquarters and
 16 they decide to issue a service bulletin --
 17 MR. STEPHENSON:
 18 A. Right.
 19 MS. FAGAN:
 20 Q. What's the process?
 21 MR. STEPHENSON:
 22 A. The service bulletin is generated by the
 23 manufacturer, or the design and manufacturer,
 24 which are typically the same, and they have
 25 the obligation to communicate it out to

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1 specifically the air operators, the operators
 2 who are operating the machine. They will also
 3 provide that same information to the
 4 authorizing authority who have granted type
 5 certificates, for example, the FAA in the US.
 6 Are we talking about Canadian?
 7 MS. FAGAN:
 8 Q. Let's say we have eight type certificates. So
 9 we --
 10 MR. STEPHENSON:
 11 A. We're talking about Bombardier as our example.
 12 MS. FAGAN:
 13 Q. So Bombardier has -- they've been certified,
 14 type certified by Canadian.
 15 MR. STEPHENSON:
 16 A. Yes.
 17 MS. FAGAN:
 18 Q. Transport Canada.
 19 MR. STEPHENSON:
 20 A. Yeah.
 21 MS. FAGAN:
 22 Q. By the FAA, by the certifying authority in the
 23 UK, by the certifying authority in France, by
 24 the certifying authority in Portugal and --
 25 come up with eight countries. So they are

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1 type certified, that one model type has been
 2 certified by eight different countries.
 3 MR. STEPHENSON:
 4 A. Right.
 5 MS. FAGAN:
 6 Q. And that manufacturer decides to issue a
 7 service bulletin.
 8 MR. STEPHENSON:
 9 A. Yes.
 10 MS. FAGAN:
 11 Q. It has to tell the operators that are using
 12 that aircraft?
 13 MR. STEPHENSON:
 14 A. That's correct.
 15 MS. FAGAN:
 16 Q. But do they also have to notify the eight
 17 countries?
 18 MR. STEPHENSON:
 19 A. That's correct. They'll notify those
 20 authorities, including Transport Canada.
 21 MS. FAGAN:
 22 Q. Because we're one of the eight?
 23 MR. STEPHENSON:
 24 A. That's correct.
 25 MS. FAGAN:

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1 Q. And we would have been --
 2 MR. STEPHENSON:
 3 A. Number one.
 4 MS. FAGAN:
 5 Q. Number one.
 6 MR. STEPHENSON:
 7 A. I'm not sure if the stamp will get it to us
 8 first, but --
 9 MS. FAGAN:
 10 Q. But we're number one because it was a Canadian
 11 designed and manufactured certified aircraft?
 12 MR. STEPHENSON:
 13 A. Yeah.
 14 MS. FAGAN:
 15 Q. So if we take the situation of a US designed
 16 and manufactured aircraft, in that situation
 17 the FAA would have been the first, the number
 18 one with the type certificate, and that
 19 American aircraft could be in eight countries,
 20 which would all have issued a type certificate
 21 by their authority in those eight countries,
 22 is that fair?
 23 MR. STEPHENSON:
 24 A. Yeah.
 25 MS. FAGAN:

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1 Q. And that American design manufacturer has
 2 eight type certificates in their headquarters,
 3 and Canada might be the second, or might be
 4 one of the eight.
 5 MR. STEPHENSON:
 6 A. Yeah, one of the eight.
 7 MS. FAGAN:
 8 Q. So what would the US design manufacturing
 9 company have to do if it wanted to issue a
 10 service bulletin?
 11 MR. STEPHENSON:
 12 A. Exactly the same thing. They're going to
 13 communicate to the operators around the world
 14 and they're going to communicate to the
 15 authorizing authorities, including the FAA,
 16 including Transport Canada, and the entire
 17 eight in that example.
 18 MS. FAGAN:
 19 Q. Now you also mentioned a airworthiness
 20 certificate. So as I understand it, the
 21 airworthiness certificate is for the
 22 particular aircraft?
 23 MR. STEPHENSON:
 24 A. Correct.
 25 MS. FAGAN:

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1 Q. Correct. So you might have a type like an S92,
 2 you could have 50 S92s. That would be 50
 3 helicopters.
 4 MR. STEPHENSON:
 5 A. Certificates of airworthiness, yeah.
 6 MS. FAGAN:
 7 Q. That were all built, manufactured to that type
 8 certificate?
 9 MR. STEPHENSON:
 10 A. Yeah.
 11 MS. FAGAN:
 12 Q. Each one of that 50, in order to fly, would
 13 have to have its own certificate of
 14 airworthiness, is that correct?
 15 MR. STEPHENSON:
 16 A. That's correct, yeah. It's the aircraft's
 17 fitness to fly, is what it is. It's like a
 18 pilots medical. It's their fitness to fly.
 19 It's the airworthiness of the aircraft. Each
 20 individual one has that document.
 21 MS. FAGAN:
 22 Q. And I don't know if you know this question, if
 23 the aircraft -- is it the manufacturing
 24 country that issues the certificate of
 25 airworthiness for that individual aircraft?

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1 MR. STEPHENSON:
 2 A. No.
 3 MS. FAGAN:
 4 Q. Or where -- we know we've got eight type
 5 certificates out there.
 6 MR. STEPHENSON:
 7 A. Yeah.
 8 MS. FAGAN:
 9 Q. But what about the certificate of
 10 airworthiness that goes for that aircraft,
 11 that model, that one?
 12 MR. STEPHENSON:
 13 A. You opened that up, so I feel compelled to
 14 respond. A flight authority could be issued
 15 to the aircraft coming off the line to move
 16 them, right, but without an airworthiness
 17 certificate specifically for the country that
 18 its going to be based -- so in order words, if
 19 I'm the manufacturer, how am I going to get it
 20 to you, your country doesn't want to
 21 cooperate; well, I'll put a flight authority
 22 to it and I'll move it. So that can happen,
 23 but that's not what you're asking really.
 24 MS. FAGAN:
 25 Q. No.

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1 MR. STEPHENSON:
 2 A. I think you're asking about where is the
 3 normal everyday certificate of airworthiness
 4 issued from. For Canadian aircraft, they're
 5 issued in Canada. So a Canadian based
 6 aircraft operated in Canada, not manufactured
 7 in Canada, the ones that the air operator will
 8 own and operate, they're responsible for the
 9 certificate of airworthiness. So in the case
 10 of an aircraft coming from the US to Canada,
 11 being sold to Canada, the carrier, air
 12 operator, takes possession of it, and they
 13 will put a Canadian airworthiness certificate
 14 onto it, and that's its health card or its
 15 certificate that talks about its
 16 airworthiness.
 17 MS. FAGAN:
 18 Q. So generally speaking, the type maybe have a
 19 type certificate in eight different countries?
 20 MR. STEPHENSON:
 21 A. Right.
 22 MS. FAGAN:
 23 Q. But the individual helicopter itself, its
 24 airworthiness certificate would most likely be
 25 issued where it's being used by the operator?

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1 MR. STEPHENSON:
 2 A. Yeah.
 3 MS. FAGAN:
 4 Q. The country where the operator is using it.
 5 If it's a Canadian operator, it would be a
 6 Canadian authority. So would there only
 7 generally be one?
 8 MR. STEPHENSON:
 9 A. I feel compelled to correct you.
 10 MS. FAGAN:
 11 Q. Go ahead.
 12 MR. STEPHENSON:
 13 A. So let me change the words. So if we have a
 14 Canadian based air operator, and they own the
 15 aircraft and they're operating it in Canada,
 16 it'll have a Canadian certificate of
 17 airworthiness. If they're operating it
 18 aboard, it'll probably still have a Canadian
 19 air operator certificate. It is possible for
 20 a Canadian air operator to be in a foreign
 21 country and be operating aircraft that are
 22 registered in that country. That's possible.
 23 It's administratively messy, but it can
 24 happen. It probably does happen. I've seen
 25 it happen with helicopter operators, I've seen

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1 it happen with six wing operators, but that's
 2 not your question. You want to know where is
 3 the C of A, or the certificate of
 4 airworthiness, where is it rooted in. It's
 5 rooted in the country that the operator is
 6 certified to operate from, right. So --
 7 MS. FAGAN:
 8 Q. That's good.
 9 MR. STEPHENSON:
 10 A. Is that okay?
 11 MS. FAGAN:
 12 Q. That's good. I just wanted to be clear. We
 13 have a lot of certificates going around.
 14 MR. STEPHENSON:
 15 A. Yeah, I could draw a picture. I drew myself a
 16 picture so I didn't get off track.
 17 MS. FAGAN:
 18 Q. Just one last sort of issue.
 19 MR. STEPHENSON:
 20 A. Okay.
 21 MS. FAGAN:
 22 Q. And that is you described the service
 23 bulletin, and you described a process where a
 24 service bulletin may become a directive?
 25 MR. STEPHENSON:

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1 A. Correct.
 2 MS. FAGAN:
 3 Q. Now let's take our Canadian aircraft, and it's
 4 designed and manufactured in Canada, and there
 5 is eight type certificates. Canada is one,
 6 the US is one, France, Portugal, wherever, and
 7 that manufacturer issues a service bulletin.
 8 MR. STEPHENSON:
 9 A. Right.
 10 MS. FAGAN:
 11 Q. It goes out to the operators, but it also goes
 12 to the eight certifying authorities?
 13 MR. STEPHENSON:
 14 A. Agreed.
 15 MS. FAGAN:
 16 Q. All right. Now Canada could look at that
 17 service bulletin, do an analysis and decide to
 18 issue an airworthiness directive. To whom
 19 does the airworthiness directive apply? We
 20 have eight countries where this machine could
 21 be working, but where does Canada's
 22 airworthiness directive -- who does that apply
 23 to?
 24 MR. STEPHENSON:
 25 A. Okay, first of all, the directive is given to

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1 all -- similar to the bulletin, service
 2 bulletin, expect we're the source, Transport
 3 Canada is the source of the directive. It
 4 goes to all of the operators of the aircraft
 5 type. It also goes to the authorizing
 6 authority, so anybody holding or have a type
 7 certificate, those eight you spoke of earlier,
 8 they're going to receive that directive, and
 9 also so will the design manufacturer of the
 10 aircraft. They'll be aware of that particular
 11 document or that direction, or directive,
 12 rather.
 13 MS. FAGAN:
 14 Q. So that directive, it's a Canadian designed
 15 and manufactured aircraft, the service
 16 bulletin comes out --
 17 MR. STEPHENSON:
 18 A. Yeah.
 19 MS. FAGAN:
 20 Q. Canada -- Transport Canada issues a directive?
 21 MR. STEPHENSON:
 22 A. Yeah.
 23 MS. FAGAN:
 24 Q. It will go to the operators in Canada that are
 25 using that aircraft?

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1 MR. STEPHENSON:
 2 A. Right.
 3 MS. FAGAN:
 4 Q. And those other eight certifying authorities,
 5 and back to the manufacturer?
 6 MR. STEPHENSON:
 7 A. That's right.
 8 MS. FAGAN:
 9 Q. Who happens to be in Quebec. Now --
 10 MR. STEPHENSON:
 11 A. Can I stop you there for a second?
 12 MS. FAGAN:
 13 Q. Yes, stop me.
 14 MR. STEPHENSON:
 15 A. Because I want to be really clear. I want to
 16 be clear about one point. An operator --
 17 sorry, a manufacturer of a large aircraft
 18 type, fairly complex, a large Boeing, a large
 19 Airbus, a large -- even a helicopter, they put
 20 out service bulletins all the time, and you
 21 can imagine with all the aircraft types that
 22 are certified and operating in any country,
 23 the documents are coming on a regular basis.
 24 We have a process to basically triage them,
 25 and we don't look at each other and go,

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1 directive one, it's just one source of all
 2 sorts of data that comes to us to evaluate
 3 whether directives are needed. We usually
 4 rely on a direct contact with individuals as
 5 well. There's always direct contact between
 6 our -- mostly our folks in headquarters, who
 7 are the controlling entity who actually do
 8 that work around type certificates on
 9 aircraft. So there's an interaction with the
 10 manufacturer, specifically here in Canada, but
 11 also the FAA as well. They're our primary
 12 contacts. Yes, as well, the European agency.
 13 So we rely on all sorts of things to give us
 14 data when we make determinations on
 15 directives. It's not just what comes in a
 16 service bulletin. Service bulletins are
 17 typically benign. They're best practices, I
 18 think I explained that to you before, and they
 19 don't really tell us much other than they
 20 found a better way to do something, or
 21 somebody has found a better way to do
 22 something, so they share that information. So
 23 the bulk of them are simply that. I'm
 24 oversimplifying service bulletins because I
 25 don't sit and read them every day, but -- so

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1 it's when you have something more significant.
 2 It'll be more than just a service bulletin
 3 that will bring our attention to this. It'll
 4 be all sorts of other activity that will
 5 generate a directive.
 6 MS. FAGAN:
 7 Q. The last example -- we'll see, maybe it's not
 8 the last example, but try the example of we
 9 have an American manufactured designed
 10 aircraft.
 11 MR. STEPHENSON:
 12 A. Right.
 13 MS. FAGAN:
 14 Q. And a service bulletin, or information comes
 15 from that manufacturer, and that would go to
 16 the certifying authority, which would be the
 17 FAA, and it would go to the other eight type
 18 certifying -- type certificates certifying
 19 authorities, if that helicopter is being used
 20 in eight different countries, and those eight
 21 countries certified. So this information
 22 would come out from the American design
 23 manufacturer, and it would also go to the
 24 users or the owners of this helicopter. Would
 25 that type of information, even though it's

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1 being generated from an American manufacturer,
 2 would Transport Canada ever issue an
 3 airworthiness directive or would the
 4 airworthiness directive basically only come
 5 from the one original certifying authority, or
 6 could an airworthiness directive come from any
 7 of the eight?
 8 MR. STEPHENSON:
 9 A. So any of the eight are able to issue an
 10 airworthiness directive. It's clearly within
 11 the scope of any of the authorities we're
 12 talking about. They issue the type
 13 certificate, meaning in this case Canada
 14 issues the type certificate, or the US issues
 15 this type certificate on the Bombardier J. We
 16 issue type certificate in Canada on the
 17 American aircraft being imported into Canada,
 18 and so we do have that ability to do that.
 19 That's not a normal procedure, it's not
 20 something we normally see. It's usually --
 21 MS. FAGAN:
 22 Q. Okay, normally it would probably be the -- I
 23 would think if it was American, the FAA might
 24 issue the directive and it funnels through?
 25 MR. STEPHENSON:

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1 A. That's normally the way that works, yeah.
 2 MS. FAGAN:
 3 Q. But it's not impossible --
 4 MR. STEPHENSON:
 5 A. No.
 6 MS. FAGAN:
 7 Q. To see any one of the other eight --
 8 MR. STEPHENSON:
 9 A. That's correct.
 10 MS. FAGAN:
 11 Q. Issue an airworthiness directive?
 12 MR. STEPHENSON:
 13 A. That's correct.
 14 MS. FAGAN:
 15 Q. Okay. The last topic that I'd like to cover
 16 is another reporting type feature of Transport
 17 Canada, and it came up during the C-NLOPB's
 18 evidence, and that has to do with CADORS.
 19 MR. STEPHENSON:
 20 A. CADORS.
 21 MS. FAGAN:
 22 Q. And I understand that CADORS stands for the
 23 Civil Aviation Daily Occurrence Reporting
 24 System.
 25 MR. STEPHENSON:

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1 A. Worthy of an acronym.
 2 MS. FAGAN:
 3 Q. Yes, I agree this one needs the acronym. The
 4 OMA and the OIC, and all of those, fine,
 5 that's a debate, but this one, the CADORS,
 6 Civil Aviation Daily Occurrence Reporting
 7 System, can you please explain what that is,
 8 its history, its function?
 9 MR. STEPHENSON:
 10 A. Sure, and maybe I'll make a comment because I
 11 just -- sorry, it popped into my mind, so I
 12 feel compelled to say it. When I talked about
 13 building a reporting culture, Commissioner, I
 14 just feel incumbent to talk to you or mention
 15 to you directly that CADORS, like any
 16 reporting system, the culture is there's a
 17 reluctance to report in anything. One of our
 18 biggest issues about the CADORS specifically
 19 is it's a momentary mention of a -- sorry,
 20 preliminary information about an event that
 21 may or may not even have occurred. There is
 22 rarely good information in there initially.
 23 It's just the beginning of information that we
 24 may choose to or choose not to pursue. We see
 25 this picked up by, forgive me, our media folks

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1 who are listening, media pick up on CADORS all
 2 the time, and interestingly enough, somebody
 3 asked me yesterday or the day before
 4 yesterday, I hear an airliner had to fly from
 5 some point to some point in the air and they
 6 didn't have radio communication; what do you
 7 think of that, and I'm going, well, you'll be
 8 happy to know that it occurs from time to
 9 time, this isn't new, media just picked up on
 10 it, and as do many occurrences in aviation.
 11 The media often will dig into CADORS, they'll
 12 see an event and they'll report it. Well, we
 13 call it a daily reporting system because
 14 there's actually reports daily. Pilots are
 15 flying airplanes, and if you use your
 16 imagination, the aircraft flying over North
 17 America alone today are literally probably
 18 1,000/2,000 aircraft right now, large
 19 airliners, not just little airplanes. I'm not
 20 talking about that. So you can imagine the
 21 activity, you can imagine the possibility of
 22 reports. We get them all the time. They come
 23 on my Blackberry every day. I see them in
 24 Ontario, I see them -- actually, I see them
 25 for the country, but not everybody in Ontario

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1 sees them for the country, and they're just --
 2 it's just information. It's a place where
 3 preliminary information to be put. I don't
 4 know the statistic, but the majority of the
 5 reports that go into our CADORS, the source of
 6 the information is Nav Canada. They're the
 7 ones who are out there every day seeing what's
 8 taking place. Certainly from the airspace,
 9 they're monitoring airspace, they're talking
 10 to the aircraft, the events occur at airports
 11 where air traffic control units are or flight
 12 service specialists are located, and they're
 13 all Nav Canada employees, they're obliged to
 14 report any occurrence no matter how minor it
 15 might be. They simply report it. We've
 16 actually seen an increase in CADORS over the
 17 last little while. Some people have said
 18 that's not a good thing. Actually, to your
 19 point about a culture, it's a good thing, it's
 20 really, really important that we continue to
 21 build that culture where we can get all the
 22 data so we can analyze it. As I suggested,
 23 you know, it could be something as benign as a
 24 bird strike to -- an air traffic control one,
 25 as an example, they have certain standards for

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1 separation of aircraft, and when they go
 2 inside that distance by even a 10th of a mile,
 3 they're reported. To me, as a pilot, it's a
 4 benign issue, but it gets reported and it
 5 should be reported. Nav Canada is interested
 6 in that sort of thing. So I don't want to go
 7 much further than that, other than to say it's
 8 just a place where we begin to look at things.
 9 Transport Canada gets all the reports. We
 10 analyze the data ourselves, we pick up on --
 11 I'll just pull numbers out of my head. Out of
 12 ten, we might look at one, because the other
 13 nine are simply -- is simply data. Just, oh,
 14 I see that occurrence; yeah, well, make a
 15 call, but I think that's a benign issue. If I
 16 have fifteen benign issues, then I might dig
 17 further. I'll use my example of bird strikes
 18 at a particular airport, as an example. The
 19 interesting thing about the CADOR System, it's
 20 on our web.
 21 MS. FAGAN:
 22 Q. And I was going to ask, perhaps you could
 23 bring up the --
 24 MR. STEPHENSON:
 25 A. Bring it up, sure.

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1 MS. FAGAN:
 2 Q. Because it's a fairly simple --
 3 MR. STEPHENSON:
 4 A. It's simple to use, and it's on our web. We
 5 actually hope that, you know, organizations
 6 actually use it. They can look to their own
 7 companies. An airport can look to their own
 8 airport. They can look for their own data.
 9 If they're going to an airport, they might
 10 actually wonder if there's any CADORS at that
 11 airport that might be of interest. The risk,
 12 of course, is it's preliminary data and it
 13 might not tell them anything, or they might
 14 think it's something and it's really not
 15 anything.
 16 MS. FAGAN:
 17 Q. So it's on the website. So who can report?
 18 You've mentioned that the vast majority of the
 19 reports come through Nav Canada?
 20 MR. STEPHENSON:
 21 A. That's correct.
 22 MS. FAGAN:
 23 Q. But are they the only ones, can the public
 24 just --
 25 MR. STEPHENSON:

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1 A. Yeah, anybody can make a CADORS report. We
 2 don't discourage it, but the risk, of course,
 3 by saying everybody make CADORS reports, we'll
 4 end up with data that will be of no
 5 consequence. We sort of have certain criteria
 6 that we're interested in. So, you know, if
 7 your sandwich wasn't very good on the airline,
 8 or, you know, they were late arriving or
 9 departing, as airlines can be, you know, we
 10 don't want to see those reports because it'll
 11 be just clouding up my purpose, right, but we
 12 do want to see reports when there's something
 13 of consequence that relates to my interest,
 14 aviation safety.
 15 MS. FAGAN:
 16 Q. So if it bears on aviation safety, is there a
 17 follow up? Like, if somebody applies, do they
 18 have to put in their name?
 19 MR. STEPHENSON:
 20 A. If they want to be contacted, yes. In other
 21 words, it's preliminary information, so we may
 22 want to seek out the information. I don't
 23 want to say it's anonymous, but if you go to
 24 the web, you won't see your name on a CADOR
 25 report, for example. Lucille, bring up the

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1 item here and find your way into it. It's
 2 very simple. I don't know if it's up so our
 3 viewers from home can see it, but we're switch
 4 -- if you want to just do a query, and just
 5 show us the -- I don't want to bring up
 6 anybody specifically, but --
 7 MS. FAGAN:
 8 Q. No, just the blank application.
 9 MR. STEPHENSON:
 10 A. I just want to show you the pick list of -- is
 11 there a pick list of categories? No, it's
 12 aircraft categories, but the occurrence type,
 13 there you go, the occurrence type here. This
 14 isn't cooperating. Here it comes. So it's an
 15 accident/incident, and I see accidents and
 16 incidents in my Blackberry, and we get a lot
 17 of incidents over the years that meet that --
 18 over the time that meets the criteria, but the
 19 events, I mean, we see the big ticket items,
 20 of course, but we'll see other minor issues,
 21 sorry, areas that somebody might report on,
 22 that somebody outside might be inclined to
 23 report on. Pilots, for example -- just stop
 24 on the ILS irregularity. If they see an ILS
 25 irregularity, they'll probably hear that

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1 through Transport Canada -- sorry, through Nav
 2 Canada. That's the Instrument Landing System.
 3 It's a nav aid that a pilot might see and he
 4 might report that, and/or -- it's actually
 5 easier for a pilot to see than Nav Canada.
 6 It's not working and they'll do the work for
 7 them, but --
 8 MS. FAGAN:
 9 Q. And that brings me to the reporting.
 10 MR. STEPHENSON:
 11 A. Yes.
 12 MS. FAGAN:
 13 Q. You've said that the majority of the reports
 14 that end up on the CADORS, which is public and
 15 people can view, comes from Nav Canada. The
 16 public, you wouldn't appreciate too many
 17 people, you know, applying to complain about
 18 the sandwich.
 19 MR. STEPHENSON:
 20 A. Right.
 21 MS. FAGAN:
 22 Q. But if the public observed something that they
 23 genuinely believed was a safety concern --
 24 MR. STEPHENSON:
 25 A. Yeah.

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1 MS. FAGAN:
 2 Q. They could complete, their name would be there
 3 for you to follow up, but they wouldn't
 4 necessarily -- they wouldn't be published, you
 5 would just use that to get some information as
 6 to this should be investigated.
 7 MR. STEPHENSON:
 8 A. Yeah.
 9 MS. FAGAN:
 10 Q. What about pilots or air operators, do the
 11 pilots and air operators go to the CADORS, or
 12 do they have to report somewhere else and that
 13 ends up on CADORS?
 14 MR. STEPHENSON:
 15 A. Yeah, again this gets to maturity. I'll shift
 16 back to safety management systems. If there's
 17 something occurring inside the organization,
 18 they're going to have their own internal
 19 reporting system. I hope that if it relates
 20 to something outside of their control, that it
 21 becomes the purview of Transport Canada, that
 22 they would report it in two ways. The would
 23 report it internally and they might actually
 24 report it inside CADORS as well. I should
 25 tell you, though, you know, for members of the

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1 public or people who don't necessarily know
 2 our business that well, they probably
 3 shouldn't be drawn towards CADORS. We have
 4 other capabilities of receiving their comments
 5 or concerns right on our website. There's a
 6 very simple link, boom, send us an e-mail,
 7 people receive it, actually, in Lucille's
 8 shop, and they receive the information in
 9 Ottawa and they decide if it's an Ontario
 10 issue, or if it should be dealt with in
 11 Ottawa. There's all sorts of ways that those
 12 things can be reported. CADORS just happens
 13 to be one of them.
 14 MS. FAGAN:
 15 Q. Okay. Incident and accident, when somebody --
 16 I don't want the public to be misled. When
 17 you see an incident or an accident, just the
 18 definition of an incident because, I mean,
 19 everybody can have a different interpretation
 20 of an incident.
 21 MR. STEPHENSON:
 22 A. Right. I don't have the definition right in
 23 front of me. I could dig it out. The TSB
 24 folks will probably give you that really good
 25 description, but the definition of an incident

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1 or accident varies with the type of aircraft.
 2 In the airline world, we're very strict, it
 3 has a very strict line where if something
 4 occurs in an airline operation, certain things
 5 have to be reported, even if they're not
 6 determined to be an accident. In other words,
 7 incidents, we want to hear as well, and
 8 they're required and obliged by law to report
 9 them. In the smaller aircraft world, that
 10 same incident may occur in a small air
 11 operator, and may not get -- be reported to us
 12 by law. So if you'd like, I could pull that
 13 definition after.
 14 MS. FAGAN:
 15 Q. No, I'm just getting that beyond the CADORS,
 16 if it meets -- in the airline world or the
 17 aviation world, if it meets those definitions
 18 of incident or accident --
 19 MR. STEPHENSON:
 20 A. Yeah.
 21 MS. FAGAN:
 22 Q. Take the CADORS out of it, there's an
 23 obligation for the operator or the pilot to
 24 report?
 25 MR. STEPHENSON:

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1 A. That's correct.
 2 MS. FAGAN:
 3 Q. And those reports will end up potentially with
 4 Transport Canada and with the Transportation
 5 Safety Board?
 6 MR. STEPHENSON:
 7 A. That's correct.
 8 MS. FAGAN:
 9 Q. Like, an accident --
 10 MR. STEPHENSON:
 11 A. That's correct.
 12 MS. FAGAN:
 13 Q. Would have to be reported to both?
 14 MR. STEPHENSON:
 15 A. Incidentally, when we receive those, we
 16 actually put them in CADORS. So they're going
 17 to go in CADORS because that's data we collect
 18 and it's a way of -- if I'm at home, you know,
 19 in the evening, that's a method of
 20 communicating with me. We have a centre in
 21 the headquarters that after hours they --
 22 and/or during the day time, for that matter,
 23 if they receive -- any accident reports go
 24 directly and funnel through there, and they
 25 actually put them in CADORS and they go out to

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1 the system, and the likes of me and my
 2 colleagues will be aware of it. So it's -- I
 3 don't want to say it's sophisticated, it's
 4 not, it's actually quite simple, but it's
 5 robust, it sends out to multiple people.
 6 MS. FAGAN:
 7 Q. That's all my questions with respect to
 8 reporting, and they're all the questions I
 9 have. Before I turn you over to the rest of
 10 the parties, because the process here is that
 11 when counsel have had their opportunity to
 12 lead you through your presentation, then the
 13 counsel for Transport Canada, and then the
 14 other parties all have the opportunity to ask
 15 you questions, and at the end if I or my
 16 colleague, Mr. Roil, have any questions, or
 17 Transport Canada counsel have questions, we
 18 can come back at the end, but for now, that's
 19 all I have. I'd just like to give you the
 20 opportunity that if you want to say anything
 21 else before we start with the group, now is
 22 your chance.
 23 MR. STEPHENSON:
 24 A. No, I think -- it's just my pleasure to be
 25 here and hope we've been reasonably

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1 informative and worthwhile for everybody, and
 2 as suggested, I know I'm probably going to get
 3 some additional questions, but -- even outside
 4 this forum once I've left, I am available.
 5 MS. FAGAN:
 6 Q. Thank you very much.
 7 COMMISSIONER:
 8 Q. Thank you, Ms. Fagan. Speaking now, there's a
 9 list which has been worked out by counsel who
 10 will question. Counsel for the party being
 11 examined, and, of course, that's Transport
 12 Canada, can ask some questions if there's
 13 something which the witness has said that you
 14 want to, for the sake of completeness,
 15 elaborate on, you can do it now. Otherwise,
 16 you would be second last.
 17 MR. FREEMAN:
 18 Q. Yes, thank you, Mr. Commissioner. We'll wait
 19 until the end and maybe have some follow up
 20 questions at that time.
 21 COMMISSIONER:
 22 Q. All right then, thank you. Next on the list is
 23 counsel for C-NLOPB. Now I think you may have
 24 to move -- no, of course, that's right, you
 25 have to come up there.

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1 MR. MICHAEL STEPHENSON - EXAMINATION BY MS. AMY CROSBIE:
 2 MS. CROSBIE:
 3 Q. Thank you, Commissioner. I just have one
 4 question and it has to do with the standards
 5 that are found in your regulations, and I will
 6 admit that at lunch time I tried to find an
 7 example, but I had some technical
 8 difficulties, so I don't have a specific
 9 example, but you had indicated this morning
 10 that your regulations often refer to a third
 11 party standard, and specifically we spoke
 12 about the Canadian General Standards Board.
 13 MR. STEPHENSON:
 14 A. Yes.
 15 MS. CROSBIE:
 16 Q. If the Canadian General Standards Board
 17 changes the standard at any given time, is
 18 that automatically adopted by your
 19 regulations?
 20 MR. STEPHENSON:
 21 A. That's a good question. I think you'll find,
 22 and I'm loath to use the word "grandfathered"
 23 because that's not what I want to do, but when
 24 we see a change to a standard, I think it's
 25 probably safe to say that what was there can

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1 remain, and if you'll give me two seconds, I
 2 might be able to tell you specifically, and
 3 are you talking about immersion suits because
 4 that's --
 5 MS. CROSBIE:
 6 Q. That's actually where I was going.
 7 MR. STEPHENSON:
 8 A. And I can tell you, and this is out of the
 9 Airworthiness Manual, it makes reference to
 10 two standards, and I assume that's because
 11 there was a change, and that should give you a
 12 sense of what I'm talking about. The current,
 13 as contained in Chapter 537, and this is just
 14 a bunch of letters which I'll give you the
 15 numbers because I'm going to put it on the
 16 record, CAN/CGSB, which is the Standards
 17 Board, -65.17-99, and I'm sensing the 99 is
 18 the year the standard was there, Helicopter
 19 Passenger Transportation Suit Systems,
 20 published December, '99, that's why I figured
 21 the 99 was, and under our criteria for
 22 acceptable for installation, the word is
 23 "acceptable". There's another criteria called
 24 "other", and it's again the same thing, CAN/CG
 25 and then it's -65.17-M88, Helicopter Passenger

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1 Transportation Suit Systems, same word,
 2 published January, 1988, and it's
 3 "acceptable". So we have two standards
 4 referenced and it's probably exactly for that
 5 reason, I'm assuming, but I must confess, I
 6 don't know that.
 7 MS. CROSBIE:
 8 Q. I think that -- well, my next question was
 9 whether the old standard would be
 10 grandfathered in, and I think that you've
 11 answered that?
 12 MR. STEPHENSON:
 13 A. Right, but at some point in time I think you
 14 would likely not see a third or fourth, fifth,
 15 or sixth, and it wouldn't run on, and over
 16 time I think you'll see the standard drop off.
 17 MS. CROSBIE:
 18 Q. So any new operator looking for certification
 19 would have to -- could pick either standard,
 20 they're not obligated just to --
 21 MR. STEPHENSON:
 22 A. Under this statement here, yes, that would be
 23 correct, and that would be their choice to
 24 choose the older standard, and deal with the
 25 fact that it may drop off at some point in

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1 time.
 2 MS. CROSBIE:
 3 Q. Okay, thank you. That's all my questions.
 4 COMMISSIONER:
 5 Q. Thank you, Ms. Crosbie. The next counsel on
 6 the list would be counsel for CAPP. Is Mr.
 7 Browne here? I don't see him. All right
 8 then, we'll move on to the three operators.
 9 The note on my list is in order that they can
 10 decide, so have you decided, ladies and
 11 gentlemen?
 12 MR. WALLACE:
 13 Q. Thank you, Mr. Commissioner. We have no
 14 questions at the present, but we do anticipate
 15 that there will be evidence led as to the
 16 audits conducted by Transport Canada, and
 17 reserve the right to examine further at that
 18 time.
 19 COMMISSIONER:
 20 Q. So when you say "we", Mr. Wallace, you're
 21 speaking of all three operators?
 22 MR. WALLACE:
 23 Q. I'm speaking -- no, I'm sorry. I'm speaking
 24 on behalf of HMDC, Hibernia Management and
 25 Development Company Limited only.

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1 COMMISSIONER:
 2 Q. I see, okay, yes, I wanted to be sure of that.
 3 MR. FREEMAN:
 4 Q. Mr. Commissioner, if I may --
 5 COMMISSIONER:
 6 Q. Yes.
 7 MR. FREEMAN:
 8 Q. It's our understanding that that type of
 9 evidence is not something that's being brought
 10 to this Inquiry within the mandate of this
 11 Inquiry, that is audits from Transport Canada.
 12 It may be that there are audits from the OPB
 13 that are on the table for this Inquiry, but it
 14 wasn't our understanding that evidence as to
 15 Transport Canada audits was part of this.
 16 COMMISSIONER:
 17 Q. Do you mean "ever" or at this time?
 18 MR. FREEMAN:
 19 Q. At this time certainly, and if it did come up
 20 that it was being requested, which hasn't been
 21 at this point, then we'd have to talk about
 22 whether or not we felt that was inside or
 23 outside the mandate of the Inquiry.
 24 COMMISSIONER:
 25 Q. All right, we'll lay that in abeyance then for

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1 the time being, anyway.
 2 MR. FREEMAN:
 3 Q. Thank you.
 4 COMMISSIONER:
 5 Q. Okay, thank you, Mr. Wallace. Now for Husky.
 6 MR. PRITCHETT:
 7 Q. Mr. Commissioner, Blair Pritchett, on behalf
 8 of Suncor. We have no questions, but subject
 9 to my friend's comments, if there is evidence
 10 of the type he's discussed that is entered, we
 11 would receive the right to question on that,
 12 again if that does come to pass.
 13 COMMISSIONER:
 14 Q. All right, thank you. Ms. Hickman.
 15 MS. HICKMAN:
 16 Q. Mr. Commissioner, Stephanie Hickman, for Husky
 17 Oil. We have the same comments as Mr.
 18 Wallace. If there is a chance to examine
 19 Transport Canada on the audits, we would like
 20 to have the opportunity to do so. Thank you.
 21 COMMISSIONER:
 22 Q. Okay, thank you. Now counsel for Cougar, Mr.
 23 Whalen.
 24 WHALEN, Q.C.:
 25 Q. Thank you, Mr. Commissioner. Norman Whalen,

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1 counsel for Cougar. We have no questions at
 2 this time from the evidence given to date.
 3 Thank you.
 4 COMMISSIONER:
 5 Q. All right, thank you, Mr. Whalen. Next on the
 6 list is counsel for Sikorsky. I do not see
 7 him here, so I take it he's not present today,
 8 and we'll move on to Helly Hansen. I don't
 9 think there's anybody present today for Helly
 10 Hansen. Counsel for MUN, for the training --
 11 MS. HOLLETT:
 12 Q. Mr. Commissioner, Karen Hollett, for Memorial
 13 University and Offshore Safety and Survival
 14 Centre. We have no questions.
 15 COMMISSIONER:
 16 Q. Thank you. Counsel, Mr. Pritchard, for the
 17 Government of Newfoundland and Labrador.
 18 MR. PRITCHARD:
 19 Q. Thank you, Mr. Commissioner. No questions on
 20 behalf of the Government of Newfoundland and
 21 Labrador. Thank you for your evidence.
 22 COMMISSIONER:
 23 Q. Thank you. Mr. Harris is not present, and for
 24 the union.
 25 MR. BALAKRISHNAN:

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1 Q. Good afternoon, Mr. Commissioner. Raman
 2 Balakrishnan, appearing on behalf of CEP. I
 3 just have a couple of questions. I don't
 4 think I'll be very long at all.
 5 MR. MICHAEL STEPHENSON - EXAMINATION BY MR. RAMAN
 6 BALAKRISHNAN:
 7 MR. BALAKRISHNAN:
 8 Q. Mr. Stephenson, we spent some time today
 9 talking about --
 10 MR. STEPHENSON:
 11 A. Excuse me, I'm a little hearing impaired, just
 12 a bit.
 13 MR. BALAKRISHNAN:
 14 Q. I'm sorry, I'll --
 15 MR. STEPHENSON:
 16 A. Just up just a bit. I don't want to miss
 17 anything.
 18 MR. BALAKRISHNAN:
 19 Q. No, that's okay. We spent some time today
 20 talking about the type certifications, and how
 21 that may work between a US company, or
 22 manufacturer, I should say, bringing aircraft
 23 into Canada, and Canada going into the US,
 24 vice versa, and we -- I think you mentioned
 25 today that the Sikorsky aircraft, the

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1 helicopters that this Inquiry is focused on,
 2 that is a US based manufacturer, is that
 3 correct?
 4 MR. STEPHENSON:
 5 A. That's correct.
 6 MR. BALAKRISHNAN:
 7 Q. Do you know if the Sikorsky helicopters are
 8 type certified for Canada?
 9 MR. STEPHENSON:
 10 A. So based on the discussions we had earlier
 11 today --
 12 MR. BALAKRISHNAN:
 13 Q. Yes.
 14 MR. STEPHENSON:
 15 A. I can say with confidence that -- I can't say
 16 that all Sikorsky aircraft are certified in
 17 Canada. I can say that this particular
 18 aircraft is certified in Canada.
 19 MR. BALAKRISHNAN:
 20 Q. And would those particular aircraft also have
 21 a particular airworthiness for use in Canada
 22 from the operator?
 23 MR. FREEMAN:
 24 Q. Mr. Commissioner, I'm sorry to interrupt, but
 25 I have to ask again whether or not, and how

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1 far you'd like to go down the path of
 2 airworthiness specifically of the S92. I
 3 think Mr. Stephenson is doing his best to
 4 answer generally as to airworthiness
 5 directives and things like that, but as to
 6 specific airworthiness of the S92, I just want
 7 to make sure we're staying within the mandate
 8 of the Inquiry.
 9 COMMISSIONER:
 10 Q. Yes. Well, obviously the--let's have a look
 11 at the mandate. The Commissioner's mandate
 12 does not include an examination of any issues
 13 related to the airworthiness of aircraft
 14 training of flight crew or flight procedures
 15 or any other matters which are included in the
 16 Transportation Safety Board of Canada
 17 investigation. So we can't go into an
 18 assessment of airworthiness, as I see it. But
 19 this question, as I understand it, is really
 20 was the particular aircraft certified for use
 21 in Canada. Is that your question?
 22 MR. BALAKRISHNAN:
 23 Q. Yes.
 24 COMMISSIONER:
 25 Q. So I think that's perfectly all right.

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1 MR. BALAKRISHNAN:
 2 Q. Thank you, Commissioner.
 3 MR. FREEMAN:
 4 Q. I just wanted to put that there because we are
 5 getting into that area. I just wanted to
 6 alert everyone to your mandate again. Thank
 7 you.
 8 COMMISSIONER:
 9 Q. Okay, thank you.
 10 MR. STEPHENSON:
 11 A. So if I understand your question, and it goes
 12 back to the discussion we had with Ms. Fagan
 13 regarding, in general terms, aircraft
 14 certified--sorry, aircraft residing in Canada,
 15 operating in Canada, type certified in another
 16 country, in this case, the S-92 in the US
 17 carries a type certificate here in Canada and
 18 being operated by a Canadian air operator, it
 19 would have its airworthiness certificate
 20 issued here in Canada by, in this case, the
 21 Canadian structure that we have in place to do
 22 that.
 23 MR. BALAKRISHNAN:
 24 Q. If bulletins on a certain type of aircraft,
 25 and let's stick with this example of an

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1 aircraft that is manufactured in the United
 2 States, type certified for use in Canada and
 3 has an air worthiness certificate for use in
 4 Canada, each individual one. If there are
 5 bulletins that are being released, could be
 6 from other countries, like you said, or you
 7 know, other operators, has there ever been an
 8 occasion where Transport Canada would revoke
 9 their type certification or revoke the air
 10 worthiness certificates when the originating
 11 country has not?
 12 MR. STEPHENSON:
 13 A. So you're asking me about whether I know about
 14 the history of the airworthiness branch. I
 15 would risk to say it's possible. I wouldn't
 16 have direct knowledge about whether an
 17 occurrence--whether it actually occurred or
 18 not. I can tell you airworthiness
 19 certificates are suspended from time to time.
 20 Airworthiness certificates, keep in mind, are
 21 based on the health of the aircraft
 22 specifically. What typically occurs though
 23 with an airworthiness certificate is not so
 24 much we suspend them. An airworthiness
 25 certificate like my medical certificate in my

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1 pocket is no longer valid because I haven't
 2 been to the doctor. In the case of the
 3 aircraft, if it's not maintained and kept to
 4 that standard, simply by virtue of its non-
 5 compliance, the airworthiness certificate is
 6 not worth anything. It's invalid. We don't
 7 normally remove it. It stays with the
 8 aircraft.
 9 Every time the inspection program of the
 10 aircraft expires, which is often the case, an
 11 aircraft will come to an end, pull it in the
 12 hangar, guys, it needs work. The CFA or
 13 certificate of airworthiness is not valid.
 14 It's not an issue. It just isn't valid. If
 15 they fly the aircraft in that condition, then
 16 that's an issue, so as it would be if I were
 17 to fly an aircraft right now, it would be an
 18 issue. But I'm not breaking a rule, nor is an
 19 air operator breaking a rule to have a
 20 certificate of airworthiness that's not valid.
 21 It's when they actually operate the aircraft.
 22 I don't know if that answers your question.
 23 MR. BALAKRISHNAN:
 24 Q. I just want to be clear on one thing.
 25 MR. STEPHENSON:

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1 A. It's reference is CFA.
 2 MR. BALAKRISHNAN:
 3 Q. What's that?
 4 MR. STEPHENSON:
 5 A. Reference the certificate of airworthiness.
 6 MR. BALAKRISHNAN:
 7 Q. Yes.
 8 MR. STEPHENSON:
 9 A. You did ask another question about type
 10 certificate and whether it would be revoked.
 11 MR. BALAKRISHNAN:
 12 Q. Yes.
 13 MR. STEPHENSON:
 14 A. I wouldn't have any firsthand knowledge, so I
 15 couldn't answer your question.
 16 MR. BALAKRISHNAN:
 17 Q. Is it possible to do that though?
 18 MR. STEPHENSON:
 19 A. Yeah, we're the signing authority. We have
 20 the--to issue and revoke, I mean, that's--it's
 21 rooted in the Aeronautics Act.
 22 MR. BALAKRISHNAN:
 23 Q. And even though the aircraft isn't
 24 manufactured here in Canada, even though it
 25 may be manufactured in the United States -

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1 MR. STEPHENSON:
 2 A. Yeah, we wouldn't -- and to be clear, we would
 3 not be issuing the FAA's issued type
 4 certificate.
 5 MR. BALAKRISHNAN:
 6 Q. No.
 7 MR. STEPHENSON:
 8 A. We would be revoking the Canadian type
 9 certificate.
 10 MR. BALAKRISHNAN:
 11 Q. Okay. I apologize to everybody here because
 12 this is a similar question that I asked last
 13 week. When you talked about the audits and I
 14 think this morning you were pretty specific
 15 that the audits are actually done--they're
 16 actually arranged with the operator ahead of
 17 time?
 18 MR. STEPHENSON:
 19 A. A large comprehensive audit is normally
 20 arranged ahead of time. The reason we do that
 21 is we want somebody to be there. We show up
 22 and the doors are locked, it's of no value.
 23 We do occasionally drop in to operators, as I
 24 alluded to in my testimony earlier today, for
 25 our convenience. Is that no notice? Well,

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1 sometimes it is. Knock, wouldn't knock, you
 2 come in, you walk in the door and "hi, how are
 3 you?" We don't need a warrant of any sort.
 4 We have the authority to inspect at any time.
 5 That's rooted in the Act, and we do that
 6 occasionally, but we find it's not necessary
 7 in most cases. But we do show up at an
 8 airport. We got three hours to kill. There's
 9 an issue I want to deal with with an air
 10 operator, so you'll go and visit them. "Oh,
 11 hi. I didn't know you were coming." "Didn't
 12 know I was coming either." And we'll have
 13 that interaction, right. But it's not--that
 14 wouldn't be a comprehensive audit. That may
 15 be a specific thing I wanted to look at or
 16 whatever.
 17 MR. BALAKRISHNAN:
 18 Q. Okay. Those are all my questions. Thank you
 19 very much, and I will echo Mr. Wallace's
 20 statements that we may reserve questions for
 21 later.
 22 COMMISSIONER:
 23 Q. Okay, thank you. Now come back to my list.
 24 Counsel for the families, Mr. Martin.
 25 MR. MARTIN:

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1 Q. Thank you, Commissioner. It's 25 after 4. I
 2 had three or four questions. I have no
 3 problems if it pleases the Commissioner that
 4 we continue on, but I have no problems, I'd
 5 just point out the time of day.
 6 COMMISSIONER:
 7 Q. Okay. Well, if you have--well, we'll go to
 8 4:30.
 9 MR. MARTIN:
 10 Q. I'd prefer, if we could, to keep the -
 11 MR. STEPHENSON:
 12 A. I'm okay.
 13 MR. MARTIN:
 14 Q. - keep the momentum.
 15 COMMISSIONER:
 16 Q. Yes, yes, all right.
 17 MR. MICHAEL STEPHENSON, EXAMINATION BY MR. JAMIE MARTIN
 18 MR. MARTIN:
 19 Q. Thank you, Mr. Commissioner. My first
 20 question, you dealt with the dispatch issue.
 21 You talked about pilot self-dispatch and you
 22 also talked about co-dispatch.
 23 MR. STEPHENSON:
 24 A. Yes.
 25 MR. MARTIN:

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1 Q. And you indicated that Cougar in particular
 2 have gone to a co-dispatch system. Is that
 3 correct?
 4 MR. STEPHENSON:
 5 A. I don't have firsthand knowledge. I just have
 6 been told that that is the case. I've never
 7 inspected it. I don't know how it's actually
 8 structured. I know they have an obligation
 9 under the 704 commuter regs to have a certain
 10 standard, meet a certain standard. My
 11 understanding is they've gone beyond that.
 12 MR. MARTIN:
 13 Q. Yes, that was my understanding of your answer
 14 to the question from Ms. Fagan. What I'm
 15 trying to determine though, what was the
 16 impetus for that? Was that Cougar going to
 17 you people and saying "we want to go on this
 18 type of system, want to use this type of
 19 system" or was it Transport Canada saying that
 20 that would be a preferable system? What was--
 21 because things just--things usually happen for
 22 a reason and I'm just wondering what was the
 23 impetus for it? Was it in relation to
 24 something that may have happened that caused
 25 that decision to be taken by Cougar?

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1 MR. STEPHENSON:
 2 A. Well, first of all -
 3 MR. MARTIN:
 4 Q. Or what knowledge, if any, do you have about
 5 that?
 6 MR. FREEMAN:
 7 Q. If I may suggest, Mr. Commissioner, and I
 8 think it's obviously very important to allow
 9 that sort of question to be asked, but maybe a
 10 good question to ask Cougar at some point. I
 11 think that may be the more appropriate person
 12 to ask that question, but I'll leave it to
 13 your -
 14 COMMISSIONER:
 15 Q. I'm sure that Cougar could answer it, but
 16 perhaps this witness can answer it.
 17 MR. FREEMAN:
 18 Q. If Mr. Stephenson could, that may be helpful
 19 as well.
 20 COMMISSIONER:
 21 Q. And if you can't answer it -
 22 MR. STEPHENSON:
 23 A. Well, I can answer--I know I can answer half
 24 of it, and the answer is I have no firsthand
 25 knowledge of whether an incident occurred. I

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1 can tell you, with confidence, we don't have
 2 the regulatory power to make them do that. So
 3 perhaps they may have chosen to do it on their
 4 own, but I just don't see the Atlantic Region
 5 Aviation staff saying "you will do this." I
 6 just don't see how they have the vehicle to do
 7 that. The standard they operate in is
 8 clearly--it's clear they require the lower
 9 level authority or the lower level dispatch
 10 system, flight following and as I described it
 11 earlier. The co-dispatch, as I have said,
 12 there is significant value in my mind for
 13 anybody who has that type of operation. It
 14 gives them a lot of confidence. It will give
 15 you additional confidence. Certainly, if I
 16 were the Cougar CEO or accountable executive,
 17 I would have more confidence knowing I have
 18 that more robust system, but they're not
 19 required to have it.
 20 MR. MARTIN:
 21 Q. So to your knowledge, there was no pressure
 22 exerted by Transport Canada on Cougar?
 23 MR. STEPHENSON:
 24 A. To my knowledge, no.
 25 MR. MARTIN:

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1 Q. They voluntarily--you don't know, but it would
 2 appear they voluntarily chose to use that
 3 system as opposed to a pilot self-dispatch?
 4 MR. STEPHENSON:
 5 A. Yeah, I have no knowledge of that and again,
 6 we're into hearsay now, but I think I would
 7 recall if that was the case and I would have
 8 been told that and I think I would share that
 9 with you, but I don't recall that.
 10 MR. MARTIN:
 11 Q. My second line of questioning, you talked
 12 about the penalties that could be imposed on
 13 companies who are not in compliance with
 14 regulations or whatnot. You talked about
 15 fines and you didn't think that they were much
 16 of a deterrent and they're not used very
 17 frequently. Is that correct?
 18 MR. STEPHENSON:
 19 A. I don't think I put it that way, and if I did,
 20 I apologize. I find it's much more useful to
 21 gain compliance with face-to-face discussion
 22 and simply human beings talking. We are the
 23 regulator. We certainly have the authority to
 24 do certain things. Fines is one of them. I
 25 find it far more valuable to get an

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1 organization to demonstrate to me that they
 2 can conduct a safe operation. My experience
 3 and the history that I've--or the authority
 4 I've exercised, and I can tell you it's
 5 exercised across this country and I talk to my
 6 colleagues across the country, as I've
 7 indicated I've worked here in the Atlantic
 8 region, that same philosophy exists. The
 9 biggest powerful tool I have in my box is to
 10 simply suspend their certificate.
 11 MR. MARTIN:
 12 Q. Yeah, that was the second option you spoke
 13 about and you also talked about a suspension
 14 notice as well.
 15 MR. STEPHENSON:
 16 A. Yeah. A suspension notice is not a suspension
 17 of operation. It's a "I'm going to suspend
 18 you if you don't satisfy me that you in fact
 19 are going to change the manner which you're
 20 operating" and it could be for any number of
 21 reasons.
 22 MR. MARTIN:
 23 Q. We're dealing with a helicopter safety inquiry
 24 here, helicopter transportation.
 25 MR. STEPHENSON:

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1 A. Understand, yeah.
 2 MR. MARTIN:
 3 Q. Do you have any knowledge as to how many--did
 4 you ever use those suspension operation
 5 certificates in the helicopter industry, that
 6 you're aware of?
 7 MR. STEPHENSON:
 8 A. I have, yes. Yes, I have.
 9 MR. MARTIN:
 10 Q. Do you recall how many times?
 11 MR. STEPHENSON:
 12 A. I wouldn't be able to pull a number out of my
 13 head. I can tell you with confidence though
 14 the main reason we do that particular--use
 15 that particular tool, oddly enough, is for
 16 maintenance, quality assurance, quality
 17 control. We typically go into particularly
 18 small operators. It's not common with larger
 19 operators. But it is common with smaller
 20 operators who struggle with the concept of
 21 quality assurance, quality control. Just the
 22 principles and actually convincing them that
 23 there's value in it, and so we've worked, over
 24 the last, I'll say four or five years, and I
 25 would say we've issued a dozen or more to very

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1 small operators, but large operators, it's
 2 very uncommon.
 3 MR. MARTIN:
 4 Q. Do you recall whether any were issued for
 5 companies operating in the Province of
 6 Newfoundland and Labrador?
 7 MR. STEPHENSON:
 8 A. I don't remember that, but I think that's--
 9 it's probably a safe bet that small operators
 10 have seen the same tool used to convince them
 11 that quality assurance is an important thing.
 12 MR. MARTIN:
 13 Q. Would it be possible to get some information
 14 on that and share it with the Commission at a
 15 later date?
 16 MR. STEPHENSON:
 17 A. I don't know if I can provide a statistic or
 18 not.
 19 MR. FREEMAN:
 20 Q. One issue I would raise, Mr. Commissioner, is
 21 the possibility that some of this information
 22 is specifically within the mandate of the TSB
 23 inquiry, and so some of this, as my client's
 24 informed me would--all the files on these
 25 types of issues, audits and things like that

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1 may actually be specifically with in the
 2 purview of the TSB inquiry. So it may be that
 3 you'd want to ask the TSB if that's the case.
 4 We can say, we believe that it is, but you may
 5 want to ask them directly, and so I think the
 6 provision of those documents may need to wait.
 7 That discussion may need to wait until after
 8 that report is released and we can talk about
 9 it then.
 10 COMMISSIONER:
 11 Q. Well, I think I'd prefer to think about it
 12 anyway and we'll see where it leads. Now not
 13 to--I don't want to rush you, Mr. Martin, so
 14 it's half past four. Rather than rush you -
 15 MR. MARTIN:
 16 Q. Sure.
 17 COMMISSIONER:
 18 Q. - why not wait until tomorrow morning then and
 19 continue?
 20 MR. MARTIN:
 21 Q. That's fine with me, Mr. Commissioner.
 22 COMMISSIONER:
 23 Q. Okay then, we'll adjourn until 9:30 tomorrow
 24 morning.
 25 ADJOURNED TO OCTOBER 27, 2009 AT 9:30 A.M.

1 CERTIFICATE

2 We, the undersigned, do hereby certify that
3 the foregoing is a true and correct transcript of a
4 hearing heard on the 26th day of October, 2009 at
5 Tara Place, 31 Peet Street, Suite 213, St. John's
6 Newfoundland and Labrador and was transcribed by us
7 to the best of our ability by means of a sound
8 apparatus.

9 Dated at St. John's, NL this
10 26th day of October, 2009

11 Cindy Sooley
12 Discoveries Unlimited Inc.
13 Judy Moss
14 Discoveries Unlimited Inc.

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