

OFFSHORE HELICOPTER SAFETY INQUIRY
November 24, 2009
Tara Place, Suite 213, 31 Peet Street
St. John's, NL

November 24, 2009

PRESENT:

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

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Jamie Martin..... Families of Deceased Passengers

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

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..... Local 2121

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

TABLE OF CONTENTS
November 24, 2009

MR. ROBERT RUTHERFORD, MR. GREGORY HARVEY, MR. PATRICK DOHEY
(PREVIOUSLY SWORN)

Examination by Ms. Anne Fagan.....	Pgs. 1 – 55
Examination by Mr. Randell Earle, Q.C.....	Pgs. 55 – 111
Examination by Mr. Jamie Martin	Pgs. 111 – 131
Examination by Ms. Kate O'Brien	Pgs. 131 – 155
Examination by Mr. David Hurley, Q.C.....	Pgs. 155 – 176
Examination by Mr. Geoffrey Spencer.....	Pgs. 176 - 183

Certificate

Page 1

1 November 24, 2009

2 COMMISSIONER:

3 Q. Good morning, ladies and gentlemen. The Panel

4 is there. Are you ready, Ms. Fagan?

5 MS. FAGAN:

6 Q. Yes, Commissioner.

7 COMMISSIONER:

8 Q. Okay.

9 MR. ROBERT RUTHERFORD, MR. GREGORY HARVEY, MR. PATRICK

10 DOHEY, PREVIOUSLY SWORN, EXAMINATION BY MS. ANNE FAGAN

11 MS. FAGAN:

12 Q. As I indicated yesterday, I'm going to have

13 some questions and Mr. Rutherford is going to

14 direct the questions as to the three witnesses

15 and the first question is for Mr. Rutherford.

16 You described a process for course changes

17 through the Institute that a request comes in

18 and then the change is vetted and it goes

19 through various, you know, academic

20 authorities and if it's approved, then the

21 course change is made. We have heard from the

22 offshore petroleum industry, they have safety

23 committees. Each platform and rig has safety

24 committees, and the safety committees meet

25 with the C-NLOPB on an annual basis and the

26 Commissioner and co-counsel, Mr. Roil and I,

Page 2

1 were invited to attend one of those meetings.

2 So you wouldn't have been at one of the

3 meetings, but a couple of issues were raised,

4 and I don't know if you can provide comment or

5 any insight on the issues that were raised,

6 and if not, maybe you might have suggestion as

7 to where we might go to find the information,

8 and one of the issues raised was that these

9 committees are of the view that they should

10 be, and of the understanding that on occasion

11 they are consulted with respect to changes to

12 the safety courses. So the committees on the

13 rigs are consulted with respect to any changes

14 that are going to be made to a course, and

15 there was a change to a course with respect to

16 helicopter landing. Are you aware of the

17 change and can you describe the change to the

18 helicopter landing course?

19 MR. RUTHERFORD:

20 A. I certainly can. We have a helicopter landing

21 officer course which we've been delivering for

22 well over ten years at the Marine Institute.

23 We were going through--we have a process

24 internally where we, as I mentioned there

25 yesterday, we do review our courses and we

26 review them on the basis of courses that we're

Page 3

1 delivering most often or we review them on the

2 basis of courses that perhaps there's been a

3 regulation change or there's been some

4 indication that there's a problem with the

5 course. This course hadn't been reviewed for

6 some years because none of those things--it

7 wasn't a course we delivered very often and it

8 wasn't a course that any issue had come to

9 light, but when we looked at it to review it,

10 we determined that there was a little bit of

11 a--there was a gap in terms of over the years,

12 the course had changed because of certain

13 small things overtime had changed over the

14 years, and there was a gap basically in some

15 of the content and there was a gap in the

16 duration required. The course, when it was

17 originally developed, was based on a North Sea

18 course and the helicopter landing operator in

19 Canadian jurisdiction has certain different

20 duties that have appeared since the course was

21 developed. Pat can talk about this a little

22 bit more closely, but basically the helicopter

23 landing officer here in the Canadian

24 jurisdiction doesn't deal with such things as

25 weather forecasting and has not the TDG,

26 Transportation of Dangerous Goods,

Page 4

1 responsibility.

2 So we, having identified there was a gap,

3 the gap was in terms of the duration that we

4 were delivering and the duration that was

5 actually in our course outline was sufficient

6 that we said we better stop delivering the

7 course until we correct this, and as I

8 mentioned there yesterday, our process for any

9 courses within a regulatory jurisdiction such

10 as CAPP would be that we make the change and

11 we go to the regulator first to confirm that

12 this is okay, and we bring a course to the

13 Training Qualifications Committee by means of

14 the change request form, which I mentioned

15 yesterday. We did this in, I think it was

16 December of 2008 at the meeting of the

17 Training Qualifications Committee. It was

18 brought to that meeting. It was general

19 approval, I guess, to go ahead with the change

20 at that time by all the members of the

21 committee, but one person at that committee

22 did not--hadn't been--it was a new person at

23 the committee who hadn't been at the committee

24 before, wasn't aware of it. So it was

25 deferred and the problem that left us with was

26 that we couldn't deliver the course and we

Page 5

1 needed to deliver the course and the training
 2 committee wasn't going to meet until a little
 3 bit later. So what we did, we discussed with
 4 the chair of the Training Qualifications
 5 Committee and said if we can get the approval
 6 of all of the committee members, can we move
 7 ahead and make the change, and that did
 8 happen. So we got the approval of the various
 9 committee members and Cougar and made the
 10 change.
 11 Now from our perspective, our requirement
 12 is we get the signature of all the committee
 13 members. I know the committee members do
 14 consult with their JOHS committees and safety
 15 committees, but that's outside of our process,
 16 and I also know that CAPP, every year, does
 17 report every change that's been made and
 18 changes that are going to be made. So we know
 19 every year there's a report back to the
 20 committees, but I don't know what happens, as
 21 an individual company, how they deal with
 22 that.
 23 MS. FAGAN:
 24 Q. So with -
 25 MR. RUTHERFORD:
 26 A. I don't know if Pat wants to add anything to

Page 6

1 that.
 2 MR. DOHEY:
 3 A. Just two points really I'd like to make on
 4 that. One is from an historical perspective,
 5 there's been 52 courses delivered by the
 6 Marine Institute over a ten-year period from
 7 March of '97. I could be off on the dates by
 8 a year or so, but March of '97 until December
 9 of 2008, there was 52 courses, and of that
 10 courses, not one of them went the full two-day
 11 time span and effectively, all of the
 12 information would have been covered in those
 13 courses. To add to that, ongoing, previous to
 14 the request for change, I canvassed all of the
 15 operators who are using the service, the
 16 helicopter company that's providing the
 17 service offshore, as well as the other
 18 training institution in Nova Scotia, and
 19 everybody was of a similar mind set, that the
 20 timeframe allowed was disproportional to the
 21 information.
 22 MS. FAGAN:
 23 Q. And the question and issue is twofold. One
 24 was this group was interested in why the
 25 course was changed, but what was of--you know,
 26 that's an information issue. What was of real

Page 7

1 concern was that they had not been consulted.
 2 Now when you--well, they say they hadn't been
 3 consulted. Now when you speak of committee
 4 members, are you speaking of the individual
 5 safety committees for each one of these
 6 platforms? Do you have any connection or any
 7 knowledge of that consultation period? When
 8 you talk of committee members and regulator
 9 and CAPP, it's the regulator, it's CAPP and
 10 the committee members are--it's a different
 11 committee? Is that fair?
 12 MR. RUTHERFORD:
 13 A. Our involvement is with the Training
 14 Qualifications Committee, which is the
 15 committee which is set up under CAPP, and so
 16 we don't have any direct involvement with the
 17 individual safety committees. I would like to
 18 mention, I think there's been some talk on
 19 this course that we reduced it from two days
 20 to one day. I think it's worth making a note
 21 of the fact that there are prerequisites for
 22 this course. You can't take the course until
 23 you've had six months service on a helideck.
 24 You can't take the course without a BST, a
 25 five-day safety training, and you can't take
 26 the course with offshore fire team training,

Page 8

1 which is another five days. So basically, you
 2 got six days plus offshore fire team, plus BST
 3 before you're allowed to come and do this
 4 particular course. So it's not like it's
 5 only--we're only giving people one day of
 6 training to operate a helideck. That's not
 7 entirely true.
 8 MS. FAGAN:
 9 Q. Okay. Well, appreciate that, and the issue
 10 seemed to be that they hadn't been consulted
 11 as much as--and then, of course, they had a
 12 lack of knowledge as to why this had gone on,
 13 and that's being investigated, but I just
 14 thought I would ask you, since you're here,
 15 what was the change and if you had any
 16 involvement in that consultation process.
 17 There was a second issue that was raised,
 18 which we thought was interesting and one of
 19 the attendees at this Joint Occupational
 20 Health and Safety meeting, and it's this
 21 annual meeting of all the safety committees,
 22 one of the members had indicated that on a
 23 number of times, he had asked that the
 24 training for the offshore workers include a
 25 component that dealt with landing on ice or
 26 dealing with an icy situation, landing when

Page 9	Page 11
<p>1 the water is slushy and it's broken ice or 2 landing on a solid ice platform and according 3 to these travellers, who are, you know, 4 seasoned workers, that there is quite an 5 extensive period of time when they're 6 travelling back and forth, you know, a long 7 period, a number of months, when they're often 8 travelling to the rigs and they're travelling 9 over ice, and they wanted to know if the 10 training institute was aware of this request 11 and secondly, is it possible to deal with that 12 type of issue? So I don't know who wants to 13 handle that one.</p> <p>14 MR. RUTHERFORD: 15 A. Well, I'll take that first and then I'll pass 16 it to anybody else wants to comment. I would 17 say we weren't aware of--the request hasn't 18 been brought to us. It has been, from our 19 perspective, something that we have been 20 thinking about and is a concern to us. That 21 is actually one of the reasons I mentioned 22 yesterday that we have this large conference 23 of training associations coming to St. John's. 24 It's not until 2012, but the subject of that 25 is fundamentally related to Arctic hostile 26 environments and one of the topics we're</p>	<p>1 can--I don't know if they accept them--I 2 haven't seen them being submitted from 3 outside, but generally speaking, it will be 4 one of the committee members will provide a 5 change request form to the committee.</p> <p>6 MS. FAGAN: 7 Q. The Training Qualifications Committee? 8 MR. RUTHERFORD: 9 A. Yeah.</p> <p>10 MS. FAGAN: 11 Q. Not the individual rig's safety committee? 12 MR. RUTHERFORD: 13 A. No, but I don't think there's anything-- 14 there's nothing in the--as far as I'm aware, 15 and CAPP would be better positioned to answer 16 this one, but I don't think there's anything 17 in the Terms of Reference that would preclude 18 that, I think if somebody wanted to bring 19 something to the Committee, I think--I don't 20 think so, but it's probably a question better 21 left for CAPP.</p> <p>22 MS. FAGAN: 23 Q. Okay, thank you. I have one or two questions 24 on the breathing device. Mr. Rutherford, in 25 your presentation yesterday, you said that the 26 Canadian Association of Petroleum Producers,</p>
<p>1 trying to get presenters on was specifically 2 that. So trying to figure out how we deal 3 with--how do we deal with ice and specifically 4 slush ice, because that is a major problem. 5 So we would like to--I think it needs 6 investigating, but does anybody else want to 7 comment on that one? No.</p> <p>8 MS. FAGAN: 9 Q. You weren't aware that - 10 MR. RUTHERFORD: 11 A. We weren't aware of the specific request, no. 12 MS. FAGAN: 13 Q. And you would not generally take requests 14 directly from a worker or a member of a safety 15 committee? That's not the protocol? 16 MR. RUTHERFORD: 17 A. No. I mean, the protocol for any change to 18 the regulated training is, as I mentioned 19 yesterday, is this change request form goes to 20 the Training Qualifications Committee and it 21 gets approved at that committee and the change 22 gets implemented from that.</p> <p>23 MS. FAGAN: 24 Q. But who fills out the change request form? 25 MR. RUTHERFORD: 26 A. It can be any of the committee members or it</p>	<p>1 CAPP, established a task force comprised of 2 operators, regulators and trainers to consider 3 the emergency breathing system in early 2005, 4 and in December 2008, recommendations were 5 made with respect to training. That in 2007, 6 you had changed the facilities and geared up 7 in order to provide that training. But we 8 heard from CAPP that the investigation and 9 consideration for a breathing device started 10 in 2000. So when did the Offshore Survival 11 Centre become involved in the deliberations, 12 let's say, over a breathing device?</p> <p>13 MR. RUTHERFORD: 14 A. We weren't members of the Training 15 Qualifications Committee in 2000. That didn't 16 happen until 2005. We were first aware of the 17 issue, that it was being looked at, was a 18 letter from CAPP which came to us from that 19 committee in 2002 indicating that they were 20 starting to explore the issue. Soon after 21 that, I think it was then that they 22 commissioned this consultant, Ian Denness, I 23 believe, to do a study of the system and he 24 came back with a recommendation to utilize a 25 rebreather type system. But it was soon after 26 that, again, that it got taken away from the</p>

Page 13

1 Committee. I think the operators took it back
 2 to consider again.
 3 We didn't find out that the decision had
 4 been made to go with a pressurized system
 5 until late 2004, and I got back in touch with
 6 the--I was in touch with CAPP at that time and
 7 said, look, we need to--this changes for us.
 8 It has implications for us in terms of
 9 training and risk management. So we did get
 10 in touch with CAPP on this issue at that time,
 11 2005, and had a meeting with CAPP early 2005
 12 on the issue. I think then the Task Force was
 13 set up to look at it. So as of 2005, we were
 14 actually actively involved in looking at the
 15 issues and we had a participation in a
 16 committee.
 17 MS. FAGAN:
 18 Q. We had a good demonstration from Mr. Harvey
 19 yesterday on the complexity and the risks
 20 associated with the HUEBA which he said had a
 21 proven track record with the Navy, I believe,
 22 since 1990. So Mr. Harvey, you can correct me
 23 if I'm wrong, but I believe that was your
 24 evidence, that this particular device went
 25 through three generations, but it had been
 26 used since 1990? Is that fair?

Page 14

1 MR. HARVEY:
 2 A. Yes, in relation to the Aqualung product, yes.
 3 MS. FAGAN:
 4 Q. And CAPP took nine years to implement this
 5 device. Mr. Rutherford, it's probably best
 6 for you, but you can direct it to whoever.
 7 From your perspective, based on the knowledge
 8 that you have and the trainers have, could the
 9 breathing device have been implemented
 10 quicker?
 11 MR. RUTHERFORD:
 12 A. I think they could have implemented a
 13 rebreather device fairly quickly. That was
 14 being commonly used in the offshore industry.
 15 I think the selection of the compressed air
 16 system is no doubt the best system, but it did
 17 come with a number of challenges, and I think
 18 the--you know, the issue is, I guess once we
 19 got into 2005 and we were participating in the
 20 process, I think things started to move
 21 reasonably well, except there was still issues
 22 relating to the medical. There was no--the
 23 fundamental issues related to medical advice,
 24 I think, and that was the reason, in late 2008
 25 they decided to step back and there was a
 26 review of all of the systems again in Europe.

Page 15

1 There was a task force that went across to
 2 Europe to look at all the systems and that's
 3 why everything was put on hold later on in
 4 2008, and it wasn't until later that we moved
 5 ahead with it again. But there's significant
 6 challenges associated with the device and I
 7 think it--I know it's like a SCUBA system, but
 8 when people scuba dive, they self select to go
 9 scuba diving. They're generally young. When
 10 you're putting a system like this with a
 11 pressurized breathing system in place, we're
 12 dealing with, you know, just people that
 13 generally are normal--I know offshore workers
 14 do require a medical. They're generally
 15 fitter than the average population, but it is
 16 a general workforce and they're not self
 17 selecting. You're basically being required to
 18 undertake training which has potential, you
 19 know, risk to your health. So it has to be
 20 very, very carefully managed. So I think that
 21 was what caused some of the issues. I don't
 22 know if anybody else wants to speak on that.
 23 No.
 24 MS. FAGAN:
 25 Q. Okay. I have a few questions now on the HUET
 26 and I'm going to need an exhibit in a couple

Page 16

1 of minutes, so I'm going to give this to the
 2 Registrar so that she can work on tracking it
 3 down. Mr. Rutherford, you had explained
 4 yesterday that it's good to have a HUET or a
 5 simulator that has physical features that are
 6 similar to reality, and you talked about the
 7 three different types of fidelity and, you
 8 know, there's a balance and one of the focuses
 9 is the task, but another focus of those three
 10 is the physical reality, and the reality for
 11 our workers right now is the S-92, and I
 12 understand that the S-92 has a stroking seat.
 13 Can you explain how a stroking seat is
 14 designed to work, and if you can't, if it's
 15 not a fair question, just let me know, but if
 16 you know how those seats work, could you
 17 inform us?
 18 MR. RUTHERFORD:
 19 A. All I can say is that they are--they're
 20 designed to absorb energy on impact and that
 21 on an impact up to, I think--if a helicopter
 22 does come down with several Gs of impact,
 23 there will be some movement on the seat which
 24 as the energy is absorbed, the seat will move
 25 downwards.
 26 MS. FAGAN:

<p style="text-align: right;">Page 17</p> <p>1 Q. Okay. Do you know how far it moves down? Do 2 you know if it's inches or - 3 MR. RUTHERFORD: 4 A. I can't answer that one, I'm afraid, no. 5 MS. FAGAN: 6 Q. Okay. Fair enough. There's lots of more 7 evidence to come. We'll find someone who can 8 tell us how far the seat drops. Mr. Harvey, I 9 have a couple of questions for you on the 10 placement of the window. Mr. Rutherford had 11 indicated that the placement of the window on 12 the S-92 is higher than the window in the HUET 13 that's used at the Centre and we had a 14 photograph shown yesterday, it came out of 15 Exhibit 18, and in Exhibit 18, it showed the 16 height and perhaps the Registrar could bring 17 up Exhibit 18, which is from yesterday? I 18 know I have her jumping around a little bit 19 but I won't be too long. I only have a few 20 questions, so it'll be all right. 21 REGISTRAR: 22 Q. 13? 23 MS. FAGAN: 24 Q. 18. 25 REGISTRAR: 26 Q. 18.</p>	<p style="text-align: right;">Page 19</p> <p>1 MS. FAGAN: 2 Q. Do you know approximately where that is? 3 Because the medium size window is about the 4 same size as the window in the S-92? 5 MR. HARVEY: 6 A. It's fairly close. 7 MS. FAGAN: 8 Q. Fairly close, and so if there's a 28--when you 9 mention the 28-inch difference, you're looking 10 at - 11 MR. HARVEY: 12 A. The larger window. 13 MS. FAGAN: 14 Q. - the larger window? 15 MR. HARVEY: 16 A. Yes, that's correct. 17 MS. FAGAN: 18 Q. But the window that's often used is the medium 19 window, which is the same size, or very, very 20 close - 21 MR. HARVEY: 22 A. Yes. 23 MS. FAGAN: 24 Q. - millimetre in size. Do you know how that 25 ledge to the floor compares to the ledge to 26 the floor?</p>
<p style="text-align: right;">Page 18</p> <p>1 MS. FAGAN: 2 Q. And it's page 11. There. And if we could 3 just leave that photograph up for a couple of 4 minutes? Thank you. Mr. Harvey, do you know 5 the difference, the height difference between 6 the seat and the ledge of the window in the S- 7 92 versus the seat and the ledge of the window 8 in the HUET? 9 MR. HARVEY: 10 A. I can't tell you the height from the seat to 11 the window, but I can tell you the height from 12 the deck or the floor to the window. 13 MS. FAGAN: 14 Q. Okay. 15 MR. HARVEY: 16 A. And the difference between the two, our 17 windows in the HUET, our lowest window, the 18 difference is 28 inches between--that's the 19 lower ledge of the window on the S-92 as 20 compared to the lower ledge of the window in 21 our HUET. So there's a 28-inch difference 22 there. 23 MS. FAGAN: 24 Q. And there's a medium size window in the HUET. 25 MR. HARVEY: 26 A. Yes.</p>	<p style="text-align: right;">Page 20</p> <p>1 MR. HARVEY: 2 A. It's about 21 inches. 3 MS. FAGAN: 4 Q. About 21 inches? 5 MR. HARVEY: 6 A. Yes. 7 MS. FAGAN: 8 Q. Okay. Now we know that the stroking seat will 9 cause the seat to drop a little more, but we 10 don't know exactly how much. 11 MR. RUTHERFORD: 12 A. It will depend on the gravity or the force at 13 which the helicopter hits the water. So it's 14 a progressive--it will be a progressive, but 15 what the full travel is, I can't answer that 16 one. 17 MS. FAGAN: 18 Q. Okay. So as trainers, would the location of 19 the window--and I mean, maybe this helps. I 20 don't know, because if the helicopter is 21 upside down, you're dealing with a different 22 scenario, but we know that the location of the 23 window, it's about the same size, but we know 24 the size of the window is the same, but the 25 location is really in a different position. 26 How does training, you know, in reality, is</p>

Page 21

1 there--would you comment, does this difference
 2 make any difference in preparing people?
 3 MR. HARVEY:
 4 A. Well, there is a bit of a disconnect between
 5 our HUET and the S-92. So for example, when
 6 we're doing our lecture, for the most part,
 7 we'll put the emphasis on the S-92. So for
 8 example, the slide that we have up here now,
 9 we'll talk about the seats and the positions
 10 and the auxiliary fuel tank and just generally
 11 point out the features and what they would
 12 need to know in that situation. But then, at
 13 some point during our presentation, we have to
 14 go over and we have to say, okay, now I'm
 15 going to show you how to get out of our unit,
 16 because there would be some differences.
 17 MS. FAGAN:
 18 Q. Okay. What about the auxiliary fuel tank?
 19 You can see that there in the photograph, and
 20 part of the training involves knocking out the
 21 window and reality, unless the windows blow
 22 out of the helicopter on their own, would
 23 involve knocking out that window. As
 24 trainers, I mean, you guys are training people
 25 to do this day in, day out, what's your view?
 26 Would that have any impact on a person's

Page 22

1 ability to egress the window or punch out the
 2 window?
 3 MR. HARVEY:
 4 A. Well, a couple comments there. First of all,
 5 you know, when you're not next to the window,
 6 it means you now have to travel from your
 7 position, in this case, it would be in the
 8 aisle seat, over the auxiliary fuel tank to
 9 the window. So any time you're moving in the
 10 water, it becomes very difficult because of
 11 the floatation of the suits. So it requires a
 12 hand over hand or a coordinated movement. It
 13 would certainly slow down your exit, just for
 14 the fact that you have to move. If you lost
 15 your handhold, then you would, in all
 16 likelihood, lose your orientation. So it
 17 would--it would make it more difficult to get
 18 out.
 19 The other point is to remove these
 20 windows, it calls for a striking action, so a
 21 knocking. Typically we say in any of the
 22 corners, maybe a solid edge of the window, and
 23 give it a knock. That works very well on the
 24 surface, but when you're under water, the
 25 water is a lot denser than the air, so it
 26 takes a lot more effort to swing your arm and

Page 23

1 strike the window, and that is difficult to do
 2 under water, and typically, a better way to do
 3 it under water is by just applying a steady
 4 force, and to do that, you really have to be
 5 next to the window and you have to be
 6 supporting yourself because you're buoyant in
 7 the water. So right here now, you know, I can
 8 put 200 pounds of force--I can lean my whole
 9 body weight into the window, but that's not an
 10 option I have under water.
 11 MS. FAGAN:
 12 Q. Okay. Do you--and I don't know if anybody
 13 trains with a box that would simulate the tank
 14 between the seat and the window. I mean, I've
 15 been in your HUET and unless it changed in the
 16 last month or two, I didn't notice anything
 17 that simulated a box, and I've also been in
 18 Nova Scotia and I've seen their HUET and I
 19 didn't see any box in theirs either. So I
 20 don't know if anybody trains with this, but
 21 tell me if I'm wrong. Does anybody train, as
 22 far as you know, with the box?
 23 MR. RUTHERFORD:
 24 A. I can answer that one, I guess. I'm not aware
 25 of anybody that's actually using this in
 26 training. I think perhaps one of the other

Page 24

1 issues that might want to be raised, I guess,
 2 is there's no real direct line--when changes
 3 are made to a helicopter, any configuration,
 4 although we do find out information because we
 5 are in communication with Cougar quite
 6 regularly, there's no formal line of
 7 communication between the training institution
 8 and Cougar relating to reporting any changes
 9 that take place in terms of configuration and
 10 what's happening, and I think that tends to go
 11 through a safety committee and maybe come back
 12 to the Training Qualifications Committee, may
 13 come to us, but there's no--you know, if they
 14 make a change in the configuration of their
 15 seats, you know, where we want to try and put
 16 that into the training courses, it's not
 17 formally--there's no formal line of
 18 communication. Basically we find out about
 19 it, people will tell us about it, and we'll
 20 find out. But that may be something to look
 21 at.
 22 MS. FAGAN:
 23 Q. And as I understand it, right now, the
 24 configuration has changed from this
 25 photograph. Right now, as I understand it,
 26 the seats--and we heard that as recent as last

<p style="text-align: right;">Page 25</p> <p>1 week, and I believe I've seen it in one of the 2 helicopters, they've moved the seats that are 3 along the side of the auxiliary tank over on 4 the starboard side. So now there is no seats 5 butted up against the fuel tank, and - 6 MR. RUTHERFORD: 7 A. I'll pass that one to Pat, because he's 8 familiar. He's seen the helicopter recently 9 and he can answer that for sure. 10 MR. DOHEY: 11 A. Yeah, I travelled offshore recently and the 12 tank has indeed been moved to the starboard 13 side, but there's also a configuration in the 14 S-92 that would allow two tanks, two auxiliary 15 tanks to be used, depending on the distance of 16 travel. 17 MS. FAGAN: 18 Q. Okay. 19 MR. DOHEY: 20 A. That may be another--that is not the case 21 right now, but that may be something for 22 future. 23 MS. FAGAN: 24 Q. For future consideration and - 25 MR. DOHEY: 26 A. Absolutely.</p>	<p style="text-align: right;">Page 27</p> <p>1 Many of the things that I saw are the 2 same that's in these reports, and I'm only 3 going to go through a couple of them, and one 4 has to do with the HUET, and not everybody 5 does everything the same and CAPP has said 6 that what they--or you have said that what is 7 the focus is the trainer, not necessarily a 8 prescriptive very, very detailed do this, do 9 that. The training institute itself is 10 certified and they review their processes. So 11 on the HUET, we have heard from you, Mr. 12 Rutherford, on why you don't put two trainees 13 in the HUET side by side, because of the fear 14 that the trainee on the inside may very well 15 get kicked in the face by those large boots. 16 However, when you look at the two processes, 17 one, the Survival Centre puts more than two in 18 the HUET and your centre puts two in the HUET. 19 Okay, so is the reason why you only put two, 20 would you consider changing that? I'd just 21 like you to comment on why they have more in 22 their HUET trying to escape at the same--than 23 you guys. 24 MR. RUTHERFORD: 25 A. There's a couple of issues, I think, 26 associated with it. The reason we don't is</p>
<p style="text-align: right;">Page 26</p> <p>1 MS. FAGAN: 2 Q. - and perhaps that's something that should be 3 looked at and then some connection with the 4 training institute so that you may be able to 5 train for it, or at least simulate the 6 situation. The next area I want to go to has 7 to do with the review, and we didn't really 8 spend any time on that yesterday. CAPP 9 entered exhibits last week and they are 10 Exhibit 55 and it's at Section 3.3. 490 is 11 the review for the Offshore Safety and 12 Survival Centre, and same exhibit, 55, Section 13 3.4, page 505 is Survival Systems. So I don't 14 intend to spend too much time on this review, 15 but there's a couple of areas which deal with 16 the suits and with the HUET and there was a 17 comparison made by the reviewer on behalf of 18 CAPP and both reviews are there. So I've 19 reviewed these documents and I've been to both 20 centres. You were good enough to host me at 21 one of your training sessions and I have to 22 say, I've appreciated the trainers. They at 23 least made you feel you were going to get 24 through it, but I didn't see the need to do it 25 a second time in Nova Scotia, and so I just 26 watched their session from the deck.</p>	<p style="text-align: right;">Page 28</p> <p>1 basically related to risk management in our 2 own specific HUET. Now it may be that the 3 trainer that's utilized in Survival System is 4 a newer model. It has open ends, which does 5 allow a little bit more, I think, flexibility 6 in the event somebody gets into trouble. 7 You'd be able to get a diver into them. So 8 that might change the risk profile a little 9 bit if we had a new HUET. So we would look at 10 it again. 11 But I think we also need to look at the-- 12 it is, we do feel as trainers that it's very 13 important that we deal with people 14 individually and we go through processes step 15 by step. When we put in--if we were to put in 16 additional cross training, we have to go 17 through a number of roles and we start adding 18 roles. Now the question is, if we're going to 19 make everybody get into the HUET, everybody do 20 every exercise, which is where it should be, 21 they could land up with doing it a number of 22 additional roles in the course of the 23 training. So we'd have to look at that 24 because as I mentioned before, we are--you 25 know, to increase the time we have in the pool 26 is challenging for us because we're</p>

Page 29	Page 31
<p>1 constrained by the pool is basically utilized</p> <p>2 full time. So it would add to the cost and</p> <p>3 duration of the exercise.</p> <p>4 So yes, it's worth--it could be worth</p> <p>5 looking at. There are some things to look at</p> <p>6 to determine, you know, whether it would</p> <p>7 increase the duration and whether we can</p> <p>8 manage the risk, but I don't think we can do</p> <p>9 it until such time as we change out our</p> <p>10 simulator.</p> <p>11 MS. FAGAN:</p> <p>12 Q. Yeah. Well, I did notice that the HUET in</p> <p>13 Nova Scotia has a very, very large exit.</p> <p>14 MR. RUTHERFORD:</p> <p>15 A. Yeah.</p> <p>16 MS. FAGAN:</p> <p>17 Q. So there's means of escape, but you wouldn't</p> <p>18 feel as closed in. The HUET at your Centre</p> <p>19 simulates that tucked in, enclosed feeling.</p> <p>20 So I'll leave it to the experts to assess.</p> <p>21 There is another issue where they change</p> <p>22 seats. At the Survival Centre, do you guys--</p> <p>23 you know, the Safety and Survival Centre, your</p> <p>24 Centre, do you change seats or do you keep the</p> <p>25 trainee in the same seat for all the roles or</p> <p>26 do you move them around so that they can use--</p>	<p>1 learned some of the more important details we</p> <p>2 want to pass on to them.</p> <p>3 MS. FAGAN:</p> <p>4 Q. Okay. So if you do it in the same--I have to</p> <p>5 tell you, after my fourth roll, I felt pretty</p> <p>6 good, you know, because you got into a</p> <p>7 routine.</p> <p>8 MR. HARVEY:</p> <p>9 A. Yes.</p> <p>10 MS. FAGAN:</p> <p>11 Q. But the workers have no control over where</p> <p>12 they're going to sit. You know, they're not</p> <p>13 assigned--you know, they're not assigned a</p> <p>14 port seat or a starboard seat then for the</p> <p>15 rest of their tours of duty. So would it be</p> <p>16 beneficial for them to have, you know, more</p> <p>17 time? I understand getting that feeling of</p> <p>18 proficiency, but would it be helpful to have</p> <p>19 more time so that they can get proficient on</p> <p>20 the other side?</p> <p>21 MR. HARVEY:</p> <p>22 A. More time is always helpful.</p> <p>23 MS. FAGAN:</p> <p>24 Q. I guess teachers and trainers, I should have</p> <p>25 known what answer I was going to get.</p> <p>26 MR. RUTHERFORD:</p>
<p>1 get used to the left and the right? And I</p> <p>2 don't know, maybe the trainees, I don't know</p> <p>3 who can answer that question as to what you do</p> <p>4 and why you do it that way.</p> <p>5 MR. HARVEY:</p> <p>6 A. Typically we'll keep them in the same seats,</p> <p>7 unless the student requests to try another</p> <p>8 seat or another window, another exit, in which</p> <p>9 case, we'll give them that option, and I guess</p> <p>10 the main reason for doing that is we have them</p> <p>11 for a very short period of time. You know, it</p> <p>12 takes about 20 minutes to put two students,</p> <p>13 because we take them in two at a time, through</p> <p>14 our exercises. So that's how much time we</p> <p>15 have with the student in the HUET. What we</p> <p>16 find is when we move them from--even when a</p> <p>17 student asks, so if they ask, "okay, can I try</p> <p>18 the window over on the other side?" well, it's</p> <p>19 almost--it's back to square one again. They</p> <p>20 get all confused and disoriented, as you</p> <p>21 would, and the problem, I think, with that is</p> <p>22 they've almost forgotten now everything</p> <p>23 they've--the process they've learned. It</p> <p>24 throws them off, and we don't have time to</p> <p>25 deal with it. So we can do that, but then</p> <p>26 when they leave, I'm not sure if they've</p>	<p>1 A. You know, there is extensive--I mean, the</p> <p>2 offshore petroleum industry does spend more</p> <p>3 time training its personnel than any other</p> <p>4 industry I'm aware of. So there is a cost,</p> <p>5 operational cost to it. We're quite happy to--</p> <p>6 as long as we got facilities and capabilities</p> <p>7 to respond to it, we're more than happy to</p> <p>8 provide the training, but there is</p> <p>9 practicalities that come into play,</p> <p>10 unfortunately.</p> <p>11 MS. FAGAN:</p> <p>12 Q. Okay. I noticed that at the Survival Centre,</p> <p>13 they have a--they use waves and we have a wave</p> <p>14 tank at MUN. Has consideration ever been</p> <p>15 given to doing the training or some of the</p> <p>16 life boat exercises in the wave tank at NRC or</p> <p>17 is consideration being given to have waves at</p> <p>18 the Centre or are waves unnecessary?</p> <p>19 MR. RUTHERFORD:</p> <p>20 A. We're certainly--we actually in our proposal</p> <p>21 for our facility's development, the addition</p> <p>22 of a new pool is in that proposal and that</p> <p>23 would be an environmental tank, including</p> <p>24 waves. With respect to using the wave tank at</p> <p>25 the National Research Council, that wave tank</p> <p>26 is there for purposes of conducting research</p>

Page 33

1 and we actually do work in that tank many
 2 times with the researchers, but it's not a
 3 tank that's designed for training purposes.
 4 It's not chlorinated and managed in purposes
 5 related to training exercises, and to rent
 6 that tank would be prohibitively expensive.
 7 It's a very, very expensive tank. So yeah, we
 8 think there's a value in having an
 9 environmental tank, but it really needs to be
 10 under the control and direction of the
 11 training institute, so we can manage the
 12 risks.

13 MS. FAGAN:
 14 Q. Okay. What about the use of fans to create
 15 wind and rain? You know, you put black hoses
 16 with holes in them in your ceiling, turn it
 17 on, almost like a sprinkler system, you've got
 18 rain. Couple of big fans, you have your wind.
 19 Sound system, you can create thunder and those
 20 sorts of realism. Are they unnecessary? Are
 21 they helpful? Have you given any
 22 consideration to any of those types of
 23 features?

24 MR. RUTHERFORD:
 25 A. Well, again, these are part of our plans for
 26 the new centre. We do have capability to

Page 34

1 provide wind and rain within the pool we have,
 2 and we do utilize it for marine courses where
 3 we're providing the training to the people
 4 going into the marine industry, but they don't
 5 do the sea day. Where we deal with the issues
 6 relating to environment, et cetera, is during
 7 our sea day in our exercises, but if we had--
 8 you know, really the time again, it comes down
 9 to what can be reasonably achieved in the time
 10 you have available to do the training. We do
 11 the--we go through the steps, the necessary
 12 steps in training people how to--in the basic
 13 training course where we're basically focusing
 14 on very basic skills and how to utilize pieces
 15 of equipment, and then we take them out into
 16 the sea day and go into this in more detail.
 17 In the recurrent course, again a very short
 18 period of time in which to do this, so we do a
 19 very short pool exercise and again out into
 20 the sea exercise. So it's certainly worth
 21 looking at, but I think we would need to have
 22 a look at our facilities a little bit more.

23 MS. FAGAN:
 24 Q. You had indicated that the Centre was
 25 considering using high-back seats and four-
 26 point harnesses because the four-point harness

Page 35

1 would be different than the lap belt. As
 2 trainers, is there a difference in trying to
 3 get out of a four-point harness versus a lap
 4 belt? Would that be a challenge?

5 MR. RUTHERFORD:
 6 A. We have been requested to look at this. From
 7 our perspective, the seat configuration and
 8 the belt is--you know, it's not a major
 9 fidelity issue. As I mentioned before, most
 10 people in various types of seats, I mean,
 11 whether it's a high-back seat or a low-back
 12 seat doesn't really matter. You know how to
 13 sit down in it. Whether it's a belt that you
 14 latch from there or latch from there, it's
 15 not--I think most people are generally
 16 comfortable with a range of belts and know how
 17 to open a belt up. So it doesn't--what we do
 18 with respect to belts is basically make sure
 19 people become familiar with the particular
 20 belt that they have in their helicopter when
 21 they go offshore. However, we have been asked
 22 to look at this and to do the change out. So
 23 we do have currently a prototype, which is
 24 being developed at the University and we're
 25 working on that. One of the things we want to
 26 make sure of is we've got a seat like that and

Page 36

1 we can--again, as I mentioned yesterday, we
 2 have emergency releases for divers so the seat
 3 can get out--if we need to get somebody out of
 4 the HUET quickly, we can do that. We get into
 5 four-point harnesses, you get into situations
 6 where possibly people get tangled in the belt
 7 and from a training perspective, we want to
 8 make sure that there's no additional risk
 9 being introduced. So it's being looked at and
 10 we'll test it out. We've been asked to do it.
 11 It's not something that we would have
 12 necessarily driven. However, we do feel the
 13 bigger issue, from our perspective, is that
 14 the location of the windows, we think is
 15 something that's a little bit of a bigger
 16 issue and a little bit more of a challenge
 17 that should be looked at. I don't know if
 18 Greg wants to comment.

19 MS. FAGAN:
 20 Q. Greg, as a trainer, having to get the belt off
 21 your shoulders, or even is the suit so
 22 buoyant, does it slip off anyway in the water?
 23 I have no idea.

24 MR. HARVEY:
 25 A. Well, like, the windows, the more realistic we
 26 can be, I think, the better, and the four

<p style="text-align: right;">Page 37</p> <p>1 point harness does introduce more difficulties 2 for some of the students, I think it will, as 3 opposed to the lap belt and it would be good 4 if we can have them experience that in 5 training. If they are going to have problems 6 with it, I think it's better for them to have 7 it in the training environment than in a real 8 life situation. So, yes, you know, the four 9 point harness would be beneficial.</p> <p>10 MS. FAGAN: 11 Q. Now we have the report here on Survival 12 Systems. They're not here. We received 13 information from them, and I don't intend to 14 go through it in detail, but I did note that 15 there was, and you don't need to go to it, but 16 there was a comment that the suits were in 17 poor repair, you know, they were missing 18 pillows and gloves, whistles, and, you know, 19 some of the flotation devices hadn't been 20 used. The Centre is getting their suits 21 leased and repaired by Helly Hansen. Did you 22 experience problems with missing gloves and 23 the suits not being in repair because there's 24 no comment -- there's no comment like that in 25 your report, in that, you know, the suits, 26 there appears to be no issue for the suits at</p>	<p style="text-align: right;">Page 39</p> <p>1 MR. RUTHERFORD: 2 A. I can't comment on that, another training 3 institution. 4 MS. FAGAN: 5 Q. But you weren't experiencing -- you're not 6 experiencing the same problems? 7 MR. RUTHERFORD: 8 A. No. 9 MS. FAGAN: 10 Q. Okay. Are there any other differences between 11 the two training facilities or any other 12 comments that you'd want to provide on the 13 review? I don't have any other questions. I 14 have another couple of questions on vessel 15 rescue. That was another issue raised by the 16 joint meeting of the Safety Committees last 17 week, but on the review itself of on the HUET, 18 I don't have any other questions. Do you want 19 to have any comments on the review or the 20 training facilities? 21 MR. RUTHERFORD: 22 A. I can say, I think, the review identified that 23 both of the training institutions were meeting 24 the requirements of the Training 25 Qualifications Committee, the Guide 2008. So 26 we're in compliance. There was a number of</p>
<p style="text-align: right;">Page 38</p> <p>1 the Centre, and both institutions are using 2 the same suit. So do you know why there's any 3 difference or has Helly Hansen -- you know, 4 are they doing a better job for you, or do you 5 know if they're involved in the other suits or 6 not? 7 MR. RUTHERFORD: 8 A. Our service -- lease service contract with 9 Helly Hansen requires them to fully service. 10 After every use, they are fully serviced and 11 returned to us in "as new" condition. So we 12 basically have a contract in place to do this, 13 but as you might see from the exhibit, I don't 14 remember which one it was now, but I showed an 15 exhibit yesterday, it's really quite expensive 16 for us to do that, so that impacts -- that's 17 one of the -- Helly Hansen service costs are 18 quite expensive. 19 MS. FAGAN: 20 Q. And you haven't had any issues with Helly 21 Hansen servicing? 22 MR. RUTHERFORD: 23 A. No. 24 MS. FAGAN: 25 Q. So you wouldn't know if Helly Hansen was 26 servicing the Nova Scotia suits or not?</p>	<p style="text-align: right;">Page 40</p> <p>1 recommendations made which we'll look at. In 2 terms of the different training providers, I 3 think both of our training providers, as well 4 as Survival Systems and ourselves are very 5 cognizant of industry needs and responsive to 6 industry, and do our best to serve industry as 7 well as we possibly can. You know, there's a 8 difference in the organizations. Survival 9 Systems is a private company. We're a public 10 organization. We have a lot of depth and 11 breadth in terms of the types of training we 12 provide. Survival Systems tends to focus more 13 on -- they're focused on the offshore 14 petroleum industry, a little bit of marine 15 business, but their associated company does 16 develop and build helicopter escape trainers. 17 So they are in a position of always being able 18 to keep that type of equipment up to date very 19 much easier than we are. On the other side, 20 we have a very, very rigorous -- I guess, our 21 academic processes are quite solid, which 22 ensures that we maintain that side. So 23 there's checks and balances, and I think both 24 -- as with everything in life, there's pluses 25 and minuses to both. 26 MS. FAGAN:</p>

Page 41	Page 43
<p>1 Q. And when I looked at the review, there were 2 many pluses along the lines that you had said; 3 student ratio, and many of the instructional 4 aspects, and it's in as an exhibit everybody 5 can read and do their own comparison. On the 6 -- but you're right, they were both certified 7 and both appear to be doing a good job. Now 8 the vessel rescue, when the Commissioner and 9 Mr. Roil and I attended the meeting of the 10 Occupational Health and Safety Committees last 11 week, one of the concerns was the ability of 12 the supply vessels and rescue crafts to 13 retrieve people from the water in high seas, 14 and it's been explained to us that the 15 protocol for when a helicopter is landing is 16 that a supply vessel must be close by. The 17 idea being if the helicopter missed its 18 approach, or if the helicopter ditches 19 basically close to the rig, there's a supply 20 vessel there to pluck the passengers and 21 people out of the water, but if the sea state 22 is too high, then the rescue is going to be 23 difficult, and Mr. Rutherford, you said 24 yesterday that there was work being done on 25 crew performance aimed at standby vessels and 26 standby rescue crafts, and you said that the</p>	<p>1 the aspects of that particular recovery 2 device. We also try out smaller pieces of 3 rescue equipment, various types of rescue 4 hoops, and we train the crew with a number of 5 mannequins, we put them in the water and train 6 the best way to recover them. Having said 7 that, we do believe there are concerns, I 8 think, of the offshore operators relating to 9 the performance in high seas that are probably 10 well founded, I think. Very much so these 11 supply vessels, these support vessels, do 12 require or do rely on fast rescue craft to do 13 most of the recovery. So the Dacon Scoop 14 would be a device that wouldn't require 15 deployment of the fast rescue craft, but I 16 think it is a concern if we have high seas, a 17 very high sea state, that the recovery would 18 be very, very challenging. That's the reason, 19 I guess, I raised a couple of the issues there 20 yesterday with the proposals that we have in 21 place and one of them relates to this 22 autonomous rescue craft which has been trialed 23 very successfully in the North Sea. In fact, 24 this was a craft that was utilized to recover 25 -- a there was a helicopter that came down and 26 actually landed on the surface, but this was</p>
<p>1 Centre was trialing new safety equipment. You 2 said there's work being done and you were 3 trialing. Can you explain what that work is, 4 what is that equipment, what's it designed to 5 do, when would we likely see something like it 6 being used? 7 MR. RUTHERFORD: 8 A. We have contracts each year with Husky Energy 9 and with Petro Canada, who are now Suncor. 10 Those contracts require us -- as the Marine 11 Institute, we go out and run trials, recovery 12 trials, utilizing each of their supply support 13 vessels with each different crew, and we run 14 every year every supply vessel with a 15 different crew, we run through a variety of 16 scenarios and a variety of recovery scenarios 17 with the crew. As part of those trials, we 18 also look at trying to piggyback onto the 19 trials some aspects of research so that we can 20 look at new methods of recovery. We actually 21 have a contract in place with PRAC, Petroleum 22 Research Atlantic Canada, to look at recovery 23 utilizing Dacon Scoop, which is a tug scoop 24 system which we can recover personnel from the 25 water. We're looking to see whether we can 26 recovery life boats from the water and some of</p>	<p>1 the first craft on the scene in that instance. 2 I don't know if -- Greg's Presentation has a 3 picture of it -- in your presentation. Do you 4 know what number -- if you can bring up Greg 5 Harvey's presentation, I can show you a 6 picture of that one. 7 MS. FAGAN: 8 Q. It might be 97. 9 MR. RUTHERFORD: 10 A. I think we have raised that and we put a 11 proposal in to PRAC. As a result of that, 12 they did have a workshop there a few months 13 ago and they brought across the project team 14 leader for that project to give a presentation 15 to industry here because I think there is -- 16 there's a real need to have a much more 17 capable vessel -- now we can find slide 5. 18 MS. FAGAN: 19 Q. So what is an autonomous rescue craft? 20 MR. RUTHERFORD: 21 A. You can see that picture there. This is -- in 22 lieu of the fast rescue craft, this is a 37 23 metre vessel which can deal with very high sea 24 states and travel at high speed in high sea 25 states. It can -- I think it's got a 26 capability of doing about 30 knots up to sea</p>

Page 45

1 state 5, sea state 6. The concept of the
 2 autonomous rescue craft is that after the
 3 Piper Alpha Inquiry in the United Kingdom
 4 which I talked yesterday, there was -- one of
 5 the recommendations or one of the outcomes of
 6 that is there has to be a system whereby
 7 people can brought to a place of safety. Now
 8 what that place of safety is is what has to be
 9 defined. Generally speaking, if you're bring
 10 brought on board a support craft or one of
 11 your supply vessels, that will be considered
 12 as you're now in a place of safety, you're out
 13 of the water and in a place of safety, whereas
 14 if you are in a fast rescue craft, an open
 15 boat, or in a life boat, you're not really in
 16 a place of safety. The intent of this
 17 particular vessel is that this was designed so
 18 that it was accepted by the regulator as being
 19 once you were on board there, you are
 20 considered as safe because on board -- that
 21 ship is configured in such a way that you have
 22 all of the resources, medical resources,
 23 medical support. It's a very, very
 24 sophisticated. It doesn't look much on the
 25 outside, but very, very sophisticated vessel,
 26 and I think, you know, it's certainly

Page 46

1 something we think is worth looking at and
 2 worth considering. So obviously what we were
 3 looking at is saying, okay, the people who
 4 have developed this are willing -- this is
 5 developed by BP and they're quite willing to
 6 share their knowledge with us and with the
 7 industry here, but obviously it would need to
 8 have -- you know, to look and see what the
 9 Canadian environment, if there's anything
 10 different that would require changes to the
 11 vessel, but it is something being discussed
 12 and, I think, something that may well be
 13 looked at in the future. The other proposal
 14 which I said we put in at the moment really
 15 relates to -- again it relates to the rescue
 16 support capability, but it's more a software
 17 planning tool for strategic and for tactical
 18 planning of where your rescue support assets
 19 should be in certain situations, and put that
 20 -- basically, what we're looking at is -- it's
 21 three aspects to the proposal. One is
 22 evacuation, creating a reasonable reliable
 23 evacuation scenario. So a helicopter down
 24 would be one of them. Man overboard would be
 25 another, but depending on the size of the
 26 rigs, the number of platforms, how many people

Page 47

1 would reasonably likely end up in the water.
 2 This part of the work would be what we were
 3 proposing to undertake with BMT Fleet
 4 Technology, who is a company that's been
 5 involved in a lot of evacuation research for a
 6 number of -- for the Caspian Sea, for the
 7 Sakhalin Island, for Shtokman in North Russia
 8 and other. So that's what we're looking at
 9 there. We're looking at the survival aspect.
 10 You know, at the moment the predictions of
 11 survival are based on a report that was done
 12 by Magellan, a company in Ottawa, about 20
 13 years ago and it's based on North Sea
 14 conditions. There is -- I think there is a
 15 need to relook at -- there's a lot of new
 16 information about survival that's taken place
 17 in the meantime. So another part of that
 18 proposal was looking at, you know, what are
 19 the realistic times that somebody in the event
 20 of an evacuation, what should be the realistic
 21 time that people should be able to be
 22 recovered from the water, based on the
 23 equipment, et cetera, they're supplied with
 24 here offshore. The third part is really the
 25 area that we've been involved in quite a lot
 26 is the whole issue of rescue and rescue

Page 48

1 capability, the type of assets that are there
 2 to provide that rescue capability. The end
 3 idea was all this would come together as data
 4 which would be utilized in a -- work with a
 5 software development company, develop a tool
 6 which can be used for somebody reasonably
 7 quickly to be able to determine -- you know,
 8 the people operating offshore, or people who
 9 have responsibility for search and rescue to
 10 determine what assets have you got relating to
 11 different types of sea conditions, different
 12 types of -- whatever conditions you got out
 13 there, what should be where. It just takes --
 14 people do this already offshore, but we think
 15 that there is a possibility for further
 16 development in that area to ensure that this
 17 can be done more readily when things change,
 18 so that you could have a tool that's available
 19 to respond to changes. So that's the other
 20 proposal that's currently around at the
 21 moment, so we'll see. Where it goes, I don't
 22 know, but I think they're the concepts of
 23 things that we think need to be looked at, so
 24 we can certainly provide more information on
 25 that to the Commission, if you wish.
 26 MS. FAGAN:

Page 49

1 Q. Thank you. On - just another one or two more
 2 questions, and that's it. When -- and this
 3 has to do with the brace position and a couple
 4 of other little things on cold water shock and
 5 training. We had heard that Mr. Decker held
 6 the seat in front of him instead of the brace
 7 position that had been taught, and I believe,
 8 Mr. Harvey, you showed us the brace position,
 9 you explained why you use the brace position.
 10 However, he reacted differently than as
 11 taught. I'd just like you to comment on that
 12 as to why that might have occurred, and in
 13 particular, breaking sort of a human nature
 14 reaction or response. I mean, you train
 15 someone a certain way and then in an
 16 emergency, they don't necessarily react that
 17 way. Is there any explanation for that or any
 18 comment you'd like to provide on that brace
 19 position?
 20 MR. HARVEY:

21 A. Well, I know in relation to the training and
 22 why he didn't do as trained for, or as
 23 instructed, I can't really comment on that,
 24 but I do know that the research shows that
 25 people in emergency situations are more likely
 26 to respond as trained than if they weren't.

Page 50

1 If they had received no training, then the
 2 likelihood of them responding in an
 3 appropriate way would be very low as compared
 4 to somebody who has been trained and had an
 5 opportunity to practice, then you would expect
 6 them to respond in a more appropriate way.
 7 Why Mr. Decker didn't, I wouldn't be able to
 8 comment.
 9 MS. FAGAN:
 10 Q. But at least his arms weren't flailing around,
 11 as you had described as being one of the
 12 reasons for the brace?
 13 MR. HARVEY:
 14 A. Yes, there's a number of reasons why we teach
 15 the brace position that we do. I think early
 16 on in helicopter transportation, lap belt was
 17 the common restraint, and if I can refer to
 18 Clifford's, which was a study I referred to --
 19 an author I referred to in my presentation, he
 20 had a look at UK Navy helicopter ditchings,
 21 and what he found was the majority of major
 22 injuries were the result of -- were spinal
 23 injuries, and I think he has a number
 24 something like 70 percent of the major
 25 injuries were, in fact, spinal injuries, and
 26 one of the things that came out of that study

Page 51

1 was the four point harness. By using the four
 2 point harness, we can minimize those type of
 3 injuries. We also know that by restraining
 4 somebody with the four point harness and
 5 getting in the proper brace position, we can
 6 minimize flailing injuries, as we talked about
 7 yesterday. Also disorientation is a big issue
 8 when you roll somebody, as we talked about
 9 yesterday. By being restrained in a seat with
 10 the four point harness, you're more likely to
 11 be -- you're going to know where you end up
 12 when you're upside down as opposed to if you
 13 weren't, you could be off to the side or you
 14 could be tucked up over -- under the seat or
 15 what have you. Also as the helicopter rolls,
 16 there's going to be a considerable in-rush of
 17 water. By being in the proper position, and,
 18 of course, with the four point harness, that's
 19 back in your seat with the straps locked in,
 20 then you're going to -- your profile to the
 21 in rushing water, assuming it's coming in
 22 through the window, is going to be minimized.
 23 So there's lots of advantages to being in the
 24 proper brace position.
 25 MS. FAGAN:
 26 Q. You also talked about cold water shock, and

Page 52

1 different ways that people can avoid cold
 2 water shock. I mean, basically have the least
 3 amount of skin as possible, you know, touch or
 4 receive that cold water. Is there anything
 5 that people or workers can do to either avoid
 6 cold water shock, prepare themselves for cold
 7 water shock, and anything that travellers on
 8 the helicopters could do between the training
 9 sessions? Like, I mean, as a trainer, we've
 10 heard, you know, they do it every three years,
 11 we're training more than anybody else, but
 12 there is a view out there that there should be
 13 more. So what can we do in between?
 14 MR. HARVEY:
 15 A. The passengers themselves, I think, you know,
 16 have to take a certain amount of
 17 responsibility, and if I can just relate it to
 18 what happened just recently to me in a HUET
 19 exercise. I had students come in and it was
 20 on a recurrent course and they had mentioned
 21 that the last time -- well, they had done
 22 their BST, so it was their first recurrent
 23 course, and that they had a lot of difficulty
 24 in the HUET component in that course, and they
 25 had to repeat, I guess, a couple of the
 26 exercises over because they weren't successful

Page 53

1 getting out and they were very nervous about
 2 it. This student had mentioned to me that
 3 I've been to the pool every night for the last
 4 so many weeks preparing for it, and when that
 5 student came in and went through the HUET, it
 6 was a non-event for them. So, you know, when
 7 that student left, the suggestion was, well,
 8 you know, you're getting a lot more
 9 comfortable in the water now, you want to keep
 10 those skills up. So maybe, you know, you want
 11 to continue going to the pool and staying in
 12 practice and getting even more comfortable
 13 with it. So I use that as an example that,
 14 you know, what some people can do, right.
 15 MS. FAGAN:
 16 Q. So swimming or being comfortable in the water.
 17 Is there anything else that would be a good
 18 suggestion?
 19 MR. RUTHERFORD:
 20 Q. If I could just add something to that. I
 21 guess, with respect to the gasp reflex, there
 22 is some evidence, I think, that people can
 23 become conditioned to be able to respond to
 24 this so they don't involuntarily respond to the
 25 gasp reflex, and that really requires -- as
 26 Robert Decker himself said, you know, he feels

Page 54

1 one of the reasons he survived and others
 2 didn't is that's very used to having his face
 3 in cold sea water. It may be something that
 4 people need to think about, you know, swim in
 5 cold sea water because there is evidence --
 6 Dr. Michael Tipton, I think, has done some
 7 work in this regard, they do climatize
 8 yourself to this, and it's something to be
 9 considered.
 10 MS. FAGAN:
 11 Q. Thank you. I don't have any other questions,
 12 and, I guess, Commissioner, it's now time for
 13 you to start leading the group through the
 14 question session. Thank you.
 15 COMMISSIONER:
 16 Q. Thank you. We'll start with counsel for the
 17 party being examined, so Mr. Hurley, if you
 18 have question, or Ms. Hollett?
 19 HURLEY, Q.C.:
 20 Q. If we could wait until after the other
 21 questions to see if we have any.
 22 COMMISSIONER:
 23 Q. All right then. Thank you. I'm going to do
 24 as I've done before, and ask people rather
 25 than go through every person, every counsel,
 26 who expects to be asking questions. Three.

Page 55

1 All right then, thank you. You're first on
 2 the list, it would seem, Mr. Earle, unless
 3 somebody else would like to -- or you'd like
 4 to change with somebody else, but if you're
 5 ready, I would ask you. Oh, wait a minute, we
 6 would normally take the break in about ten
 7 minutes. If you're ready, though, we'll start
 8 and we can break in about ten minutes.
 9 ROBERT RUTHERFORD, GREGORY HARVEY, PATRICK DOHEY -
 10 EXAMINATION BY RANDELL EARLE, Q.C.:
 11 EARLE, Q.C.:
 12 Q. Good morning, gentlemen. Dr. Dohey, Mr.
 13 Rutherford, and Mr. Harvey. I'm Randell Earle
 14 and I represent an awful lot of the people
 15 you've trained over the years, the members of
 16 CEP Local 2121, which is the bargaining agent
 17 for the large number of employees at the
 18 Hibernia Platform and the Terra Nova FPSO.
 19 The first question I have for you is, if you
 20 will, a rather general question, but I think
 21 it is important in terms of understanding the
 22 overlay of things, and the question is, in
 23 this area, and when I say "this area", I mean
 24 offshore east coast Canada, who has the
 25 expertise, and I mean genuine expertise, I
 26 think we all have an understanding of someone

Page 56

1 we understand to be an expert, who has the
 2 expertise in the area of survival in cold
 3 water environment and survival training?
 4 MR. RUTHERFORD:
 5 A. That's a very good question. Obviously, we
 6 have a number of instructors who have
 7 expertise in this particular area. We have
 8 several instructors, including Mr. Harvey
 9 here. There has been certain work was done
 10 within the National Research Council in the
 11 certain aspects of survival, but to say
 12 there's any one particular expert who is the
 13 person who you would come to and say is the
 14 person that knows everything, I'm not sure I
 15 could necessarily answer that -- answer that
 16 question.
 17 EARLE, Q.C.:
 18 Q. So we're looking at your organization?
 19 MR. RUTHERFORD:
 20 A. We're looking at our organization for sure,
 21 the collective knowledge that's within our
 22 organization, as well as Survival Systems in
 23 Nova Scotia, who has also considerable
 24 expertise in this area.
 25 EARLE, Q.C.:
 26 Q. So it is far to say that the offshore oil

Page 57

1 industry does not have expertise in this area,
 2 that they rely on people like yourselves and
 3 like Survival Systems, and you mentioned NRC,
 4 for expertise in this area?
 5 MR. RUTHERFORD:
 6 A. I would say it's fair to say they rely on us.
 7 To say that they don't have any expertise, I
 8 don't think is entirely fair. I think there's
 9 a lot of people that have had previous
 10 expertise as Survival Systems trainers and
 11 been involved in survival training who have
 12 gone on to become part of operators and become
 13 part of their HSE groups. I think that -- so
 14 there is, there is some expertise within the
 15 operators, but fundamentally the organizations
 16 that really focus on it are the Offshore
 17 Safety and Survival Centre and Survival
 18 Systems.
 19 EARLE, Q.C.:
 20 Q. But, Mr. Rutherford, wouldn't you agree that
 21 by definition, somebody who has gone on to
 22 another job runs the risk of not being
 23 current?
 24 MR. RUTHERFORD:
 25 A. Yeah, but if they've gone on to a job that
 26 doesn't involve the same aspects, yeah.

Page 58

1 EARLE, Q.C.:
 2 Q. Now another question, and this might seem a
 3 rather simple question, and I think there are
 4 a number of people in this room who know the
 5 answer to this question, but I think we need
 6 it on the record. Would one of you explain
 7 for us the protocol, if you will, for exiting
 8 a helicopter that has downed, is in the water,
 9 because my impression was that Mr. Decker
 10 described a specific regime, a specific way of
 11 doing it, so could one of you explain, and if
 12 I'm wrong and there's not a recommended way of
 13 doing it, tell us, but if there is, could one
 14 of you -- I guess, it would probably be Mr.
 15 Harvey or Mr. Dohey, could explain to us what
 16 the technique is?
 17 MR. HARVEY:
 18 A. Well, in the training, we deal -- we break
 19 things down into steps. So the first step
 20 once -- well, the first step would be to
 21 recognize there's a problem. Once you
 22 recognize the problem, whether that's you,
 23 yourself, you recognize there's something
 24 wrong with that helicopter or the pilots come
 25 on and notify you, the first step is to get
 26 watertight. How you get watertight will

Page 59

1 obviously depend on the type of suit you're
 2 wearing. Right now, everyone is wearing the
 3 Helly Hansen suit here, so that would be the
 4 hood up, the zipper up. If you have time, you
 5 would put the dive mask on to complete getting
 6 watertight. The next priority would be to
 7 brace for impact. The pilots might notify you
 8 of that, or you might have to figure it out
 9 for yourself. Depending on where you're
 10 sitting will depend on the type of brace
 11 position you get into. If you're in a forward
 12 facing seat, the brace position would be with
 13 your arms crossed across your chest like this.
 14 If you're in one of the rear facing seats, the
 15 brace position is slightly different. On
 16 impact, we instruct the students, their
 17 priority would be to clear their exit. That
 18 would depend on the type of exit. Right now,
 19 there's three different exits on the S-92.
 20 There's the knock out windows, there's three
 21 emergency exits, and there's the door. We
 22 don't necessarily go into detail -- we'll go
 23 through each one in class, but we won't go
 24 through the details. That would be the
 25 responsibility of the passenger when they got
 26 on the helicopter to determine where they're

Page 60

1 sitting, what exit they're sitting by, and
 2 whether it's referencing the safety cart in
 3 the helicopter itself and reviewing that to
 4 determine how that particular exit works, then
 5 that would be the process. Depending on what
 6 happens to the helicopter, if it stays
 7 upright, then there would be an orderly
 8 evacuation hopefully out into one of the
 9 rafts. If it turns - if the helicopter
 10 capsizes, then obviously the procedure would
 11 be a bit different. It would be about
 12 orienting, looking, holding something solid in
 13 the direction they have to go. Depending on
 14 where they're sitting -- so, for example, if
 15 they're by the window, they could be holding
 16 or referencing the window; if they're not by
 17 the window, they're in an aisle seat, then
 18 they would hold their reference something
 19 solid in the direction they want to go. That
 20 might be auxiliary fuel tank, that might be
 21 the seat next to them. So there's a number of
 22 variations there, and at some point the
 23 passenger will have to review that themselves
 24 with regard how things are going to work for
 25 where they're sitting, and the operation of
 26 the piece of equipment that's beside them.

Page 61	Page 63
<p>1 EARLE, Q.C.:</p> <p>2 Q. So would I be correct in saying, Mr. Harvey,</p> <p>3 that if someone finds themselves in a</p> <p>4 submerged or semi-submerged helicopter and</p> <p>5 they're sitting by a window, the process,</p> <p>6 having gone through those earlier stages that</p> <p>7 you described, the process is push the window</p> <p>8 out; if possible, desirably hold the frame of</p> <p>9 the window, then release your seat belt?</p> <p>10 MR. HARVEY:</p> <p>11 A. That's correct, yes.</p> <p>12 EARLE, Q.C.:</p> <p>13 Q. Now, well, Mr. Commissioner, I think the next</p> <p>14 question I'm going to ask is going to take a</p> <p>15 few seconds to answer, and I see we're at --</p> <p>16 COMMISSIONER:</p> <p>17 Q. Oh, yes, all right. Okay, we'll take the</p> <p>18 break now, fifteen minutes.</p> <p>19 (RECESS)</p> <p>20 EARLE, Q.C.:</p> <p>21 Q. Thank you. Probably again for Mr. Harvey, the</p> <p>22 four point harness, would that give you a</p> <p>23 better lateral restraint than the lap belt in</p> <p>24 terms of side to side movement?</p> <p>25 MR. HARVEY:</p> <p>26 A. Yes.</p>	<p>1 EARLE, Q.C.:</p> <p>2 Q. Couple years ago.</p> <p>3 MR. HARVEY:</p> <p>4 A. I'm trying to envision a trip I had to the</p> <p>5 heliport where I first saw it.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. So it was installed at that time?</p> <p>8 MR. HARVEY:</p> <p>9 A. Yes.</p> <p>10 EARLE, Q.C.:</p> <p>11 Q. Did anybody ever ask you before this thing</p> <p>12 went in place, "what are your views", and I</p> <p>13 say you, personally, and I'd also care to hear</p> <p>14 from the rest of you in the sense of the "you"</p> <p>15 being the Offshore Safety and Survival Centre,</p> <p>16 whether this thing would present any</p> <p>17 impediment to exit from the helicopter?</p> <p>18 MR. RUTHERFORD:</p> <p>19 A. I can respond that certainly we were not</p> <p>20 consulted on this. As I mentioned before,</p> <p>21 there is no direct line of communications to</p> <p>22 changes to the helicopter to us. We find out</p> <p>23 about changes generally by our instructors</p> <p>24 taking a visit to the heliport and seeing what</p> <p>25 is happening and what has changed, but there's</p> <p>26 no direct line of communication.</p>
Page 62	Page 64
<p>1 EARLE, Q.C.:</p> <p>2 Q. So I want you to visualize an individual in</p> <p>3 the four point harness sitting in a seat</p> <p>4 inboard of this auxiliary fuel tank. How</p> <p>5 difficult is it going to be for them to get</p> <p>6 that window out, get their hand on the frame,</p> <p>7 release themselves from their seat belt and</p> <p>8 exit that helicopter?</p> <p>9 MR. HARVEY:</p> <p>10 A. Are we talking on the surface or inverted?</p> <p>11 EARLE, Q.C.:</p> <p>12 Q. Underwater.</p> <p>13 MR. HARVEY:</p> <p>14 A. Underwater. I think it would be very</p> <p>15 difficult, if not impossible.</p> <p>16 EARLE, Q.C.:</p> <p>17 Q. When did you gentlemen find out that this tank</p> <p>18 had been installed in the helicopter?</p> <p>19 MR. HARVEY:</p> <p>20 A. Me, personally, it probably would have been</p> <p>21 shortly -- I'd be guessing, I'd say a couple</p> <p>22 years.</p> <p>23 EARLE, Q.C.:</p> <p>24 Q. Couple weeks ago?</p> <p>25 MR. HARVEY:</p> <p>26 A. Couple years ago.</p>	<p>1 EARLE, Q.C.:</p> <p>2 Q. So you fellows find out about these changes in</p> <p>3 the helicopter after the fact?</p> <p>4 MR. RUTHERFORD:</p> <p>5 A. Yes.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. When the offshore platform went in place, the</p> <p>8 first one, the Hibernia Platform, I believe</p> <p>9 the aircraft that was being used at that point</p> <p>10 in time was the Super Puma. At some point in</p> <p>11 time there was a change to the Sikorsky. Was</p> <p>12 there any process that said, okay, we're</p> <p>13 switching to the Sikorsky now, you know, what</p> <p>14 is the impact of this change in unit for the</p> <p>15 HUET at your Centre? Is there any process of</p> <p>16 exchange of information, evaluation of</p> <p>17 consequences, anything of that nature?</p> <p>18 MR. RUTHERFORD:</p> <p>19 A. No, there was nothing formal. As I said,</p> <p>20 there's no formal process in place. We become</p> <p>21 aware -- we're aware of the change and we were</p> <p>22 asked by operators, offshore operators, to</p> <p>23 include the changes into our classroom, into</p> <p>24 your presentations, that the change had taken</p> <p>25 place, but this would be a letter from an</p> <p>26 operator. It didn't -- I can't remember that</p>

Page 65

1 coming from the Training Qualifications
 2 Committee because I don't think -- that
 3 happened before we were part of that
 4 committee, but basically when the change took
 5 place, we would be advised of the change and
 6 to incorporate into our -- into our training.
 7 EARLE, Q.C.:
 8 Q. So you'd change your pictures, point out the
 9 differences, things of that nature, again
 10 after the fact consultation?
 11 MR. RUTHERFORD:
 12 A. Yes.
 13 EARLE, Q.C.:
 14 Q. I'm speaking of after the fact consultation.
 15 Did I hear you correctly in saying that the
 16 first time anyone came and spoke to you about
 17 the helicopter transportation suit, the 452,
 18 was in 2008, after the decision to use it had
 19 been made?
 20 MR. RUTHERFORD:
 21 A. That is what I said, and I believe that to be
 22 true. I don't know if Greg can comment on
 23 that.
 24 MR. HARVEY:
 25 A. Yes, that is correct.
 26 EARLE, Q.C.:

Page 66

1 Q. Mr. Rutherford, I certainly heard you say in
 2 your evidence that you felt you had a fair bit
 3 that you could say, again I use "you" in the
 4 collective sense, a fair bit that you could
 5 say about this suit which you thought might be
 6 helpful. If you could answer orally, because
 7 the transcript is never going to get a nod.
 8 MR. RUTHERFORD:
 9 A. Yes, indeed, yes.
 10 EARLE, Q.C.:
 11 Q. Now you talked about fidelity issues, and my
 12 friend, Ms. Fagan, asked you a fair number of
 13 questions about that, so I won't spend a lot
 14 of time, but it seems to me that in any area
 15 of fidelity there is the issue of window size,
 16 and that window size, although everybody
 17 seemed to be thinking about it, and were
 18 thinking about escape, that window size issue
 19 seems to me to ring the bell in two ways. One
 20 is getting somebody out of it, and I must say
 21 I looked at those pictures and I said, thanks
 22 be to God that it's not Randell Earle that's
 23 trying to get out through that window with my
 24 shoulders, but there's also the issue of the
 25 weight of water ingress in a submerged
 26 helicopter, right. I see you nodding. So

Page 67

1 that's a fidelity issue for you, right, and
 2 you have already touched on the window height
 3 as being an issue, and the belting system, and
 4 we don't have the same seat belts in the HUET
 5 that we have in the helicopter that the
 6 overwhelming majority of your students will be
 7 riding in, correct?
 8 MR. RUTHERFORD:
 9 A. Yeah.
 10 EARLE, Q.C.:
 11 Q. And there are issues, I suggest to you, in
 12 terms of fidelity of the position vis a vis
 13 the window, the position of the seat. The
 14 tank discussion we just had, but also the two
 15 seats side by side. As I understand what
 16 you've been telling us, that in terms of the
 17 HUET, the seat is next to the window, correct?
 18 MR. RUTHERFORD:
 19 A. Yes, sir.
 20 EARLE, Q.C.:
 21 Q. And when we have issues of the number of
 22 people in the trainer as compared to what one
 23 might expect in an actual helicopter, is that
 24 correct?
 25 MR. RUTHERFORD:
 26 A. Yes, sir.

Page 68

1 EARLE, Q.C.:
 2 Q. Now what about the force required to get that
 3 window out, is that a variable, other than the
 4 variable it seems to me that would come with
 5 the size of the window? If you've got a
 6 window that's submerged and you're trying to
 7 get it out, the forces might be different at
 8 different points on different sizes of
 9 windows. Mr. Rutherford, you're the engineer,
 10 and I've got high school physics, maybe I'm
 11 wrong, but is that -- is there a variation in
 12 force that's involved there?
 13 MR. RUTHERFORD:
 14 A. There will be, but it's an extremely difficult
 15 thing to quantify because that variation in
 16 force is going to depend on the depth of
 17 water, how much water has come inside the
 18 helicopter, outside the helicopter, and a
 19 whole range of -- so I think whilst I can say,
 20 yes, there may be a variation in force, how we
 21 would quantify that would take a significant
 22 amount of research, I would suspect. What we
 23 try to do in training is have a window that's
 24 reasonably hard to remove, so again it's --
 25 there is a force required to remove the window
 26 and that's fundamentally what we can train

Page 69

1 against, but I think if you wanted to really
 2 look at -- I don't know if Sikorsky has done
 3 any research on their particular windows at
 4 particular depths of water, and what the
 5 actual force is. I haven't seen anything, but
 6 that may be something we should be looking at.
 7 EARLE, Q.C.:
 8 Q. And I take it that there's probably a
 9 specification set by the aviation people that
 10 in a certain specified -- there is a maximum
 11 force that need be applied to get a window
 12 out. Let me phrase it another way. So that
 13 if the required force in these circumstances
 14 were 60 pounds and you had a limit of 40
 15 pounds, which I understand is actually what
 16 people are told they need is 40 pounds, then a
 17 window that required 60 pounds to take it out
 18 wouldn't be acceptable. You have that kind of
 19 regulated standard, right?
 20 MR. RUTHERFORD:
 21 A. Yeah.
 22 EARLE, Q.C.:
 23 Q. Are there variations, though -- because this
 24 is a minimum standard, are there variations
 25 between helicopters?
 26 MR. RUTHERFORD:

Page 70

1 A. There is -- I mean, there's wide variations
 2 between helicopters, wide variations between
 3 helicopters and the type of exit. Some
 4 require you to push out, some exits require
 5 handles to be turned, some -- I think we go
 6 through in the presentation the types of
 7 different exits that are available. So there
 8 is very much a wide variation. I know that
 9 Pat maybe can talk to --
 10 MR. DOHEY:
 11 A. In the case of the Super Puma that was used
 12 here before, you would have to remove a tab
 13 first and then push out the -- I guess, it's
 14 per specs glass type window, it's a very light
 15 -- it's a lighter material, would take
 16 considerably less effort perhaps to push out
 17 that window. So from helicopter to helicopter
 18 it is different.
 19 EARLE, Q.C.:
 20 Q. So it was a two stage operation to remove the
 21 window?
 22 MR. DOHEY:
 23 A. I take out the seal.
 24 EARLE, Q.C.:
 25 Q. In your HUET, is it a single stage operation,
 26 just push the window out?

Page 71

1 MR. DOHEY:
 2 A. I'd best refer to Greg. I don't train in
 3 survival.
 4 MR. HARVEY:
 5 A. When we were doing the Super Puma, when the
 6 Super Puma was flying here, it was a two stage
 7 operation. We had beading set in around the
 8 window, so the students would have to remove
 9 the beading and then knock the window out.
 10 The S-92 doesn't have the beading, so we don't
 11 use it any more.
 12 EARLE, Q.C.:
 13 Q. So you modified the HUET?
 14 MR. HARVEY:
 15 A. Yeah.
 16 EARLE, Q.C.:
 17 Q. Okay, the other set of things that touch on
 18 fidelity, it seems to me, are the
 19 environmental ones, as you put it. I mean,
 20 that's everything from wind, rain, sea state,
 21 temperature. Are there any others?
 22 MR. HARVEY:
 23 A. Light and dark, I suppose.
 24 MR. RUTHERFORD:
 25 A. Yes.
 26 EARLE, Q.C.:

Page 72

1 Q. In terms of fidelity, I mean, you do this in a
 2 pool, but do we have any idea of how far off
 3 the mark the pool condition is? I mean, do
 4 you people have data on the model sea state,
 5 for instance, for offshore Newfoundland?
 6 MR. RUTHERFORD:
 7 A. We have information on the sea state, but I
 8 think in terms of our training, again I come
 9 back to the fact we have a limited time to
 10 provide training. What we are focusing on is
 11 providing people with basic, very basic
 12 knowledge and skills, and if we were to
 13 provide training to make use of anything else
 14 in terms of additional fidelity, we would have
 15 to be training for a significantly longer
 16 period of time for everybody coming through,
 17 and we would have to very much look very, very
 18 carefully at the risks that we expose people
 19 to. To there is a limit to what can be done
 20 in training, and I reference you back again to
 21 what is going on in the UK. It's only
 22 recently that OPITO has actually allowed
 23 windows to actually be used in helicopters
 24 because of the issues relating to, you know,
 25 training personnel offshore is a very
 26 stressful process. The HUET is quite

Page 73

1 stressful for many people and we have issues
 2 that -- so, you know, we go as far as we
 3 possibly can within the time scales allowed,
 4 but I think we have to recognize there's
 5 limitations, and those limitations are quite
 6 significant.

7 EARLE, Q.C.:

8 Q. Yes, I understand that, absolutely, but, I
 9 mean, again it's layman's observation, but I
 10 look at one of these helicopters, and as I
 11 believe Mr. Harvey said, they are top heavy,
 12 they have the engines on top, they have these
 13 great big rotors, and they may be suspended by
 14 a deployed flotation system, but it would seem
 15 to me that it would be important in terms of
 16 the training that you have and the emphasis
 17 where you -- to have some understanding of the
 18 forces and the likelihood of the capsizing of
 19 a helicopter, even if it has made a controlled
 20 descent.

21 MR. RUTHERFORD:

22 A. That is provided in the training, the
 23 likelihood of capsizing is part of our
 24 presentation. I think, as Greg mentioned
 25 there yesterday, there's the likelihood of
 26 capsizing on impact or shortly after impact is

Page 74

1 60 percent as it stands at the moment, that's
 2 the current knowledge, which means 40 percent
 3 of the time it won't capsize, but there is a
 4 likelihood. That's why we provide the
 5 training, but the issue is how far do we take
 6 the training when this happens. We're always
 7 looking to push the envelope as far as we can,
 8 but again taking into account managing risk
 9 and managing other aspects.

10 EARLE, Q.C.:

11 Q. A fair statement, but, of course, those
 12 figures are not east coast Canada figures, are
 13 they?

14 MR. RUTHERFORD:

15 A. No, they're not, but I don't think we've got
 16 enough data on east coast Canada. I mean, one
 17 of the challenges you have with this type of
 18 data is, fortunately, I mean, helicopter
 19 incidents and accidents are relatively rare.
 20 That means you don't have a whole lot of data
 21 on which to base any -- all types of
 22 helicopter are different, every incident is
 23 different, so you really don't have very, very
 24 sound data on which to build an case. You can
 25 only do what you can in terms of trying to
 26 provide the best solution on that basis.

Page 75

1 EARLE, Q.C.:

2 Q. Well, Mr. Rutherford, I get a feeling that
 3 with data on sea state, and the dynamics of
 4 the helicopter in terms of weight and center
 5 of gravity and all those things, your friends
 6 who have the pool with no chlorine in it, the
 7 NRC, could give you a pretty good estimation
 8 of the likelihood of capsizing in our
 9 conditions, don't you think?

10 MR. RUTHERFORD:

11 A. Well, perhaps they could if a controlled study
 12 was undertaken of the particular helicopter
 13 and those particular sea states. I think what
 14 we can do, as a training provider, is indicate
 15 that in the event that you do have a
 16 controlled landing on the water, that still
 17 may be an unsurvivable incident or it may
 18 still have issues relating to capsize because
 19 of the sea conditions in which you're landing.
 20 So, yes, I can answer they may well be able
 21 to, but that would be a study that would have
 22 to be undertaken under controlled conditions.
 23 It's not something we can do.

24 EARLE, Q.C.:

25 Q. Because this brings me to where I'm going on
 26 this thing. No doubt you've been sitting

Page 76

1 there wondering what the heck is he up to,
 2 asking us all these questions, but, you know,
 3 I'm aware, for instance, of some of the other
 4 technology that the Marine Institute has, and
 5 it's purely wonderful, for instance, your
 6 bridge simulator and the ability to input all
 7 the variables by means of a computer program,
 8 and I look at your HUET and I say to myself
 9 this is a fairly crude simulation, and the
 10 question I have for you, and I think the
 11 important question in terms of the kinds of
 12 considerations that this Inquiry has got to
 13 look at, is what is the process by which you
 14 evaluate the significance of these fidelity
 15 issues? Is it a judgment thing, is there a
 16 committee, is there an overall set of
 17 parameters, is there indeed a computer program
 18 somewhere? That's the question, what is the
 19 process by which you weigh the significance of
 20 these fidelity issues?

21 MR. RUTHERFORD:

22 A. What we -- in terms of a training provider in
 23 our particular situation, we will weigh issues
 24 relating to training with the purely
 25 judgmental opinions of instructors and what
 26 we're able to do, but I think you need to go

Page 77	Page 79
<p>1 back to what I mentioned there yesterday, as a 2 training provider, we are a small unit of the 3 Marine Institute, we are a cost recovery unit, 4 we deliver training -- any facilities and 5 other types of development that take place 6 need to be externally funded in some way, and 7 we are looking -- we are aware that there are 8 some issues that need to be looked at in terms 9 of the helicopter underwater escape trainer, 10 and those are part of our funding that we're 11 looking at at the present time. Yeah, they're 12 all very, very good questions and open to 13 research. We haven't -- we haven't engaged 14 particularly in helicopter underwater escape 15 research primarily because we haven't got 16 involved in that area. We've only recently 17 got involved in research at all, and because 18 we only have the HUET we have and the pool we 19 have, which is in full use, it's not something 20 that we have actively engaged in. We've just 21 been involved in providing the training, but 22 certainly that was one of the intentions when 23 we were looking at upgrading our facility is 24 having two pools with two HUETs, and creating 25 a research unit that could look at those very 26 things.</p>	<p>1 the selection of the compressed air breathing 2 apparatus, there as some significant issues 3 which needed to be addressed, and I think that 4 selection was still up in the air, in fact, as 5 late as 2008 when there was a task force went 6 across to look at numbers of different 7 providers in the UK, Norway. So there was 8 still issues that needed to be addressed at 9 that time. 10 EARLE, Q.C.: 11 Q. Well, how long, Mr. Harvey, because I believe 12 you're a diver and, in fact, you were at one 13 point in time certified to train people as 14 scuba divers, how long have recreational scuba 15 divers, which you mentioned, been using a 16 bottle similar to the Aqua-Lung as an 17 emergency backup? 18 MR. HARVEY: 19 A. I can't give you an exact date, but certainly 20 for recreational divers, certainly in the 21 early mid 80s when it probably would have 22 started with the Spare Air System that I 23 mentioned in my presentation, and we started 24 seeing that made available on the market. 25 EARLE, Q.C.: 26 Q. And I take it those people, those recreational</p>
Page 78	Page 80
<p>1 EARLE, Q.C.: 2 Q. So I hear you saying that there is no formal 3 process of evaluating fidelity, that you're 4 doing what you can within a cost structure 5 that exists? 6 MR. RUTHERFORD: 7 A. I would say we do the best we can, yes. 8 EARLE, Q.C.: 9 Q. Now let's move to the HUEBA. Am I correct in 10 understanding that you say that you're advised 11 that the compressed air system had been 12 selected in late 2004? 13 MR. RUTHERFORD: 14 A. That is correct, yes. 15 EARLE, Q.C.: 16 Q. And you were here, Mr. Rutherford, for Mr. 17 Barnes evidence, correct? 18 MR. RUTHERFORD: 19 A. I was, yes. 20 EARLE, Q.C.: 21 Q. Were you surprised to hear that a conference 22 in Halifax for providers, it certainly 23 appeared on paper that the selection of a 24 system was still up in the air in 2006? 25 MR. RUTHERFORD: 26 A. Yes, but -- yes and no. I guess, because of</p>	<p>1 divers, albeit self-selecting, as Mr. 2 Rutherford said, they had to be trained? 3 MR. HARVEY: 4 A. Yes. 5 EARLE, Q.C.: 6 Q. And the evidence is that the P-STASS has been 7 used for ordinary passengers since 1993? 8 MR. HARVEY: 9 A. This would be military related passengers, I 10 believe. 11 EARLE, Q.C.: 12 Q. But we're not talking pilots now, we're 13 talking people being transported in military 14 helicopters, right? 15 MR. HARVEY: 16 A. Yes. 17 EARLE, Q.C.: 18 Q. And presumably they had to be trained? 19 MR. HARVEY: 20 A. Yes. 21 EARLE, Q.C.: 22 Q. Surely then the message is that the training 23 methodology for the use of these devices was 24 well known long before CAPP was told by the 25 Offshore Petroleum Board to look at these 26 things? That's the message, isn't it?</p>

Page 81	Page 83
<p>1 MR. RUTHERFORD: 2 A. That would be the message that training 3 methodologies were in place, but basically it 4 comes down to, I guess, the offshore operators 5 here needing to protect their own workforce 6 during training and I think the medical advice 7 that was being given at that time was that the 8 risks needed to be managed, and needed to be 9 managed very carefully. 10 EARLE, Q.C.: 11 Q. Yeah, but there's also the balancing of the 12 protection of the offshore worker -- 13 MR. RUTHERFORD: 14 A. There is, but -- 15 EARLE, Q.C.: 16 Q. Once they're in a helicopter. 17 MR. RUTHERFORD: 18 A. There is, but when we -- you got to consider, 19 I guess, from a training perspective, and you 20 take a worker and put him into a training 21 environment, people don't expect to come out 22 of a training environment with serious injury, 23 and I think what would happen if somebody did 24 come out of a training environment with 25 serious injury, what would happen would be the 26 training would basically be shut down. I</p>	<p>1 comfortable with moving ahead, and we did move 2 ahead with it once we had the approval to go. 3 EARLE, Q.C.: 4 Q. Mr. Rutherford, surely the issue is simply one 5 of medical screening, that there were some 6 people you would say it's too risky to train 7 you on this by actual practice, we'll tell you 8 how to use it because if you're underwater in 9 a helicopter, you're not going to asking 10 yourself, well, which risk do I think is 11 greater, an air embolism or drowning, you're 12 going to use the thing, and surely the thing 13 was simply to do as it was done with 14 recreational divers, to screen medically and 15 say these people, yeah, we've got medical 16 clearance on them, they can do the 17 demonstration training, these people over 18 here, they don't have medical clearance and 19 we'll just have to instruct them by example. 20 MR. RUTHERFORD: 21 A. That's not a decision, I think, that we can 22 make as a training provider. We can put our 23 own standards in place to prevent people 24 coming through training, but I think that that 25 would be another issue -- raises another issue 26 as to people going offshore; some people would</p>
<p>1 mean, that's the reality of it. So we're 2 talking balance here. We cannot put people in 3 way of serious harm during training. 4 EARLE, Q.C.: 5 Q. I think that's always a very important guiding 6 principle, but don't you think these other 7 users accepted that principle as well. 8 MR. RUTHERFORD: 9 A. I really -- I can't comment on that. All I 10 can comment on is that, you know, once all the 11 risks were managed and we received guidance to 12 go ahead, we were comfortable with moving 13 ahead with the pressurized system as long as 14 the various risk management, we kept issues 15 below one metre, and we were comfortable to 16 move ahead with it. However, there were still 17 concerns, and, I guess, the concerns were not 18 concerns necessarily raised by it. There was 19 a task force that still went to Europe to have 20 a look at various other training devices in 21 place, and that would have been concerns that 22 would have been raised by operators or by the 23 medical community. So I can't really answer 24 that question. All I can say from our 25 perspective, once we were able to put it in 26 place in a managed environment, we were</p>	<p>1 be trained, and other people would not be 2 trained. I think that that issue really has 3 to be decided by the offshore operators, so I 4 don't really want to respond to that. 5 EARLE, Q.C.: 6 Q. But, Mr. Rutherford, aren't you the proper 7 people to advise on this, aren't you the 8 survival training experts? 9 MR. RUTHERFORD: 10 A. We advise on certain aspects of it. We're not 11 medical -- we're not medical practitioners, 12 we're not the people who can advise on medical 13 risk. We can certainly on types of training 14 activity and training systems that are in 15 place, we can certainly advise on ways to 16 manage the risk related to training 17 activities, and we can certainly be part of 18 that process. Yes, I think that is true. 19 EARLE, Q.C.: 20 Q. Now you made the point, Mr. Rutherford, that 21 you felt under OPITO, it would have taken 22 longer to put the compressed air system in 23 place, that under the UK regime -- 24 MR. RUTHERFORD: 25 A. I don't think I made that point at all. What 26 I said in the UK regime, that they've adopted</p>

Page 85	Page 87
<p>1 a different type of system. What I said, I</p> <p>2 think, that they have not as yet adopted a</p> <p>3 pressurized air system, they have adopted a</p> <p>4 rebreather system, and fundamentally the</p> <p>5 reason for that is because of risk management.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. I'm glad you clarified that because I</p> <p>8 certainly heard you differently. So, I mean,</p> <p>9 that has been the way the risks have been</p> <p>10 managed in the UK, isn't it, they opted by the</p> <p>11 hybrid rebreather and they managed to have it</p> <p>12 in place?</p> <p>13 MR. RUTHERFORD:</p> <p>14 A. They did, yes.</p> <p>15 EARLE, Q.C.:</p> <p>16 Q. Prior to 2005, correct?</p> <p>17 MR. RUTHERFORD:</p> <p>18 A. They did, yes.</p> <p>19 EARLE, Q.C.:</p> <p>20 Q. Now, on the process of getting ready to</p> <p>21 provide this training, when did you start</p> <p>22 developing training?</p> <p>23 MR. RUTHERFORD:</p> <p>24 A. I mean, we were developing the basic early</p> <p>25 stages of training very early on, I guess, but</p> <p>26 we didn't develop the specific courses until</p>	<p>1 they were stepping back from the process to</p> <p>2 re-evaluate again, and there was a task force</p> <p>3 that was sent to the Europe to re-evaluate all</p> <p>4 the systems, so that basically we were on hold</p> <p>5 as of that time, yes.</p> <p>6 EARLE, Q.C.:</p> <p>7 Q. That was 2008?</p> <p>8 MR. RUTHERFORD:</p> <p>9 A. Yeah.</p> <p>10 EARLE, Q.C.:</p> <p>11 Q. We heard that there was another pull back from</p> <p>12 CAPP from 2004 to 2005. Were you aware of</p> <p>13 that?</p> <p>14 MR. RUTHERFORD:</p> <p>15 A. We were aware that it pulled back from CAPP</p> <p>16 and it went back to the operators, I guess, to</p> <p>17 reconsider. They were looking at it at that</p> <p>18 time and it was 2005 that the task force --</p> <p>19 they decided the end of 2004, we heard that</p> <p>20 they were definitely going to go with the</p> <p>21 pressurized breathing system, and early 2005</p> <p>22 there was a task force that was set up, yes.</p> <p>23 EARLE, Q.C.:</p> <p>24 Q. How long -- if you had had a go ahead, how</p> <p>25 long would it have taken you to develop your</p> <p>26 training?</p>
<p>1 such time as we knew which system was going to</p> <p>2 be selected, because a specific course --</p> <p>3 EARLE, Q.C.:</p> <p>4 Q. So when did you start developing -- when did</p> <p>5 you say, okay, we need a course outline with</p> <p>6 course objectives, outcomes, all the sort of</p> <p>7 stuff you've got in your documentation, when</p> <p>8 did you say we've got to start doing that?</p> <p>9 MR. RUTHERFORD:</p> <p>10 A. We were developing our training courses</p> <p>11 through 2005, 2006, and 2007, but we couldn't</p> <p>12 finalize them until such time as we had the</p> <p>13 approval from CAPP that this was the system</p> <p>14 they were going to go with. We had the</p> <p>15 background information, background</p> <p>16 documentation, but we didn't have what was our</p> <p>17 approved course outline until such time as we</p> <p>18 received that notification, or that was not</p> <p>19 approved. We had it developed. We were</p> <p>20 developed in 2007.</p> <p>21 EARLE, Q.C.:</p> <p>22 Q. So you were waiting on CAPP essentially?</p> <p>23 MR. RUTHERFORD:</p> <p>24 A. We were waiting -- what caused the delay was</p> <p>25 the decision to step back late in 2008 when</p> <p>26 they decided to -- we received a letter that</p>	<p>1 MR. RUTHERFORD:</p> <p>2 A. Go ahead, as of when, as of 2005?</p> <p>3 EARLE, Q.C.:</p> <p>4 Q. 2005?</p> <p>5 MR. RUTHERFORD:</p> <p>6 A. It would have been 2007. We had to get</p> <p>7 equipment acquisition, we had to do design of</p> <p>8 the change of the pool, which took place. We</p> <p>9 had to -- so it would have been -- we were</p> <p>10 basically ready with all the equipment and</p> <p>11 everything in place by the end of 2007.</p> <p>12 EARLE, Q.C.:</p> <p>13 Q. Yes, but you didn't have the same urgency</p> <p>14 because you didn't have the final approval</p> <p>15 from CAPP, though. I'm asking you if you had</p> <p>16 an approval in 2005, and I want to break this</p> <p>17 out, how long would it have taken you to</p> <p>18 develop your training plan?</p> <p>19 MR. RUTHERFORD:</p> <p>20 A. The training plan would have been six months,</p> <p>21 but I think it would have taken, in terms of</p> <p>22 the equipment and equipment acquisitions, and</p> <p>23 the various training of our technical and</p> <p>24 technical support, we would have been -- it</p> <p>25 would have probably been a year at best to put</p> <p>26 everything in place.</p>

Page 89

1 EARLE, Q.C.:

2 Q. A year.

3 MR. RUTHERFORD:

4 A. Assuming we had everything, the approval was

5 there, and assuming we had all the necessary

6 funding, et cetera, et cetera, et cetera.

7 EARLE, Q.C.:

8 Q. Assuming somebody had said to you, we're going

9 to do this, we want this done, an absolute,

10 you know, destroy every other priority in your

11 organization basis, but on the basis of a

12 decision has been made, we want this

13 implemented as quickly as reasonably possible,

14 you would say a year?

15 MR. RUTHERFORD:

16 A. It would take a year, yes.

17 EARLE, Q.C.:

18 Q. And I take it things like the seat, I mean,

19 that was something you had fabricated in your

20 own technical services support organization,

21 right?

22 MR. RUTHERFORD:

23 A. Yes.

24 EARLE, Q.C.:

25 Q. And the shallow end, I mean, it's really a

26 platform that's fabricated, dropped into the

Page 90

1 pool, is that --

2 MR. RUTHERFORD:

3 A. Yes.

4 EARLE, Q.C.:

5 Q. Not particularly fancy.

6 MR. RUTHERFORD:

7 A. No, but it has to be designed, engineered, and

8 constructed.

9 EARLE, Q.C.:

10 Q. Now why was it that in the process of this,

11 you end up going to PRAC looking for money?

12 MR. RUTHERFORD:

13 A. We did get an indication early on in the

14 process that we were going to receive some

15 funding from the operators. There was -- we

16 received an indication that they were going to

17 buy the units, but then it came back, I guess,

18 we got advised that it was going to have to

19 come out of training revenues. For us, that's

20 a little bit of a challenge. We did go to our

21 executive and said this is what it's going to

22 cost, this is what we have to do, and to move

23 forward, but I indicated to our executive I

24 would try and find other sources of revenue to

25 try and pay for it. So we went to PRAC and

26 tried to defray the cost. That's what

Page 91

1 basically we do as a public organization, we

2 try and find ways to fund everything we do,

3 and basically we always have to go out and

4 find ways to do it.

5 EARLE, Q.C.:

6 Q. With respect, Mr. Rutherford, you've trained

7 1300 people, you had a cost of about

8 \$270,000.00, and you're going to train a lot

9 more people yet to come, but they will all be

10 people who will be working for these oil

11 companies. Why they not simply say we've got

12 to recover the cost, Mr. Barnes, tell your

13 members this is what the training is going to

14 cost per unit?

15 MR. RUTHERFORD:

16 A. Well, that was discussed earlier on and I

17 think it was the -- my understanding, but

18 you're better off to ask the oil companies

19 this, I mean, their concern was that they'll

20 be creating a non-competitive environment by

21 providing funding to one training operator or

22 another training operator, but that's

23 something better answered by the oil

24 companies. I can't -- we were asked to put

25 training in place, we put training in place as

26 best we could.

Page 92

1 EARLE, Q.C.:

2 Q. You talked about accreditation, and you talked

3 about your Centre being accredited by CAPP.

4 Now I presume because you're associated with

5 the academic world that you're familiar with

6 the accreditation of programs in the

7 university?

8 MR. RUTHERFORD:

9 A. Very much so, yes.

10 EARLE, Q.C.:

11 Q. Now isn't it fair to say that when a program

12 at the university is accredited, you have an

13 accreditation team made up of experts from

14 equivalent types of organizations who come in

15 and they evaluate and checklist and benchmark

16 and all these things, your program?

17 MR. RUTHERFORD:

18 A. That is true, yeah.

19 EARLE, Q.C.:

20 Q. And if we have an accreditation of a hospital

21 in the health care system, what we have

22 happened is a bunch of health care

23 professionals from other hospitals in other

24 locations, people who are disinterested, well

25 recognized for their standing and expertise,

26 they will come in and they will look at the

Page 93	Page 95
<p>1 hospital, whether it is one of the hospitals 2 of Eastern Health or any hospital, and they 3 will evaluate it against a set of criterion 4 and issue or deny accreditation. 5 MR. RUTHERFORD: 6 A. That is true. 7 EARLE, Q.C.: 8 Q. When you're dealing with CAPP, you're not 9 dealing with that kind of accreditation, are 10 you? 11 MR. RUTHERFORD: 12 A. No, it hasn't been in place under the CAPP 13 Training Qualifications Committee. Basically, 14 what they did when they established it was 15 approve training providers to do certain 16 courses and that was really -- I think, 17 initially when we were set up under the -- 18 it's a reasonably new industry, I guess, the 19 offshore petroleum industry here, although 20 it's starting to get a lot older now, but when 21 they were first set up, we were the training 22 providers, and the Offshore Petroleum Board 23 came through and approved us as providers, but 24 there hasn't really -- I guess, CAPP's first 25 attempt would be the review they did of the 26 BST and the BST-R to actually review the</p>	<p>1 we'll recommend a course is extended and 2 sometimes we recommend that it's shortened, 3 yes. We did recommend that, yes. 4 EARLE, Q.C.: 5 Q. Now I understand that the length of the course 6 in the UK is four days. 7 MR. DOHEY: 8 A. Two days. 9 EARLE, Q.C.: 10 Q. Two days? 11 MR. DOHEY: 12 A. Yes. 13 EARLE, Q.C.: 14 Q. And what about off the coast of Africa? 15 MR. DOHEY: 16 A. Off the coast of Africa -- it depends on who 17 the operator is. 18 EARLE, Q.C.: 19 Q. Okay. So did you actually make the change 20 request or was this a request formally that 21 came from the committee? 22 MR. RUTHERFORD: 23 A. We made the change request and it was 24 submitted to the committee for their December, 25 2008, meeting. 26 EARLE, Q.C.:</p>
<p>1 courses and to do some form of accreditation, 2 but it's not -- what it was, just basically a 3 review of the course. 4 EARLE, Q.C.: 5 Q. It's essentially the customer coming in and 6 saying this product is acceptable to us? 7 MR. RUTHERFORD: 8 A. Absolutely, yeah. 9 EARLE, Q.C.: 10 Q. Now Ms. Fagan asked you about the helicopter 11 landing officer training, and it's good to see 12 that the Inquiry Counsel are finally talking 13 to the same people I'm talking to. In respect 14 of the helicopter landing officer, as I 15 understand it, the course was shorten from two 16 days to one day? 17 MR. RUTHERFORD: 18 A. I believe it's 14 hours to 8 hours. 19 MR. DOHEY: 20 A. Yes, that's correct. 21 EARLE, Q.C.: 22 Q. Which is, for all intents and purposes, two 23 days to one, and that was initiated by Marine 24 Institute? 25 MR. RUTHERFORD: 26 A. It was. We review our courses and sometimes</p>	<p>1 Q. And in terms of this going back to the 2 Occupational Health and Safety Committees, you 3 just take the "say so" that that's been done, 4 do you? 5 MR. RUTHERFORD: 6 A. Yeah, we do. That's the process we have, is 7 to take it from the Training Qualifications 8 Committee and to get their approval before we 9 move ahead. That's the system we currently 10 have at the moment, yes. 11 EARLE, Q.C.: 12 Q. And it's your understanding, is it, that any 13 change under the -- I think it's a Standards 14 and Qualifications Committee, actually. 15 MR. RUTHERFORD: 16 A. Uh-hm. 17 EARLE, Q.C.: 18 Q. That that also has to be approved by C-NLOPB? 19 MR. RUTHERFORD: 20 A. Changes are ratified by the C-NLOPB. The C- 21 NLOPB sits as part of that committee, yes. 22 EARLE, Q.C.: 23 Q. Yes, and you're on that committee by 24 invitation? 25 MR. RUTHERFORD: 26 A. That is true. We're not formally recognized</p>

Page 97

1 within the Terms of Reference of the
2 committee, no.
3 EARLE, Q.C.:
4 Q. Can you see any difficulty in the body that is
5 requesting the change and the body that
6 probably has the large bulk of the expertise,
7 albeit being by invitation, being on the
8 approval committee?
9 MR. RUTHERFORD:
10 A. Not at all. I think any of the committee
11 members or anybody can request a change. I
12 mean, obviously, if you're going to request a
13 change, it's something that you want, but it
14 has to go to -- you know, the committee
15 operates by a consensus, and so unless the
16 rest of the committee members were to agree to
17 it, then that change would not be implemented.
18 So I think any of the members -- many changes
19 take place in terms of training requirements
20 brought to by various members and they're
21 sitting on the committee, but the idea of the
22 committee is there's consensus reached on
23 whether that is an appropriate change or not.
24 EARLE, Q.C.:
25 Q. If there was an issue came up -- Ms. Fagan
26 brought -- yes, the ice landing training, and

Page 98

1 your response was that no request for training
2 had come to the Offshore Safety Survival
3 Centre, you just hadn't heard that request, is
4 that correct?
5 MR. RUTHERFORD:
6 A. Oh, the -- okay, I thought you meant Icelandic
7 training. I was trying to --
8 EARLE, Q.C.:
9 Q. Icelandic?
10 MR. RUTHERFORD:
11 A. No, we haven't done that. We haven't received
12 any request. Hasn't come to me for any
13 request for training in ice landing, but, you
14 know, it's something that we are certainly
15 aware just because we're aware of the
16 conditions, that it's something that should be
17 looked at.
18 EARLE, Q.C.:
19 Q. And you then went on to say that you would
20 expect such a request to come to you through
21 the operators. You wouldn't hear that through
22 the workers or through the Occupational Health
23 and Safety committees, correct?
24 MR. RUTHERFORD:
25 A. Again, such a request of any change or change
26 requirement to a course would come to us

Page 99

1 through CAPP and the Training Committee. So
2 that would be the formal way we would hear
3 about it.
4 EARLE, Q.C.:
5 Q. Given again that you're the people with the
6 large expertise, do you see any problem with
7 the rigidity in the way information is flowing
8 here? That, you know, a request such as that
9 or the idea that maybe that's a good idea has
10 to come from the operators. Helly Hansen
11 brings the suit in after it's been approved.
12 You find out about the tank in the helicopter
13 when it's in place, and so on and so forth.
14 Do you see any room for improvement in the way
15 information flows here about these crucial
16 issues of safety?
17 MR. RUTHERFORD:
18 A. I certainly think there is some room for
19 improvement and I think--I mean, one of the
20 things, I guess, to consider is the offshore
21 industry is growing. When it was first set
22 up, it probably worked quite well with only
23 one or two operators. That it was fairly--the
24 communication lines were fairly--were there in
25 place and it was not so much a problem. But I
26 think as the offshore grows and as more and

Page 100

1 more operators come in, then I think the
2 processes really need to be looked at and
3 tightened up to ensure that the right people
4 are being consulted on the right issues at the
5 right time, yes.
6 EARLE, Q.C.:
7 Q. What sort of involvement do you have with C-
8 NLOPB?
9 MR. RUTHERFORD:
10 A. Well, they do sit on the Training Committee,
11 so we do meet members of the C-NLOPB at
12 Training Committee meetings. Involvement with
13 them, we also will meet with them occasionally
14 to discuss issues like if we have a research
15 proposal to put in place that we want to
16 discuss with them, we'll meet with them on
17 that basis, and they have the right to come in
18 and to look at our training and our training
19 institute and see that we're meeting
20 regulatory requirements or their requirements.
21 So our involvement is--you know, we have an
22 involvement with them. It's not a direct
23 involvement. Our direct involvement relating
24 to training is generally through the CAPP
25 committee.
26 EARLE, Q.C.:

Page 101

1 Q. Um-hm. With respect to the 452 suit, why is
 2 it that the suit, which after all is supposed
 3 to serve people in the water, is not used in
 4 any of the sea days?
 5 MR. RUTHERFORD:
 6 A. Well, there's a couple of reasons for that. I
 7 mean, the helicopter passenger suit is used
 8 within the exercise with it--that we actually
 9 utilize it, in the helicopter passenger
 10 transportation exercise, which takes place in
 11 the pool is where we utilize that suit. When
 12 we undertake the sea exercises, we're
 13 basically looking at our evacuation, mass
 14 evacuation exercise, where we utilize the
 15 immersion suit. There's another aspect to it
 16 is that the cost of the Helly Hansen suit is
 17 significantly more to service than the other
 18 suit we have. So that's another
 19 consideration. We would have to increase the
 20 price to utilize it.
 21 The other thing is that the suit, I
 22 think, as it stood at the present time, the
 23 suit was quite uncomfortable. I think it's
 24 not as comfortable as the Fitzwright suit. We
 25 already have enough challenges in relation to
 26 our sea day exercise, making sure that people

Page 102

1 are reasonably comfortable and they're
 2 focusing on the training within the exercise.
 3 So we don't want to add additional stresses to
 4 that situation. So basically that's the
 5 situation we have is we utilize that suit and
 6 we've used it successfully and we manage the
 7 risks of our training utilizing a suit that we
 8 know well and works well. So number of
 9 reasons, but the primary one is that we do the
 10 helicopter passenger transportation exercise
 11 in the pool with the HUET and we utilize the
 12 suit that's associated with that exercise.
 13 EARLE, Q.C.:
 14 Q. Now, we know the suit is tested, as it is
 15 designed, in a salt water environment. Don't
 16 you think it would be a potential source of
 17 data and information about how these suits
 18 would perform over the long term if you were
 19 using them in your sea days?
 20 MR. RUTHERFORD:
 21 A. It may well be, but it wouldn't be--I think it
 22 would be probably--you'd set something like
 23 that up as a structured research project, just
 24 to ensure that we gather the information back.
 25 But you know, it may well be useful, but at
 26 the present time, our role is providing

Page 103

1 training, use of suits and how to use suits
 2 and I think when we change equipment and
 3 utilize different equipment, we have to look
 4 at all the impacts of that change and they are
 5 impacts not only in our managing possibly a
 6 risk, it also has an impact on cost of our
 7 training.
 8 EARLE, Q.C.:
 9 Q. With respect to the question Ms. Fagan asked
 10 about the deploying of the supply vessel when
 11 a helicopter is about to land and I think you
 12 brought--or clarified it somewhat to indicate
 13 that this supply vessel is also equipped with
 14 a fast rescue craft and there are issues of
 15 deploying that rescue craft. Is it then your
 16 understanding that there are conditions of sea
 17 state where a helicopter would be flying, but
 18 it would not be safe to deploy the fast rescue
 19 craft?
 20 MR. RUTHERFORD:
 21 A. It would be unsafe to deploy a fast rescue
 22 craft in certain sea states, yes.
 23 EARLE, Q.C.:
 24 Q. And that these are conditions in which
 25 helicopters -
 26 MR. RUTHERFORD:

Page 104

1 A. I couldn't answer whether helicopters are
 2 flying in those sea states, but I can answer
 3 you that in certain sea states, it's not safe
 4 to -
 5 EARLE, Q.C.:
 6 Q. And finally, I wanted to ask you about the set
 7 up that we have here versus OPTI (sic). I
 8 thought I heard you said that--and believe me,
 9 some of us down in the back did have trouble
 10 picking you out yesterday, so I'm not being
 11 cagey. That OPTI (sic) is funded by a
 12 sinvention? Was that the word you used?
 13 MR. RUTHERFORD:
 14 A. Are you referring to OPITO, the Offshore
 15 Petroleum Training Organization?
 16 EARLE, Q.C.:
 17 Q. Yes.
 18 MR. RUTHERFORD:
 19 A. Yeah, OPITO, they're funded through training
 20 revenues. Basically, it's a non-profit
 21 organization and they're funded--when they
 22 approve or accredit a training organization
 23 for delivery of a particular course, you pay
 24 an accreditation fee to them. You pay an
 25 annual accreditation fee to them based on the
 26 number of courses you're actually delivering.

Page 105

1 So every time you deliver a course, there's a
 2 certain amount of money goes back to OPITO as
 3 the accreditation agency, yes.
 4 EARLE, Q.C.:
 5 Q. Okay, so this is--they basically are not in a
 6 commercial market. They're a designated
 7 provider and there's a form, a funding formula
 8 in place?
 9 MR. RUTHERFORD:
 10 A. There is indeed, yeah. They're not
 11 commercially--they're not a commercial
 12 provider. They're a non-profit. They're set
 13 up as a non-profit organization, which is an
 14 organization fundamentally, you know.
 15 EARLE, Q.C.:
 16 Q. Strictly speaking, you're a non-profit
 17 organization?
 18 MR. RUTHERFORD:
 19 A. Not only strictly speaking, we are.
 20 EARLE, Q.C.:
 21 Q. Yes, and no doubt you're often -
 22 MR. RUTHERFORD:
 23 A. And I hear about that many times.
 24 EARLE, Q.C.:
 25 Q. In absolute terms, you are always a not-for-
 26 profit, but when you use that phraseology that

Page 106

1 they're a non-profit organization, you are
 2 differentiating them from yourselves, aren't
 3 you?
 4 MR. RUTHERFORD:
 5 A. Oh yeah, it's basically set up, there's--
 6 within the United Kingdom, I guess your--as
 7 with here, you see, you set yourself up as you
 8 are a company or you're set up as an
 9 independent organization which can engage in
 10 contractual aspects of various other, but it
 11 is not--it's not set up to generate profit.
 12 It's set up under certain different
 13 guidelines.
 14 EARLE, Q.C.:
 15 Q. Yeah. Unlike--I guess I got the acronym
 16 wrong, but unlike the UK organization, you
 17 could literally be faced with Survival
 18 Systems, Holyrood, doing exactly what you're
 19 doing and telling the oil companies, "yes, and
 20 we will do it for ten percent less"?
 21 MR. RUTHERFORD:
 22 A. That's absolutely true, yes.
 23 EARLE, Q.C.:
 24 Q. And I notice that a tremendous amount of what
 25 you said you'd like to do is tied to seeking
 26 grants and project funding from the oil

Page 107

1 industry.
 2 MR. RUTHERFORD:
 3 A. From the oil industry and/or from government
 4 or other funding agencies, but as I noted, the
 5 way we're structured is that any capital
 6 investment or any major equipment acquisition,
 7 we have to look for funding in some way, yes.
 8 EARLE, Q.C.:
 9 Q. Yes, and you seem to look to the oil industry
 10 for most of the time, right?
 11 MR. RUTHERFORD:
 12 A. I don't think that's entirely true. We would
 13 like to look to the oil industry most of the
 14 time, I think, but when we did things like
 15 spinning out our facility in Stephenville to
 16 create additional capacity so we could serve
 17 the offshore oil industry, that funding came
 18 from government, and we often look to
 19 government and various other sources for
 20 funding.
 21 EARLE, Q.C.:
 22 Q. You have a group of courses that are designed
 23 to cater to the offshore industry and then you
 24 have some other courses that cater to the
 25 offshore industry and other industries. For
 26 instance, I understand that a student can get

Page 108

1 a tanker endorsement from your organization,
 2 and that's very valuable to an organization
 3 like CanShip, which is engaged directly in the
 4 offshore industry, but that same tanker
 5 endorsement is also valuable to Kent tanker
 6 lines, the Irving company, and that sort of
 7 stuff. But in those areas where you are
 8 essentially catering to the offshore industry,
 9 what percentage of your revenue comes from
 10 that industry?
 11 MR. RUTHERFORD:
 12 A. The percentage of revenue we take from the
 13 offshore petroleum industry, you're saying?
 14 EARLE, Q.C.:
 15 Q. What percentage of your revenue -
 16 MR. RUTHERFORD:
 17 A. Total?
 18 EARLE, Q.C.:
 19 Q. - related to those areas that are strictly to
 20 the offshore, like the BST, what percentage of
 21 your revenue -
 22 MR. RUTHERFORD:
 23 A. Well, the percentage of revenue for courses
 24 which are delivered to the offshore industry
 25 is 100 percent of the revenue comes from the
 26 offshore industry.

Page 109

Page 111

1 EARLE, Q.C.:

2 Q. So 100 percent?

3 MR. RUTHERFORD:

4 A. Yeah.

5 EARLE, Q.C.:

6 Q. So bottom line, you're sitting up here talking
7 in front of your customers.

8 MR. RUTHERFORD:

9 A. Absolutely, yes.

10 EARLE, Q.C.:

11 Q. Now you should not take this as a personal
12 insult, but don't you think a reasonable
13 person might be, you know, of a view that
14 you're, in your position, somewhat constrained
15 in your ability to be critical of the approach
16 that industry has taken to safety issues?

17 MR. RUTHERFORD:

18 A. It's possible. I don't constrain that easily,
19 but -

20 EARLE, Q.C.:

21 Q. As I said, it's -

22 MR. RUTHERFORD:

23 A. - but you know, they're our clients and
24 obviously we have to treat them with the
25 general respect that they--and they, from
26 where we sit, they're a good client and they

Page 110

1 do provide very, very--I mean, their approach
2 to training is, I think, very proactive,
3 generally speaking, compared to other industry
4 sectors. So, you know, that is a fair
5 comment, I think.

6 EARLE, Q.C.:

7 Q. And the UK system, and you've criticized it
8 because you feel that they're risk overt to a
9 point of fault. The UK system of funding
10 does, and reporting to government, that
11 doesn't eliminate that issue, does it?

12 MR. RUTHERFORD:

13 A. It does provide an additional independence of
14 the training provider from the industry. It
15 doesn't mean the training provider can't
16 deliver specific client request courses to
17 industry, but in terms of the general base
18 line training or the training standards, it is
19 maintained independent of the direct
20 involvement of the operator, yes.

21 EARLE, Q.C.:

22 Q. Thank you very much, Mr. Rutherford, Mr. Dohey
23 and Mr. Harvey.

24 MR. RUTHERFORD:

25 A. Thank you.

26 COMMISSIONER:

1 Q. Now the next on the list, Mr. Martin, would be
2 you as counsel for the families.

3 MR. ROBERT RUTHERFORD, MR. GREGORY HARVEY, MR. PATRICK

4 DOHEY - EXAMINATION BY MR. JAMIE MARTIN

5 MR. MARTIN:

6 Q. Thank you, Mr. Commissioner. Good afternoon,
7 gentlemen. As Commissioner Wells indicated, I
8 represent the families of several of the
9 deceased passengers of the March '09 Cougar
10 helicopter crash, and I guess fortunately
11 following Mr. Earle, he's covered some of the
12 areas that I was proposing to cover, and I
13 certainly won't duplicate in that area. So I
14 really have about four or five lines of
15 questioning and four or five topics that I
16 just want to get--seek clarification on or
17 seek an answer for the first time.

18 The first point that I want to raise with
19 you, and I want to just focus on the sea days
20 for a minute, and in particular the question
21 that Ms. Fagan asked you yesterday about Mr.
22 Decker's evidence about seeking exemptions.
23 His evidence, I believe, was that because of
24 the weather conditions at the time, he was--he
25 got an exemption from the formal sea day
26 component of the program. You clarified that

Page 112

1 and said it was deferral and that I think it
2 was 90 days he had to--or that person, whoever
3 is most affected, whoever is directly
4 affected, would have to try to do the course
5 again. Is that correct?

6 MR. RUTHERFORD:

7 A. That is correct, yes.

8 MR. MARTIN:

9 Q. Okay. Now is the--and you've indicated, I
10 believe, in your evidence yesterday that there
11 was approximately 20 training sessions per
12 year that get postponed because of weather.

13 MR. RUTHERFORD:

14 A. Yeah, there is from year to year, depending on
15 the weather conditions. As we know, offshore
16 Newfoundland can be quite variable, but we do
17 tend to--there's at least ten percent of our
18 exercises get cancelled or postponed and it
19 can be as high as 15 percent.

20 MR. MARTIN:

21 Q. So are you saying then that there's never an
22 exemption? There's always a deferral? What
23 I'm dealing with is if that person who had to
24 be deferred the first time also had to be
25 deferred the second or third time, do you at
26 any time ever grant an exemption from that

Page 113	Page 115
<p>1 particular piece?</p> <p>2 MR. RUTHERFORD:</p> <p>3 A. We're not permitted to grant exemptions. They</p> <p>4 have to come back and do their sea day</p> <p>5 training and we work very, very hard to get</p> <p>6 people back in again to ensure that they get</p> <p>7 their sea day.</p> <p>8 MR. MARTIN:</p> <p>9 Q. Okay.</p> <p>10 MR. RUTHERFORD:</p> <p>11 A. We will--in the event we can't do it within</p> <p>12 the 90 days, if people have registered, we'll</p> <p>13 let the Board know and we will bring them</p> <p>14 back--it's very rare. We bring people back</p> <p>15 and we'll get them through in their 90 days,</p> <p>16 because they're aware that if they don't come</p> <p>17 back in and do that, they've got to redo the</p> <p>18 course. So that's what we're allowed to do.</p> <p>19 MR. MARTIN:</p> <p>20 Q. Okay. My next line of questioning, and just</p> <p>21 very briefly, you alluded to first aid</p> <p>22 training yesterday and indicated that that's</p> <p>23 not a responsibility of your Centre.</p> <p>24 MR. RUTHERFORD:</p> <p>25 A. I don't think -</p> <p>26 MR. MARTIN:</p>	<p>1 maintenance of your suits. You referred</p> <p>2 yesterday to the transportation passenger</p> <p>3 suits, in response to your questions from Ms.</p> <p>4 Fagan, and you have indicated that</p> <p>5 approximately \$350,000 a year is dedicated to</p> <p>6 that as part of a blanket order. I think you</p> <p>7 referred to the term "blanket order" and you</p> <p>8 draw down on that?</p> <p>9 MR. RUTHERFORD:</p> <p>10 A. Yeah, it's a standing--yeah, a standing offer,</p> <p>11 we have.</p> <p>12 MR. MARTIN:</p> <p>13 Q. A standing offer with Helly Hansen, is that</p> <p>14 correct?</p> <p>15 MR. RUTHERFORD:</p> <p>16 A. Yeah, yeah.</p> <p>17 MR. MARTIN:</p> <p>18 Q. And how is that number determined? I mean, do</p> <p>19 you base it on the amount of training that you</p> <p>20 anticipate in any given year? Because you did</p> <p>21 indicate that you maintain your suits after</p> <p>22 every use.</p> <p>23 MR. RUTHERFORD:</p> <p>24 A. Yeah. Every year, we're required by our</p> <p>25 contracting procedures to go out and rebid all</p> <p>26 service contracts and the situation of someone</p>
<p>1 Q. Or did I--maybe I mistook -</p> <p>2 MR. RUTHERFORD:</p> <p>3 A. I don't think. No, we provide first aid</p> <p>4 training. It's not--the first aid training is</p> <p>5 not included in the basic survival training.</p> <p>6 So we can provide a whole range of first aid</p> <p>7 training and we do provide a whole range of</p> <p>8 first aid training.</p> <p>9 MR. MARTIN:</p> <p>10 Q. Oh, you do. I had understood that that was</p> <p>11 separately contracted for with the operators.</p> <p>12 It's not, is it?</p> <p>13 MR. RUTHERFORD:</p> <p>14 A. Well, the operators can go to anyone. There</p> <p>15 are a number of providers of first aid</p> <p>16 training. So they can go to--there are other</p> <p>17 providers providing it, but they can certainly</p> <p>18 come to us for it, yes.</p> <p>19 MR. MARTIN:</p> <p>20 Q. It is a component of your program?</p> <p>21 MR. RUTHERFORD:</p> <p>22 A. We have first aid training on our courses,</p> <p>23 yes.</p> <p>24 MR. MARTIN:</p> <p>25 Q. I just wanted to clarify that. The third</p> <p>26 issue I just want to touch on is the</p>	<p>1 like Helly Hansen who are the sole source</p> <p>2 supplier, we don't have--we don't bid it, but</p> <p>3 we all go out for a quotation every year, and</p> <p>4 what we'll do in that situation, we will</p> <p>5 provide an estimate of what we expect to</p> <p>6 utilize during the course of the year. They</p> <p>7 will provide the fees for all the aspects of</p> <p>8 the service and as the year goes on, we draw</p> <p>9 down so that once--every time a suit gets</p> <p>10 serviced, we'll just raise sort of a mini</p> <p>11 contract that goes away and comes back and it</p> <p>12 draws down on that figure.</p> <p>13 MR. MARTIN:</p> <p>14 Q. And do you normally draw down the full amount</p> <p>15 every year? I'm just wondering.</p> <p>16 MR. RUTHERFORD:</p> <p>17 A. It will depend. Generally speaking, on the</p> <p>18 training activity, I think quite possibly this</p> <p>19 year we may involve additional cost on the</p> <p>20 passenger transportation suit because of the</p> <p>21 additional HUEBA courses we've put in, which</p> <p>22 we weren't anticipating at the beginning of</p> <p>23 the year. So in that case, we'll make a</p> <p>24 contract modification. But generally</p> <p>25 speaking, we've been in this business, you</p> <p>26 know, a number of years, we're usually pretty</p>

Page 117

1 close in terms of where we are.

2 MR. MARTIN:

3 Q. And if you're not close, where do you get the

4 money from?

5 MR. RUTHERFORD:

6 A. Well, if we're not close, we have to raise a

7 variation order, and so that money that pays--

8 this is all, it comes from training revenues.

9 So this is where we are. We're cost recovery.

10 The training revenues come in and the money

11 goes out to pay, you know, our instructors'

12 salaries. It goes out to pay consumables and

13 it goes out to pay service companies.

14 MR. MARTIN:

15 Q. So if you had to pay more than \$350,000, you

16 can recover the cost from -

17 MR. RUTHERFORD:

18 A. Oh, it comes in, because we're doing more

19 training, yes.

20 MR. MARTIN:

21 Q. And the immersion suit issue, I think you

22 indicated it cost about \$250,000 per year for

23 that, maintenance of that suit? Is that

24 correct?

25 MR. RUTHERFORD:

26 A. It's around that. We have a--we utilize the

Page 118

1 immersion suit both for pool exercises and for

2 sea exercises. It is significantly cheaper,

3 the service for that suit, yeah.

4 MR. MARTIN:

5 Q. Okay. Next line of questioning, I just want

6 to relay a story passed on to me by one of our

7 clients. When I was preparing for the

8 Inquiry, I went through with several of the

9 clients the itinerary, the agenda and who was

10 scheduled to speak and what may have been the

11 anticipated evidence at the time, and of

12 particular interest to one individual in

13 relation to your institute was--and I

14 indicated to them that you would likely be

15 covering general issues associated with

16 training, your relationship with the operator,

17 your relationship with the regulator and

18 whatnot. But this particular individual

19 indicated that her deceased husband was, you

20 know, really, really frightened by the process

21 of the training that you provide. No

22 reflection on the Institute, but just it was a

23 very--I think her words were, you know, it was

24 a terrifying experience. He found it somewhat

25 difficult, and I think that's consistent with

26 what you were saying yesterday, and I know Mr.

Page 119

1 Harvey was saying today where he talked about

2 people were confused and they were--when they

3 do some of that HUET training and I think the

4 word that she used was stressed. He would

5 really get stressed over that, and I think

6 that was a word that you used, Mr. Rutherford,

7 as well.

8 What I'm getting at is what input do you

9 receive from your--from the end users, the

10 people who actually go on the rigs every day,

11 in terms of understanding where they're coming

12 from in terms of the stresses that they

13 experience? Do you do evaluations? Do you

14 encourage the people to be forthright in

15 telling you or the Institute what problems, if

16 any, they're experiencing with the training?

17 I just want to get a better idea as to--you

18 know, because they're separated. They're not

19 part of the Training and Qualifications

20 Committee and you're not either, and they're--

21 so what processes are available to them to

22 make sure that their concerns, if any, are

23 registered with you and if so, what do you do

24 about it?

25 MR. RUTHERFORD:

26 A. I'll respond to that and then I'll pass over

Page 120

1 to my two instructors. I think it's a

2 question that they may also want to respond

3 to. The issue of the type of training that we

4 do is the people that come into our training

5 centre are widely, widely different in terms

6 of some people can breathe through the

7 training, they find it very, very easy. Other

8 people are very, very highly stressed by what

9 we do. That's one of the reasons why, you

10 know, we take the training, we take it in

11 very--you know, in slow steps to try and

12 accommodate the people that are having

13 problems and our approach in the event,

14 particularly of basic survival training and

15 the training where people are responsible

16 fundamentally for themselves, is to if people

17 do have problems with it, we will work with

18 them. We'll have--instructors will stay late

19 and work with them. If we have people who

20 have particular problems, we will bring them

21 back individually and again, we'll work with

22 them to go through this, because there is--it

23 is a requirement that they complete all the

24 exercises and complete the training. So we

25 have to get that through. We do have--you

26 know, occasionally there's people that will

<p style="text-align: right;">Page 121</p> <p>1 self select and decide that, you know, "this 2 is not for me. This job is not for me. The 3 stress is too high. We just don't want to do 4 this" and there's people occasionally that we 5 will say, you know, "this job is not for you. 6 Don't do this" and we will not issue a 7 certificate. So we will work with them. 8 So the information that the instructors, 9 they will work closely with the instructors. 10 They'll feedback information on this. They 11 have an opportunity, there's an evaluation 12 form which they will complete and they'll 13 indicate those. Those sort of issues will 14 come to us. We have a committee in house. We 15 will look at that, as well as--so the feedback 16 comes to us, if there are issues, but I think 17 that's fundamentally, you know, is why we are 18 where we're at. We've been in this business a 19 number of years and we take that feedback and 20 we try and push the envelope as far as we can 21 without putting too much stress onto the 22 individual. So yeah, I'll pass over, I think 23 Greg might want to talk about that. 24 MR. HARVEY: 25 A. Yes. Certainly in particular to the HUET 26 training, I guess, water work in general, but</p>	<p style="text-align: right;">Page 123</p> <p>1 Training and Qualifications Committee, which 2 you are an invitee on, do you do anything 3 about that? Do you take these concerns one 4 step further? 5 MR. RUTHERFORD: 6 A. The students also, not only do they provide us 7 with an evaluation form on training, but I 8 know that all of the operators, they also 9 provide all of the operators with an 10 evaluation. So I will get calls maybe that an 11 operator will get in touch with me and say 12 "we're having problems. Is this an issue?" 13 So there is--whilst there's not necessarily a 14 formal process, it certainly does take place. 15 Recognize also that the same training that we 16 deliver, the operators, their HSE people also 17 come through this training and their 18 management also come through this training. 19 So when they come through, they become--you 20 know, that sort of dialogue can take place, 21 "we're having issues with this particular"-- 22 but - 23 MR. MARTIN: 24 Q. But who would you typically deal with? 25 Because, you know, in response to Mr. Earle's 26 questions, you know, he alluded to you're</p>
<p style="text-align: right;">Page 122</p> <p>1 in particular, the HUET training, it's 2 certainly not unusual for have a student come 3 just prior to the exercise and maybe express 4 that they haven't slept that night or in the 5 last couple of nights, just for fear of doing 6 the HUET. I think in some cases, it's fear of 7 the unknown. So we would see that--I would 8 see that more as an instructor in the BST 9 course, where they haven't been through it 10 before, as opposed to the recurrent course 11 where they've been through it before and 12 they've practised it, and maybe they're 13 feeling a little more comfortable coming in, 14 but it certainly is an issue for a lot of the 15 students. 16 MR. MARTIN: 17 Q. If, for example, though some of the concerns 18 raised were in terms of comfort level of suits 19 or the practicality of wearing gloves and they 20 registered these concerns to you at the 21 training level, what, if anything, do you do 22 in terms of dealing with the operators, 23 dealing with the regulator? Is there any 24 formal processes in place that you take their 25 concerns and pass them along to the people 26 who--you know, I'm thinking about that</p>	<p style="text-align: right;">Page 124</p> <p>1 talking to Helly Hansen after the suit has 2 been recommended. You're all of a sudden on 3 this committee, this Training and 4 Qualifications Committee in 2005. I assume 5 that had to do with the underwater breathing 6 device. 7 MR. RUTHERFORD: 8 A. Well, I don't - 9 MR. MARTIN: 10 Q. So how do you get the input received into a 11 manageable form, in terms of dealing with the 12 people who are actually making the decisions? 13 That's--you know, do you deal with the 14 operator? Do you phone up the operator? Do 15 you phone up the regulator? Do you phone up 16 the representative here for CAPP? I mean, 17 what typically--if there's a legitimate 18 concern raised by a person who's undergoing 19 your training, where do you take it? 20 MR. RUTHERFORD: 21 A. Well, with a piece of equipment such as the 22 suit, I mean, generally speaking, our first 23 line of communication will be to the supplier 24 of that equipment, because they're our--you 25 know, we are their contractor. They're our 26 supplier. So we can go back to them and say</p>

Page 125

1 there's issues here. So we would have direct
 2 dialogue with our supplier, but the other
 3 issues, if there's other things, they go out
 4 to industry. Industry, the HSE people within
 5 industry are fully well aware of this and in
 6 an instance such as the suit, I think the C-
 7 NLOPB also become aware of it, and what will
 8 tend to happen is if there's an issue that
 9 does rise such as this, the industry will come
 10 in to our Centre and have a look to see it for
 11 themselves. The C-NLOPB will come in and see
 12 for themselves. So you know, that sort of
 13 dialogue takes place. There's nothing in form
 14 of a structured system whereby we report
 15 specific issues that relate to a specific
 16 piece of equipment, other than, you know, for
 17 something that was a safety issue for us, in
 18 terms of delivering our course. If we had a
 19 piece of equipment that was being provided to
 20 us and we considered it to be a safety issue
 21 for us to deliver that course using that piece
 22 of equipment, then that would go directly to
 23 the operator.
 24 MR. MARTIN:
 25 Q. Now I'll conclude on this point, and I think I
 26 will conclude my questioning for the

Page 126

1 proceeding. I just want to focus for a moment
 2 on issues relating to the length of the
 3 course, and I'm talking about your basic
 4 survival course, your refresher course and
 5 your one-day course, and I know you put up a
 6 slide, and I'm not asking that you put it up
 7 now, but it was slide 43 where you'd looked at
 8 an international comparison and you indicated
 9 that, in terms of the duration of your
 10 programs and the period of time that you had
 11 to seek renewal of that certificate are, you
 12 know, marginally better than Norway and the UK
 13 and that you're, generally speaking,
 14 relatively satisfied with the length of the
 15 course and the renewal of the certificate.
 16 However, there were times in your evidence and
 17 in response to questions from Mr. Earle and in
 18 response to some questions from Ms. Fagan,
 19 that you--it's something that, you know, you
 20 might want to look at at some point in time,
 21 and what I'm trying to determine is have you
 22 had any discussions with the operators on
 23 those particular issues? Because there's
 24 undoubtedly going to be a cost associated with
 25 if you increase the length of the training or
 26 if you cause an individual to come back

Page 127

1 earlier than three years to seek renewal, but
 2 are those issues that are under active
 3 consideration, in terms of assessing whether
 4 they're good or bad for the industry?
 5 MR. RUTHERFORD:
 6 A. They're issues -
 7 MR. MARTIN:
 8 Q. And the users, in particular.
 9 MR. RUTHERFORD:
 10 A. Yeah, I mean, they're issues that come to the
 11 table quite frequently and I think when CAPP
 12 did their presentation, they mentioned they
 13 did a survey of all the users relating to
 14 training, training frequency and the responses
 15 came back fairly mixed. Some people wanted to
 16 increase frequency, increase length. Other
 17 people wanted to reduce it. Generally
 18 speaking, I don't think there was any
 19 consensus that everybody--people wanted to
 20 necessarily increase the frequency of
 21 training. I think it was a little bit the
 22 other way. So that went out through CAPP to
 23 industry, but it's still something that comes
 24 up. Industry will bring that to the table. I
 25 think, certainly, the C-NLOPB certainly and
 26 the C-NSOPB here in eastern Canada have been

Page 128

1 very resistant to the change to extending the
 2 period from three to four years. There's been
 3 a lot of pressure from certain quarters to do
 4 that, but they have actually resisted that
 5 because they feel that the frequency is
 6 appropriate as it stands.
 7 MR. MARTIN:
 8 Q. Now in terms of the--where does that get
 9 formally discussed? You have a Training and
 10 Qualifications Committee, again, which you're
 11 an invitee, consisting of the drilling
 12 contractors, consists of CAPP and it consists
 13 of the operators, if my memory serves me
 14 correct. You're only invited to that meeting
 15 as requested.
 16 MR. RUTHERFORD:
 17 A. Well, no, we have a standing invitation.
 18 MR. MARTIN:
 19 Q. You have a standing invitation, so--but how do
 20 you become aware that there's an issue? I
 21 mean, do you -
 22 MR. RUTHERFORD:
 23 A. Well, an issue, if somebody wanted to extend
 24 or reduce that, that would be brought up at
 25 that table and discussed and, as I say,
 26 generally speaking, the pressure tended to

Page 129

1 look at trying to extend, reduce training, try
 2 to extend training times, but the C-NLOPB, who
 3 is the regulator, everything--every decision
 4 that's made, the Training Committee can only
 5 recommend and at the end of the day, the C-
 6 NLOPB or the C-NSOPB have to ratify those
 7 decisions and they have been resistant to any
 8 changes in that respect.
 9 MR. MARTIN:
 10 Q. And they're on that Training and
 11 Qualifications Committee?
 12 MR. RUTHERFORD:
 13 A. They're on that, yeah.
 14 MR. MARTIN:
 15 Q. So you say you have a standing invitation?
 16 MR. RUTHERFORD:
 17 A. Yeah.
 18 MR. MARTIN:
 19 Q. So can you just show up to a meeting and say -
 20 MR. RUTHERFORD:
 21 A. Well, every meeting that they have, we're
 22 invited to, yes.
 23 MR. MARTIN:
 24 Q. You're invited to it?
 25 MR. RUTHERFORD:
 26 A. Yeah.

Page 130

1 MR. MARTIN:
 2 Q. Regardless of the issue?
 3 MR. RUTHERFORD:
 4 A. For the Training Committee, yeah. We're
 5 invited to all Training Committee meetings,
 6 yes.
 7 MR. MARTIN:
 8 Q. Well then, that begs the question, why
 9 wouldn't you be just formally part of the
 10 committee?
 11 MR. RUTHERFORD:
 12 A. The committee was structured, basically it was
 13 structured as an operator committee. It may
 14 well be that there's a change to the--that,
 15 you know, there may well be a change made to
 16 the Terms of Reference, but as the Terms of
 17 Reference stand at the moment, we're not
 18 formally part of the Terms of Reference, but I
 19 don't think--the only difference it makes
 20 really is that we're not ostensibly a voting
 21 member of the committee, you know.
 22 MR. MARTIN:
 23 Q. But would an approval of that suit have been
 24 looked at by that Training and Qualifications
 25 Committee?
 26 MR. RUTHERFORD:

Page 131

1 A. The suit, that would come under the Safety
 2 Committee.
 3 MR. MARTIN:
 4 Q. It wouldn't have been looked at by that
 5 Training and Qualifications Committee?
 6 MR. RUTHERFORD:
 7 A. No. No, the Training and Qualifications
 8 Committee, the role of that is to look at the
 9 training and qualifications standard, that
 10 document that guides us, and I think I showed
 11 in my evidence and CAPP showed. It's the
 12 standard practice. So pieces of equipment, et
 13 cetera, do not fall under that committee, no.
 14 MR. MARTIN:
 15 Q. Those are my questions. Thank you very much.
 16 COMMISSIONER:
 17 Q. Thank you, Mr. Martin. Too late for you to
 18 start now, Ms. O'Brien, so we'll resume at
 19 2:00.
 20 (LUNCH BREAK)
 21 COMMISSIONER:
 22 Q. Okay, Ms. O'Brien.
 23 MR. ROBERT RUTHERFORD, MR. GREGORY HARVEY, MR. PATRICK
 24 DOHEY - EXAMINATION BY MS. KATE O'BRIEN
 25 MS. O'BRIEN:
 26 Q. Good afternoon. Kate O'Brien, I'm here

Page 132

1 representing the families of both deceased
 2 flight crew. The first question I wanted to
 3 ask is does your Centre provide any training
 4 to flight crew? I mean, I know you don't
 5 license pilots, but I'm wondering do you
 6 provide any survival training to the flight
 7 crew that are operating in the Newfoundland
 8 and Labrador offshore?
 9 MR. RUTHERFORD:
 10 A. They come through and do a one-day HUET, the
 11 helicopter underwater escape training, and
 12 that training is basically designed--they
 13 don't do that training under any offshore
 14 regulation, but I think they do come and do
 15 the training. Every year, I think, most of
 16 the pilots come through and run through that
 17 one-day training.
 18 MS. O'BRIEN:
 19 Q. Okay.
 20 MR. RUTHERFORD:
 21 A. It's not the same as the OSI training. It
 22 only deals specifically with the HUET,
 23 helicopter underwater escape training.
 24 MS. O'BRIEN:
 25 Q. Okay, and who arranges--you know, who has made
 26 the arrangements for the pilots to come in and

Page 133	Page 135
<p>1 do that one-day HUET training?</p> <p>2 MR. RUTHERFORD:</p> <p>3 A. That would be arranged through Cougar, who</p> <p>4 would be in touch with our administration and</p> <p>5 they would book them in.</p> <p>6 MS. O'BRIEN:</p> <p>7 Q. And when did that begin? When did they start-</p> <p>8 -when did Cougar start arranging that kind of</p> <p>9 training? When did their pilots start getting</p> <p>10 that training?</p> <p>11 MR. RUTHERFORD:</p> <p>12 A. As far as I'm aware, they've been doing it</p> <p>13 ever since they've been operating off the</p> <p>14 coast.</p> <p>15 MS. O'BRIEN:</p> <p>16 Q. Do they do any training for the underwater</p> <p>17 breathing apparatuses, the HUEBA?</p> <p>18 MR. RUTHERFORD:</p> <p>19 A. Well, they do now. Since it's been</p> <p>20 introduced, that will be part of their</p> <p>21 training, as introduction, but it wasn't prior</p> <p>22 to May.</p> <p>23 MS. O'BRIEN:</p> <p>24 Q. So you actually speak quite lowly.</p> <p>25 MR. RUTHERFORD:</p> <p>26 A. Okay.</p>	<p>1 MR. RUTHERFORD:</p> <p>2 A. Yeah, yeah.</p> <p>3 MS. O'BRIEN:</p> <p>4 Q. Are you aware of whether or not the pilots</p> <p>5 started using the HUEBA devices at the same</p> <p>6 time that passengers generally started using</p> <p>7 those devices?</p> <p>8 MR. RUTHERFORD:</p> <p>9 A. I wouldn't know when they--I don't even know</p> <p>10 now whether they actually use it in flight,</p> <p>11 but that would be best question for Cougar.</p> <p>12 MS. O'BRIEN:</p> <p>13 Q. Yes, okay, and you're saying they do a one-day</p> <p>14 HUET and helicopter underwater escape</p> <p>15 training, which is obviously much shorter than</p> <p>16 the five days for the basic survival training.</p> <p>17 So what elements are not taught to them that</p> <p>18 would be taught in the basic survival training</p> <p>19 that they do not get?</p> <p>20 MR. RUTHERFORD:</p> <p>21 A. The HUET training focuses specifically on</p> <p>22 helicopter underwater escape training and so</p> <p>23 they wouldn't cover any of the issues relating</p> <p>24 to offshore hazards. It wouldn't cover sea</p> <p>25 survival exercises. They wouldn't cover--so</p> <p>26 basically what they will do is just cover off</p>
Page 134	Page 136
<p>1 MS. O'BRIEN:</p> <p>2 Q. If you could just speak up a little bit.</p> <p>3 MR. RUTHERFORD:</p> <p>4 A. It wasn't--I mean, it's introduced to that</p> <p>5 course. We have introduced the helicopter</p> <p>6 underwater escape breathing apparatus training</p> <p>7 into the HUET course, which they do. I should</p> <p>8 point out, that HUET course is really--it's</p> <p>9 not a course specifically developed for</p> <p>10 pilots. It's just a course that is offered.</p> <p>11 Primarily, that course is delivered to people</p> <p>12 operating in the marine industry and it's not</p> <p>13 one of the regulated courses under the CAPP</p> <p>14 guidelines, but it does cover off all aspects</p> <p>15 of HUET and helicopter underwater escape</p> <p>16 training.</p> <p>17 MS. O'BRIEN:</p> <p>18 Q. And did the--did you start offering the HUEBA</p> <p>19 training to the pilots at the exact same time</p> <p>20 as you started offering it to all passengers</p> <p>21 as part of the BST and the BST-R?</p> <p>22 MR. RUTHERFORD:</p> <p>23 A. We've included it in all of our helicopter</p> <p>24 underwater escape training now.</p> <p>25 MS. O'BRIEN:</p> <p>26 Q. At the same time?</p>	<p>1 everything associated with helicopter escape</p> <p>2 training.</p> <p>3 MS. O'BRIEN:</p> <p>4 Q. Okay. So that is how--if your helicopter goes</p> <p>5 down, how to get out of the helicopter and get</p> <p>6 to the surface. Does it include--because I'm</p> <p>7 sure as part of the basic survival training,</p> <p>8 part of what you cover, I know you called it</p> <p>9 enemies or survival or some terminology like</p> <p>10 that. You're giving people training on once</p> <p>11 you're there, hopefully out of the helicopter</p> <p>12 on the water, techniques to prolong your</p> <p>13 survival until rescue happens. Do the pilots</p> <p>14 get any of that type of training?</p> <p>15 MR. RUTHERFORD:</p> <p>16 A. I believe that's included in the course, but</p> <p>17 it's just within the one day. Within that</p> <p>18 one-day course they'll be covering off some</p> <p>19 aspects of that, yes.</p> <p>20 MS. O'BRIEN:</p> <p>21 Q. So some aspects, but less? Is that what</p> <p>22 you're saying, or do you not know?</p> <p>23 MR. RUTHERFORD:</p> <p>24 A. The HUET course is one that generally just</p> <p>25 focuses specifically on aspects of helicopter</p> <p>26 underwater escape and what happens after</p>

Page 137

1 helicopter. So everything surrounding
2 helicopter underwater escape would be covered
3 in that course. That's basically what--so you
4 know, what happens before, what happens after.
5 It's a course--it's a general course we have
6 that is taught to general populations. The
7 pilots just avail of it.
8 MS. O'BRIEN:
9 Q. Okay. So to be clear, my question is in terms
10 of the survival piece, once you get out of the
11 helicopter, is the training for pilots--and
12 perhaps the trainer there, Mr. Harvey, is
13 better able to answer this question. Is the
14 training that the pilots and copilots get the
15 exact same as passengers get, in terms of the
16 survival piece, once you're out of the
17 helicopter, or is it less than what regular
18 passengers get?
19 MR. HARVEY:
20 A. Less.
21 MS. O'BRIEN:
22 Q. Less. So I take it this course isn't
23 developed through the--it is not developed
24 through the Training and Qualifications
25 Committee, no?
26 MR. RUTHERFORD:

Page 138

1 A. No, it's not.
2 MS. O'BRIEN:
3 Q. Who is it developed by?
4 MR. RUTHERFORD:
5 A. This is just a course we have on our standard
6 course list. Generally speaking, this course
7 was developed for--primarily for people in the
8 marine industry who are involved in
9 transportation to and from vessels. So it's
10 people that--so very often people like tanker
11 operators may well take advantage of this
12 course if they're going to have people
13 travelling on a helicopter.
14 MS. O'BRIEN:
15 Q. Has Cougar had any input into the course
16 design?
17 MR. RUTHERFORD:
18 A. No, they haven't. All they've done is taken a
19 course that we have on our standard course
20 list and their pilots avail of it.
21 MS. O'BRIEN:
22 Q. I don't know if you can answer this or not,
23 but given that pilots and copilots spend more
24 time in helicopters than presumably anybody
25 else, so their chance of being in a ditching
26 operation at sea is, of course, higher than

Page 139

1 anybody else's, do you think that the training
2 that they're getting, in terms of the survival
3 training that they're getting right now, is
4 sufficient?
5 MR. RUTHERFORD:
6 A. I think we would certainly be very happy to
7 develop a course specifically targeted to
8 pilots if requested. I think the pilot
9 training, you know, they do have certain
10 actions that they have to undertake in the
11 event of a ditching, which others don't. So
12 it would make some sense for them to have a
13 specialized training course which deals
14 specifically with their requirements. So
15 yeah, we could certainly do that.
16 MS. O'BRIEN:
17 Q. So from that, my question I had asked was, you
18 know, whether you felt their current level was
19 sufficient and you've come back and said "we
20 could certainly develop a course for them."
21 Is what you're saying that you think that they
22 could benefit from more training than what
23 they're getting?
24 MR. RUTHERFORD:
25 A. What they're doing at the present time is
26 availing of a course that was designed for

Page 140

1 another purpose, so yes, I would say they
2 could certainly--courses are always much
3 better when they're specifically designed for
4 the purpose intended, so I would say the
5 answer would be yes.
6 MS. O'BRIEN:
7 Q. Okay. I only really have--you've already
8 answered my questions on the HUEBA, so I
9 really only have two other short questions to
10 ask and they're both sort of follow-up
11 questions from, you know, examination that's
12 taken place earlier and I was sort of left
13 with questions in my own mind. So just to tie
14 up those loose ends. One is with respect to
15 your choice not to do inboard training in the
16 HUET and I know you spoke at length, you
17 explained why you choose to only train people
18 in an outboard or window side seat. I'm
19 wondering in the other jurisdictions that I
20 know that you're familiar with, is anybody
21 doing that inboard training or are all other
22 trainers that you're aware of, you know,
23 choosing to go the same route that you are and
24 only doing the window side training?
25 MR. RUTHERFORD:
26 A. There are jurisdictions that are undertaking

Page 141	Page 143
<p>1 inboard training. Again, it comes down 2 really, a lot of this ties into the specific 3 configuration of our own helicopter underwater 4 escape trainer, which is quite confined. It 5 makes it a little bit challenging in terms of 6 undertaking this training, but I think other 7 jurisdictions do do this training inboard. 8 Although how rigorous it is and whether 9 everybody gets a chance to do inboard, I would 10 suspect that--whilst it's available, I suspect 11 that knowing the number of ditches that people 12 do within their helicopter training, I would 13 be very surprised if everybody that goes 14 through a course gets an opportunity to sit 15 inboard and outboard. I think it would extend 16 the duration of the training quite 17 significantly.</p> <p>18 MS. O'BRIEN: 19 Q. Okay. Given that we now know that certainly 20 for the current configuration of the S-92 in 21 use that they have moved that extra--that fuel 22 cell, the fuel tank, so now really they have 23 effectively increased the number of inboard 24 seats. So every flight now, there's more 25 people sitting on inboard seats than there 26 were previously. I'm wondering, as you're--I</p>	<p>1 A. That's my understanding, yes, yeah. 2 MS. O'BRIEN: 3 Q. Okay, and I assume that is in dry air, not 4 submersed? 5 MR. HARVEY: 6 A. Yes. 7 MS. O'BRIEN: 8 Q. Okay, and do you have any idea, for your 9 windows on your HUET, the amount of pressure 10 that's required to remove those, when it is 11 submersed? 12 MR. HARVEY: 13 A. No. 14 MS. O'BRIEN: 15 Q. You don't know? 16 MR. HARVEY: 17 A. We don't remove our windows with the HUET 18 submersed. 19 MS. O'BRIEN: 20 Q. Oh. Okay, I didn't understand that. So when 21 you guys do the training, the escape training 22 - 23 MR. HARVEY: 24 A. Yes. 25 MS. O'BRIEN: 26 Q. - people have to push out windows, but only in</p>
<p>Page 142</p> <p>1 know you have said you have plans to update 2 and looking at a new HUET and there's things 3 that you've mentioned earlier that training 4 you're hoping to implement. Is that something 5 you're going to be looking at again, doing 6 more inboard training, inboard escape training 7 or not? 8 MR. RUTHERFORD: 9 A. We certainly will take a look at it, if we can 10 get the helicopter underwater escape trainer 11 that I think we are better able to manage the 12 risk and there's less likely of people getting 13 injured in the course of using the trainer. 14 So I think we continue to look at all our 15 training courses on a regular basis. If 16 there's a way we can improve and still manage 17 our risk, we'll certainly do that, yes.</p> <p>18 MS. O'BRIEN: 19 Q. Okay. Now I'm moving now, I want to move to 20 the amount of force to remove windows. I know 21 that we've heard that the windows right now on 22 the Cougar helicopters, and please correct me 23 if I'm wrong, they have a maximum pressure of 24 40 pounds per square inch in order to remove 25 them? Is that correct? You're nodding. 26 MR. HARVEY:</p>	<p>Page 144</p> <p>1 the above water scenario? 2 MR. HARVEY: 3 A. Yes. 4 MS. O'BRIEN: 5 Q. Okay, and when they go in the below water 6 scenario, they don't have to push out a 7 window? 8 MR. HARVEY: 9 A. No, the windows would be out. 10 MS. O'BRIEN: 11 Q. Okay, and I am assuming, Mr. Rutherford, 12 that's because of the added risk and risk 13 management? 14 MR. RUTHERFORD: 15 A. Yeah, I mean, basically. It would be that, as 16 well as the fact that generally speaking, when 17 a helicopter--on a normal controlled ditching, 18 it will land on the water and that is what 19 we'd normally be providing the training for is 20 that in a controlled ditch, you're on the 21 water. You got moments to get that window out 22 and then she turns over. So she's out by the 23 time she's turned over. So yes, but it also 24 comes down to a management of risk activity 25 too. 26 MS. O'BRIEN:</p>

Page 145

1 Q. Okay, and even though that we know that 60
 2 percent, according to the stats Mr. Harvey
 3 provided, that 60 percent capsizes, what you
 4 are saying is in most of those cases, there's
 5 time to get the windows out first before it
 6 rolls?
 7 MR. RUTHERFORD:
 8 A. All we know is that capsizes can take place in
 9 60 seconds or less, but how much time you have
 10 would--I don't know for sure.
 11 MS. O'BRIEN:
 12 Q. Okay. Do you know, in your HUET then for the
 13 amount of force to get your windows out above
 14 water, do you know how much force it takes?
 15 MR. HARVEY:
 16 A. No, I wouldn't be able to put a number on it.
 17 MR. RUTHERFORD:
 18 A. It's fairly--they don't just push out easily.
 19 It's a fair--it does require a significant
 20 push, because we do have indications of people
 21 having problems in getting their--you know, we
 22 have to be very careful how we teach people
 23 how to do this, because people do land up with
 24 injuries to their hands, which is--so we do--
 25 so it's fairly significant. What exactly it
 26 is, I don't know. It would depend on where

Page 146

1 they hit the window.
 2 MS. O'BRIEN:
 3 Q. So you don't know where it is compared to the
 4 40 pounds per square inch standard that the
 5 actual helicopters are using? You don't know
 6 if yours is more difficult, less difficult?
 7 MR. RUTHERFORD:
 8 A. I couldn't answer that precisely, no.
 9 MS. O'BRIEN:
 10 Q. Okay. I assume that your HUET would come with
 11 specifications. You know, your equipment
 12 would come with specifications by the
 13 manufacturer that would include those numbers,
 14 wouldn't it?
 15 MR. RUTHERFORD:
 16 A. The windows were retrofitted. I don't have
 17 those numbers when they were retrofitted into
 18 the HUET, when that was done.
 19 MS. O'BRIEN:
 20 Q. Okay. I should explain my--you know, the
 21 reason for this line of questioning is because
 22 when I'm sitting here listening, you know, to
 23 what people have to do to put out the windows
 24 and knowing what my own upper body strength
 25 is, which is low, I have real questions
 26 whether if I was put in that situation, I

Page 147

1 would have any hope of banging out a window,
 2 and certainly I would think that if I was in a
 3 case where I was submerged and so, of course,
 4 not only is my own movement going to be very
 5 restricted, but also the amount of force
 6 needed to get out that window is going to be
 7 much, much higher, I wouldn't have a chance.
 8 That's the feeling I get.
 9 MR. RUTHERFORD:
 10 A. Again, I go back, we had to put in place a
 11 special risk management procedure on our HUET
 12 training relating to getting windows out
 13 because we had so many problems with injuries.
 14 People were--depending on how they were
 15 hitting the window, they were injuring their
 16 hands and that's a problem for us. You know,
 17 from a safety provider under the Department of
 18 Labour, we have to respond to every incident
 19 and injury and that goes back to Occupational
 20 Health and they'll come down and close us
 21 down. So we know that we're at the limit of
 22 what we can really realistically do in the
 23 training exercise, because, you know, we had
 24 injuries and we had to put in place special
 25 procedures to make sure that it's done in the
 26 right way so that we weren't injuring people.

Page 148

1 So that's basically what I can do, from a
 2 training provider.
 3 MS. O'BRIEN:
 4 Q. I do understand what you're saying, but if I
 5 could put the question more directly maybe to
 6 Mr. Harvey. Would someone my size, in a real-
 7 life situation when the--if the helicopter was
 8 submerged, knowing what the force is on the S-
 9 92A's, would I have any chance of being able
 10 to push out that window?
 11 MR. HARVEY:
 12 A. I'm not prepared to say you wouldn't have any
 13 chance.
 14 MS. O'BRIEN:
 15 Q. Sure.
 16 MR. HARVEY:
 17 A. But certainly I would expect it to be more
 18 difficult than it was on the surface.
 19 MS. O'BRIEN:
 20 Q. Okay. I mean, what I'm wondering is--and I
 21 know there's lots of stats out there for what
 22 different size people can push. I mean, those
 23 are numbers that researchers are out there
 24 collecting all the time, and I'm wondering if,
 25 you know, if there is--if the case is that in
 26 a practical situation people of a certain

Page 149

1 size, statistically speaking, would be highly
 2 unlikely to be able to push out the window,
 3 wouldn't it be--I would think that perhaps
 4 those people would be advised, "look, in the
 5 case of an emergency, don't waste time trying
 6 to push out your window. Look for an
 7 alternate exit," or training like that. I'm
 8 wondering are you considering those kind of
 9 things in your training?
 10 MR. HARVEY:
 11 A. We discuss some of those issues with the
 12 students, so even in relation to our windows.
 13 If a student did have, you know, considerable
 14 difficulty taking out our windows above the
 15 surface, then a suggestion might be made, you
 16 know, you might want to consider where you're
 17 sitting. That might include having somebody
 18 next to you that could assist in taking out
 19 the window, or you know, sitting by one of the
 20 alternate emergency exits, something of that
 21 nature, sure, yeah.
 22 MS. O'BRIEN:
 23 Q. Okay. So I find that encouraging that you're
 24 telling people that. Do you know if there's
 25 any follow through when those people now are
 26 at Cougar and they're, you know, about to

Page 150

1 board the plane, if they've been advised by
 2 the trainer "look, you're having difficulty.
 3 Try to sit yourself near an emergency exit or
 4 next to someone who's stronger," do you know
 5 whether they have the ability, in practice, to
 6 carry out your instructions? I know Mr.
 7 Decker described jostling for position in
 8 line.
 9 MR. HARVEY:
 10 A. No, I wouldn't be able to comment on it.
 11 MS. O'BRIEN:
 12 Q. Do you think, as a trainer, it would be good
 13 for people to be able to, if they knew they
 14 were going to have problems because of their
 15 size or because of whatever happened during
 16 their training, to be able to request certain
 17 seating in the helicopter?
 18 MR. RUTHERFORD:
 19 A. That would be going well beyond the
 20 jurisdiction of a trainer to put somebody in a
 21 particular seat and not in a particular seat.
 22 That would have to be entirely up to the
 23 individual. We can't, as a trainer, tell
 24 someone to go in a particular seat and put
 25 someone else at possible increased risk.
 26 MS. O'BRIEN:

Page 151

1 Q. No, no, I understand that, but would it be--do
 2 you think it would be, you know, carrying the
 3 training into practice, is that something that
 4 if that could be implemented with Cougar or
 5 whoever is making these decisions, would that
 6 be a positive step or not?
 7 MR. RUTHERFORD:
 8 A. I think it would be extremely difficult to put
 9 into practice. I think if you're going to
 10 treat people--we provide people with skills,
 11 knowledge to do their training and I think
 12 after that, they really have to be treated,
 13 you know, equally and consistently. We can't
 14 get in a position of recommending that
 15 somebody sits here or somebody sits there.
 16 That's just--that's beyond our jurisdiction.
 17 MS. O'BRIEN:
 18 Q. Even if one of the trainers has identified
 19 during the course of the training and said to
 20 a person you should consider, because of the
 21 problems you've had, sitting next to an
 22 emergency exit?
 23 MR. RUTHERFORD:
 24 A. We can tell the student that they could do
 25 that, and they can request it of Cougar, but I
 26 don't think it'll be up to the training

Page 152

1 provider to pass that information, because
 2 it'll be highly judgmental.
 3 MS. O'BRIEN:
 4 Q. Okay. So you're saying you don't want to get
 5 involved in the chain of communication, but
 6 it's -
 7 MR. RUTHERFORD:
 8 A. Not that I don't. It would be beyond--I think
 9 it would definitely be--we would be
 10 overstepping the limits of where we can go as
 11 a training provider to do that. We can't tell
 12 people where to sit in a helicopter. We will
 13 provide people with training and tell them,
 14 you know, that--make them aware of issues that
 15 they may well have, but then it comes onto--it
 16 would be up to the individual or the company.
 17 It's not something we can do.
 18 MS. O'BRIEN:
 19 Q. Up to the individual to move forward with that
 20 information?
 21 MR. RUTHERFORD:
 22 A. Yes, indeed, yeah.
 23 MS. O'BRIEN:
 24 Q. Okay. Really, you know, just to clarify, I
 25 wasn't suggesting that it should be your
 26 obligation to move forward with that. I was

Page 153

1 just wondering whether you thought it would be
 2 worthwhile that a passenger would have an
 3 avenue to take those concerns.
 4 MR. RUTHERFORD:
 5 A. Yeah, I mean, if we're going to do that, we'd
 6 have to base any such recommendations on a lot
 7 more solid information, knowledge, research
 8 than we have. I mean, basically what we have
 9 is judgmental. We're dealing with human
 10 beings and human performance and you know,
 11 with an interaction between the instructor and
 12 the student, but it's not something which you
 13 can base that type of decision on, I don't
 14 believe.
 15 MS. O'BRIEN:
 16 Q. Okay. All right. My final question is really
 17 that this morning, Mr. Rutherford, Ms. Fagan
 18 asked you about sort of the nine-year delay
 19 between the request or the initial thought of
 20 getting the underwater breathing apparatus to
 21 its implementation. She asked you if, from
 22 your perspective, the breathing apparatus
 23 could have been implemented more quickly.
 24 That was the question she put to you, from
 25 your perspective, could it have been done more
 26 quickly than this nine years, and you gave

Page 154

1 her--I mean, that's a yes or no question. You
 2 gave her a very lengthy answer, but I didn't
 3 hear an answer to the question yes or no. You
 4 know, do you think it could have been done
 5 more quickly than nine years? And my next,
 6 the follow-up question to that would be are
 7 there areas that you saw--because this
 8 Commission is looking forward. So we're not
 9 changing that time, but you know, for the next
 10 time a change has to be made, you know, are
 11 there areas where you thought the process
 12 could have moved more quickly so that, you
 13 know, next time round that information can--
 14 you know, we can learn from that and do it
 15 better next time?
 16 MR. RUTHERFORD:
 17 A. I think as with many things in life, it's
 18 always easy to look at things in hindsight. I
 19 think, you know, and very often things that
 20 take place with the very best of intentions
 21 have the worst of outcomes. I think, looking
 22 back, it would have gone much faster, I think
 23 if there'd been wide early consultation with
 24 all stakeholders in an open forum before we
 25 moved forward, but I guess people moving
 26 forward may think that because you take in

Page 155

1 consultation, it's likely to extend the time
 2 for the implementation. So it's easy to look
 3 back and say something should have happened
 4 much faster, but I think people making those
 5 decisions in the first place are looking for a
 6 quick solution and very often, you get caught
 7 up in a way because you haven't had wide
 8 consultation. So it's--I think given the fact
 9 that the issues we know related to the
 10 particular type of breathing apparatus and the
 11 issues that came back during the course of the
 12 process, it would have been, you know, much
 13 better to have had those wider consultations
 14 very early in the process, but that would be
 15 my suggestion.
 16 MS. O'BRIEN:
 17 Q. Okay. Those are all my questions. Thank you
 18 very much.
 19 COMMISSIONER:
 20 Q. Thank you. Now, Mr. Hurley.
 21 MR. ROBERT RUTHERFORD, MR. GREGORY HARVEY, MR. PATRICK
 22 DOHEY - EXAMINATION BY DAVID HURLEY, Q.C.
 23 HURLEY, Q.C.:
 24 Q. Thank you, Mr. Commissioner. Mr. Rutherford,
 25 to conclude your testimony before the Inquiry,
 26 I would ask you if you have any insights which

Page 156

1 you could provide the Inquiry on possible
 2 improvements that could be made to offshore
 3 safety?
 4 MR. RUTHERFORD:
 5 A. Yeah, I've got a few suggestions, and I would
 6 make the proviso that these are purely my own
 7 personal suggestions. They're not suggestions
 8 that are from my employer or the training
 9 institute as a whole. Some of the
 10 suggestions, I guess, are things that have
 11 come out of this Inquiry anyway. I just want
 12 to consolidate some of them.
 13 Number one, I'm just going to raise the
 14 issue, and I'm going to get right back to the
 15 Ocean Ranger Report, which was another
 16 incident, you know, that caused significant
 17 change, and there was a recommendation 107
 18 from that report which indicated "Government
 19 and industry, without delay, establish
 20 performance standards regarding evacuation
 21 systems." I just raise this one because CAPP
 22 mentioned in their testimony we now have
 23 basically just been produced, we have a draft
 24 guide of EER standards, which is at the
 25 present time, just a draft guide. I would
 26 suggest that that--one, that needs to be

Page 157

1 finalized as soon as possible, but also,
 2 looking through that guide, it doesn't appear
 3 to address, at this time, helicopter passenger
 4 transportation. So it might be either that
 5 gets incorporated in the guide or we have
 6 performance standards for helicopter passenger
 7 transportation--and the reason I think why
 8 this guide is important, because this provides
 9 a sort of top framework for the necessary
 10 research that's going to take place
 11 underneath. So I think we need to take a look
 12 at that guide, see if it adequately covers
 13 helicopter passenger transportation and use
 14 that as--and put that, put something in place
 15 that covers that. So that's number one.
 16 The second one I've got, I guess, comes
 17 out of the various discussions we've had of
 18 other jurisdictions and other training
 19 jurisdictions overseas. I think it's clear to
 20 everybody that there needs to be some form of
 21 change or improvement to the way that the
 22 training activity, the oversight of training
 23 activity is provided in this sector. I think
 24 the system we have in place worked very, very
 25 well for a jurisdiction that was just starting
 26 off, growing. It provided a framework to get

Page 158

1 things moving. But now we're moving into a
 2 situation where we have multiple, multiple
 3 offshore installations and more and more
 4 companies moving in. I think it is worthy of
 5 looking at ways that that could be improved
 6 and I would suggest something coming out of
 7 this Inquiry might be the striking of some
 8 form of committee to look at ways that that
 9 could be improved, and I think certainly
 10 coming out of some of the issues today, it
 11 should involve--any committee should certainly
 12 involve the helicopter supplier. I think they
 13 have a very important role to play in offshore
 14 safety.
 15 Another one, I did mention before, I just
 16 want to consolidate it. I think that as
 17 training providers, I think we--I did note
 18 that we have the opportunity to experience not
 19 only safety and survival equipment firsthand
 20 day in, day out, but we do have the
 21 opportunity to observe the trainees and see
 22 how they're responding to the sort of
 23 situations we're putting them into. So I
 24 think it's very, very important that somehow
 25 or other we set up a little bit of a better
 26 formal framework for that consultation to be

Page 159

1 fed back.
 2 Another thing that might be worth looking
 3 at is some form of training provider
 4 association which not only involves, I think,
 5 training providers such as ourselves, Survival
 6 Systems, may well involve the providers such
 7 as CONA who are providing technical training,
 8 but if such a committee were set up, I think
 9 it would have some value, but it would need to
 10 be looked at and funded in some way.
 11 Another one, I think, capacity. Keep on
 12 eye on our capacity. The industry is growing.
 13 We need to be forward planning. We are all
 14 the time responding to limits of capacity,
 15 trying to find ways to work around issues and
 16 problems. We have new offshore developments
 17 taking place and every time a new offshore
 18 development comes on, there is an increase in
 19 capacity for training requirements. So we
 20 need to be thinking about that before it
 21 happens, rather than trying to react to it in
 22 the--react to it after it's happened.
 23 And the last thing I'd like to say is a
 24 couple of equipment items that I think we
 25 really need to take a look at. I think
 26 obviously it's been raised the issue of

Page 160

1 gloves. It seems to me and as it seemed to
 2 Commissioner Wells there, that they really
 3 ought to--the types of gloves that are used on
 4 immersion suits and flight suits, there's got
 5 to be a better glove, because the glove is so
 6 important to survival activity. There's so
 7 much that takes place you can't do if you
 8 haven't got dexterity of your fingers. So I
 9 think we need to look at that, in terms of a
 10 research project, probably the National
 11 Research Council or somebody to look at that.
 12 As well as face masks, I believe that we
 13 haven't really -- we've always recommended
 14 goggles in our training. They don't really
 15 interact well with the new suit. I think the
 16 face mask is something that can help to reduce
 17 this cold shock, and I think that a properly
 18 developed face mask is something we want to
 19 look at. One, you know, is it -- there's a
 20 difference of opinion whether we should have
 21 them or not. We believe we should have it,
 22 but if we do have it, we need to have a proper
 23 mask that properly integrates with the suit.
 24 I said that was the last one, but I'm going to
 25 raise one other. When new pieces of
 26 equipment, new helicopters, whatever comes

Page 161

1 into service, it's really, really helpful for
 2 us as a trainer provider if we get; one, the
 3 sort of information/presentation, but also,
 4 like, pieces of, you know, models that we can
 5 use in a classroom or full scale information
 6 we can use in a classroom. For instance, when
 7 a new helicopter comes into service, if we
 8 were able to get hold of, you know, a mock-up
 9 of a fuselage so we could use that in our
 10 training, which has all the exits so that we
 11 can show people exactly how these exits,
 12 specifically how they work. It's something we
 13 can look at. I think it's much easier to get
 14 that when new pieces of equipment, when
 15 contracts are put in place, and new pieces of
 16 equipment are acquired, that as part of that
 17 equipment, we also consider that somehow that
 18 piece of equipment is going to have to be
 19 trained, or somebody's going to have to be
 20 trained on it, so think about the training
 21 when the acquisition takes place. I think
 22 that's enough, I think, for me. I'll pass
 23 over to --
 24 HURLEY, Q.C.:
 25 Q. Unless you have some clarification, that's all
 26 I have -- all the questions I have. Thank

Page 162

1 you.
 2 COMMISSIONER:
 3 Q. Thank you very much, Mr. Hurley. I'm going to
 4 ask you a few questions or discuss a few
 5 things with you. What you said just a few
 6 minutes ago to Mr. Hurley was very
 7 significant, and it came to my mind last night
 8 actually, thinking about all this, and my
 9 question is has there ever been any discussion
 10 on forming a high level committee that would
 11 involve the operators at a high level, C-
 12 NLOPB, the suppliers like Helly Hansen of the
 13 suits, and perhaps other equipment that I
 14 don't know about, and yourselves, and maybe
 15 others, so that what's happening or going to
 16 happen once proposed can be discussed with
 17 everybody having an input, and the reason I
 18 ask that question is, yes, the operators are
 19 extracting oil and they're paying for the
 20 whole process of doing so, but as I said in my
 21 opening remarks of this Commission, it's also
 22 a community thing, the whole community, Canada
 23 and Newfoundland and Labrador is involved
 24 here, and it can't be forgotten, and,
 25 therefore, it seems to me a committee of that
 26 sort, funded perhaps by a shared agreement

Page 163

1 between Governments and the oil companies, I
 2 don't know to what extent the University or
 3 Marine Science Institute could fund something
 4 like that because you reliant on government
 5 funding, aren't you, through the university,
 6 but there should be something in place, I
 7 think, so that at the highest level where
 8 safety ought to be, right up there with
 9 production, there would be input on these
 10 safety issues? That's a round about way of
 11 asking the question, but has there ever been
 12 any suggestion that anything like that could
 13 be put in place?
 14 MR. RUTHERFORD:
 15 A. Not that I'm aware of, Commissioner. It's
 16 certainly -- I think it'll be a very, very
 17 valuable way forward. I think communications
 18 should never be underestimated. Communication
 19 is extremely important for anything -- these
 20 sort of activities. Everybody tends to get --
 21 you get caught up in your own world, doing
 22 your own thing, responding to the immediate
 23 day to day requirements, and often it's really
 24 important to have some means to step back and
 25 look at the larger picture. So, yes, I'm not
 26 aware of anything, but I would say it's a good

Page 164

1 idea.
 2 COMMISSIONER:
 3 Q. Okay, well, I won't belabour the point, but it
 4 has occurred to me since we started this
 5 process, remember a few years ago they used to
 6 use the word in Canada, "two solitudes" in a
 7 quite different connotation, but somehow I
 8 felt that we have here several solitudes, and
 9 I don't think that's a good thing for safety,
 10 I don't think it's a good thing for the
 11 industry or for the community in the broader
 12 sense in which this is operating. Okay, we'll
 13 leave that. Coming back to the training, your
 14 organization trained me. It took more than
 15 one day, it was most of one day, including the
 16 most extensive medical, I think, I've ever
 17 had, which is a good thing, and then until 10
 18 o'clock one night just about, and then a full
 19 morning the next morning discussing with a
 20 very knowledgeable lady ever so many aspects
 21 of safety, so that in a sense it was more than
 22 a day, but it was very valuable. I'm going to
 23 say that, you know, right up front. Coming to
 24 the actual business of the training -- all the
 25 discussion and lecture, if you like, because
 26 it was interactive, I thought was valuable, it

Page 165

1 opened new doors in my thinking. Coming to
 2 the actual training to get out of the
 3 helicopter, well, first there was the HUEBA or
 4 -- I want to say HUEBA, but --
 5 MR. RUTHERFORD:
 6 A. Yeah, that's what I say.
 7 COMMISSIONER:
 8 Q. Okay, the HUEBA, or HUEBA, had not long been
 9 introduced, so we were given some training in
 10 that, but we didn't use that in the mock-up of
 11 the helicopter, but I thought, and I still
 12 think, that the HUEBA is a most valuable
 13 thing, it's overdue, and that couple of
 14 minutes that you can get out of that could
 15 save your life. Is that a fair statement?
 16 MR. RUTHERFORD:
 17 A. It's a fair statement, yes.
 18 COMMISSIONER:
 19 Q. Okay. The window, one of the first things I
 20 was told was that, you know -- I was on the
 21 left hand side, so it would have been this
 22 way, to knock out the window by hitting it in
 23 the corner. When I hit it hard, that was the
 24 last I saw of it. I don't know if the window
 25 survived, but I haven't had a bill for it, at
 26 any rate, but that was no problem and the

Page 166

1 instruction was as soon as the helicopter
 2 dropped, the mock-up dropped and hit the
 3 water, you did that. The big surprise that
 4 nobody mentioned to me was how quickly the
 5 water comes up. It's almost instantaneous. I
 6 hardly had time -- didn't have time really to
 7 take a breath, and I remember reading a report
 8 since I've been involved in this for a US Navy
 9 helicopter pilot who described going into the
 10 water, and he said the effect when the
 11 windshield, if you like, was knocked out, was
 12 like being hit in the chest with a fire hose,
 13 and so even in the controlled conditions of
 14 the pool, that was quite a shock, how quickly
 15 the water -- the second time around, it wasn't
 16 a shock, I got a good deep breath and had no
 17 problem, but the hand hold on the window ledge
 18 was absolutely essential, in my mind. If I
 19 had not obeyed that instruction, you know,
 20 somebody would have had to pull me out
 21 probably. That is vitally important. As far
 22 as the suit is concerned, they said to me,
 23 whoever was there at the time, you probably
 24 take a medium. In fact, I should have taken a
 25 large because I was constricted in movement in
 26 the suit that I had, but I have to say that

Page 167

1 water poured into it, and afterwards thinking
 2 about that, I said to myself, well, the
 3 Training Centre, you know, has got a lot of
 4 suits and they get a lot of wear and perhaps I
 5 shouldn't be surprised that it leaked, but I
 6 was surprised yesterday to hear you say that
 7 they go back to Helly Hansen after every use,
 8 but the water poured into my suit and there
 9 was no question of air lifting my legs up,
 10 quite the contrary, because the suit was
 11 already pretty well full of water, you know.
 12 The other thing, I guess, this is to you, Mr.
 13 Harvey, I really enjoyed your presentation, as
 14 I did yours, Mr. Rutherford, I do take issue
 15 with you on one thing, and you're the expert,
 16 I'm not, but I don't believe the summer water
 17 off Newfoundland east coast ever gets up to 15
 18 degrees. You may be right, and I'll admit it
 19 if I -- I take a lot of convincing on that. I
 20 really do believe our conditions are as bad as
 21 you're going to get for all this purpose
 22 anywhere, you know. Anyway, coming back to
 23 the training -- what was it I wanted to
 24 mention. I made a note here. Oh, yes, the
 25 air in the suits. Now you have a thing on top
 26 of your hood that is supposed to automatically

Page 168

1 bleed the air out, but if you go in, you can
 2 expect to turn over, I mean, the statistics
 3 prove that, don't they?
 4 MR. HARVEY:
 5 A. Yes.
 6 COMMISSIONER:
 7 Q. So then your legs and feet and the heavy
 8 boots, or the big boots, are up, so that the
 9 air that's trapped in them is up in the -- is
 10 up, it's not down, and then it's not until you
 11 get out that the air can bleed out through the
 12 top, as I see it. So when Mr. Decker said
 13 that when he was coming up, the air was
 14 coming, you know, in his face, it makes sense.
 15 Would you say that make sense?
 16 MR. HARVEY:
 17 A. I'd agree with that.
 18 COMMISSIONER:
 19 Q. Yeah, yeah, because my Inquiry Counsel, Ms.
 20 Fagan, did the training. Now I was so full of
 21 water that my feet didn't go up, you know,
 22 when holding onto the window, but in her case,
 23 I hope she doesn't mind my telling you this,
 24 her feet went up to the ceiling because of air
 25 trapped in the suit, and the other thing that
 26 I never quite understood why the immersion

Page 169

1 suit, the very name of it, is immersed, the
 2 wearer is immersed in water, an immersion
 3 suit, why that couldn't be used or adapted for
 4 use in the flight in the helicopter because
 5 I'm told that immersion suits can keep a
 6 person dry and fairly comfortable for a fairly
 7 -- for a lengthy period, long enough to be
 8 rescued, put it that way. Would you like to
 9 talk about that?
 10 MR. HARVEY:
 11 A. Well, first of all, you know, when we wear the
 12 immersion suit, we're not under water with it.
 13 I suspect if you took the same immersion suit
 14 and put it in the HUET, you would have been
 15 just as wet, if not wetter, because it still
 16 doesn't have a continuous seal, it still has
 17 the split seal. The other issue is with the
 18 immersion suit, when you -- if you would have
 19 used it, the gloves would have been on.
 20 Before you went in the water, the gloves would
 21 have been on, and they're an important feature
 22 for getting the seal around the other opening
 23 in the suit because the face seal is the
 24 biggest opening. The next openings are your
 25 wrist seals. By putting the gloves on, those
 26 wrist seals are closed up. So the likelihood

Page 170

1 of getting water in is pretty well eliminated
 2 with the immersion suit. With the flight
 3 suit, we don't put those gloves on until after
 4 you're out and on the surface, and by that
 5 time, you know, there's an opportunity for
 6 water to get in through those seals.
 7 COMMISSIONER:
 8 Q. I see.
 9 MR. HARVEY:
 10 A. So I don't think it's fair to say that, you
 11 know, the immersion suit would be better.
 12 We're doing different things with it.
 13 COMMISSIONER:
 14 Q. So it's a compromise really, isn't it, or is
 15 it?
 16 MR. HARVEY:
 17 A. I'm not sure --
 18 COMMISSIONER:
 19 Q. Well, the flight suit?
 20 MR. RUTHERFORD:
 21 A. The flight suit is designed for multipurpose,
 22 but the particular Helly Hansen suit that was
 23 in place, the 452, was actually tested above
 24 standard, so it may be that -- obviously, the
 25 standards need to be looked at. One of the
 26 issues in the standard in terms of water

Page 171

1 immersion, they require, and I'm going this
 2 from memory, is that as it stands at the
 3 moment, you do a three metre jump in the
 4 water, the water that's contained that you
 5 gather in the suit of that is taken, and you
 6 do a 1000 to 1200 metre swim on your back for
 7 an hour. A number of people do all this and
 8 the water that's taken in that is measured,
 9 and the formula that takes the amount of water
 10 in the current standard is the amount of water
 11 from that three metre jump, added to three
 12 times the amount of water you gain in the
 13 swim, and that's what used in the thermal
 14 testing of the suit. So there is -- I think
 15 when I looked at Helly Hansen's presentation,
 16 they were looking at about around half a litre
 17 of water. So the thermal testing of the suit
 18 assumes a certain amount of water. The
 19 challenge is that that three metre jump is
 20 probably, when you're dealing with a
 21 helicopter incident where you're being forced
 22 under water, you're being turned upside down,
 23 that's probably not an appropriate standard to
 24 test a suit to, I suspect. So that's
 25 something that needs to be looked at, and I
 26 believe that's one of the things they're

Page 172

1 looking at in the standards at the present
 2 time.
 3 COMMISSIONER:
 4 Q. I see. Okay, then the other thing that was
 5 mentioned by one of you this morning was this
 6 business of rescue craft and fast rescue
 7 craft. Does it make sense on that route, which
 8 at the moment to Hibernia which is the nearest
 9 platform is, I think, 315 kilometres, if I
 10 remember correctly, is there a role for sea
 11 borne rescue in all of this, along with, of
 12 course, first responders?
 13 MR. RUTHERFORD:
 14 A. Yeah, I -- the approach that BP took up in the
 15 Hebrides when they were looking at a number of
 16 platforms sort of widely dispersed, was to
 17 provide the appropriate response for
 18 helicopters transiting, taking off, landing,
 19 transiting between installations, was to come
 20 up with a combination approach. So you've got
 21 a helicopter as a search and rescue available,
 22 but certainly in the area perhaps up in the
 23 Grand Banks, to have a very highly capable
 24 craft that's capable of getting people out of
 25 the water, capable of operating in the very
 26 severe states that we've got, I think

Page 173

1 certainly a combination, I feel, would be
 2 very, very, very valuable, and it may also be
 3 valuable to have a combination take place even
 4 in the coastal, so if you got a craft that can
 5 move 30 knots, you know, in very high, several
 6 metre sea states, which basically they can,
 7 then you have a craft that -- you can get
 8 quite a distance. If you know where the
 9 helicopter is transiting, you might have a
 10 possibility of getting there well before a
 11 helicopter gets on -- you know, depending
 12 where the incident takes place. So I think
 13 all those things are things that we need to
 14 look at in the bigger picture, what is out
 15 there, what sort of assets are available for
 16 rescue support, what makes most sense from a
 17 cost perspective and from the perspective of
 18 actually being capable of responding to
 19 particular situations, I think is certainly
 20 worth investigating.

21 COMMISSIONER:
 22 Q. When really listening to you, it comes back
 23 again to this concept of the high level group
 24 in which all the disciplines are represented
 25 dealing and discussing and analysing these
 26 approaches.

Page 174

1 MR. RUTHERFORD:
 2 A. And again going way back again to the Ocean
 3 Ranger Report where they're talking about
 4 integration of search and rescue and the
 5 various support -- I mean, the only way you
 6 could integrate support is really to have
 7 everybody who is involved or every stakeholder
 8 dialoguing, putting the information on the
 9 table, figuring out what is the best way to
 10 pull all this together. So, yes, I would
 11 agree.

12 COMMISSIONER:
 13 Q. Okay, thank you, and I hope, you know, and I'm
 14 speaking now to the representatives of the
 15 industry, that this discussion on such a
 16 committee to examine things, I'd like a
 17 reaction and I'm sure I will get it from the
 18 industry on something like that because it
 19 seems to me, as a newcomer to the safety thing
 20 in the offshore, that it would be -- that it
 21 could be a very, very useful approach that
 22 would involve all of the stakeholders,
 23 including the union, and representatives of
 24 the workers, because a lot of good things can
 25 come out of that sort of discussion, I feel,
 26 and the other thing is, you know, coming back

Page 175

1 to my original remarks when this process
 2 started back on the 19th of October, if I
 3 remember the date correctly, and I was saying
 4 this is a collaborative effort, in my mind it
 5 should be very much a collaborative effort,
 6 we're not seeking to rectify anything in the
 7 past, but we're prospective, we're looking
 8 toward the future, and, you know, I notice
 9 that the representatives of the industry are
 10 here with their counsel, but you all have
 11 taken very little part so far, and I would
 12 hope that you would rethink that approach
 13 because you have so much knowledge and
 14 background and skills in a thing like survival
 15 training and the suits, which are very much
 16 part of the industry's role, and I would very
 17 much appreciate what I refer to and offered as
 18 the collaborative approach and I know that you
 19 will have things to say sooner or later, but
 20 perhaps consider sooner in the form of
 21 questions and bringing things to my attention
 22 and things to Inquiry Counsel's attention that
 23 we can work on. I hope you don't mind my
 24 bringing that to your attention. Okay, is
 25 there anything else this afternoon?
 26 MR. SPENCER:

Page 176

1 Q. Mr. Commissioner, in the spirit of your last
 2 comment, you had some questions about water
 3 going into your suit during the training.

4 COMMISSIONER:
 5 Q. Yes.

6 MR. SPENCER:
 7 Q. I'm wondering if I could ask just a couple of
 8 follow-up questions?

9 COMMISSIONER:
 10 Q. Absolutely.

11 MR. SPENCER:
 12 Q. Which might help shed some light on that.

13 COMMISSIONER:
 14 Q. Yes, absolutely.

15 MR. SPENCER:
 16 Q. And I don't mean to belabour the point, Mr.
 17 Commissioner.

18 COMMISSIONER:
 19 Q. No, no, no, it's -- well, you heard what I
 20 just said.

21 MR. SPENCER:
 22 Q. Yes, I did, and there are a couple things I'd
 23 like to explore with Mr. Rutherford, if I
 24 could.

25 COMMISSIONER:
 26 Q. Yes.

Page 177

1 ROBERT RUTHERFORD, PATRICK HARVEY, PATRICK DOHEY -
 2 EXAMINATION BY MR. SPENCER:
 3 MR. SPENCER:
 4 Q. I thought I had heard you say earlier today,
 5 or perhaps it was yesterday, that the suits
 6 are subject to heavy use in chlorinated water,
 7 and can you explain what you meant by that?
 8 MR. RUTHERFORD:
 9 A. Yeah, the suits are used day in and day out in
 10 chlorinated water, but what happens we do send
 11 them back for servicing after every use. If
 12 the -- the chlorinated water can cause
 13 deterioration in the cuffs and various other
 14 things on the suits.
 15 MR. SPENCER:
 16 Q. Yes.
 17 MR. RUTHERFORD:
 18 A. But the intent of us sending back to the
 19 service agent, it would be that, you know, you
 20 would identify something that has gone outside
 21 of the specifications, so in the event it has
 22 gone out of specification, it gets replaced.
 23 That's what we have it in our contact for
 24 replacing that.
 25 MR. SPENCER:
 26 Q. Before I go on, I've been asked to identify

Page 178

1 myself. I am Geoffrey Spencer, I'm the
 2 solicitor for Helly Hansen.
 3 MR. RUTHERFORD:
 4 A. Yeah.
 5 MR. SPENCER:
 6 Q. I know the suits are sent for servicing by
 7 Helly Hansen after usage. On the back of each
 8 suit, you said there's "training" written on
 9 each suit, is that correct?
 10 MR. RUTHERFORD:
 11 A. That is correct, yes.
 12 MR. SPENCER:
 13 Q. So after the suits are serviced by Helly
 14 Hansen, the same suits are returned to you?
 15 MR. RUTHERFORD:
 16 A. That's right, yes.
 17 MR. SPENCER:
 18 Q. So you have one pool of training suits that
 19 are used specifically for training and nothing
 20 else?
 21 MR. RUTHERFORD:
 22 A. We only use suits for training purposes, yes.
 23 MR. SPENCER:
 24 Q. And when you say they're used in heavy use, is
 25 it fair to say that these suits take, I guess,
 26 a bit more abuse than they normally would in

Page 179

1 terms of in the training process, they're
 2 subject to repeated dunking into the pool?
 3 MR. RUTHERFORD:
 4 A. They do -- in the usage, yes, we certainly
 5 will be dunking people many times,
 6 particularly when we're doing the helicopter
 7 underwater escape breathing apparatus
 8 training. People are under water for extended
 9 period of time. So there is -- that is one of
 10 the -- you are going to take in water in those
 11 suits. I don't think there's any question
 12 about that. Now whether -- that's very hard -
 13 - that's what makes it hard for us as a
 14 training institution to say this suit is good
 15 or this suit is bad because those suits will
 16 take on water. In the course of the training
 17 that we provide, water will be taken in, so,
 18 you know, that's just the way they are.
 19 MR. SPENCER:
 20 Q. Yes, because people take -- people have to do
 21 repeated dunkings into the pool and have to
 22 stay underwater for a specific period of time?
 23 MR. RUTHERFORD:
 24 A. Yeah, the only thing we can reliably say as a
 25 training institution, if we can do all those
 26 exercises and they take on no water, we can

Page 180

1 tell you that that suit is tight and it's a
 2 secure suit. If we do particular exercises
 3 and we take on water, we can't tell you
 4 whether that suit meets the necessary
 5 standards or not, that has to be done under
 6 research conditions. We can tell you -- all
 7 we can tell you is, you know, during training
 8 that suit is taking on water.
 9 MR. SPENCER:
 10 Q. Sure, and I think -- did I understand you to
 11 say as well yesterday that you're not
 12 concerned with personal fittings of these
 13 suits in terms of you're not concerned with
 14 making sure everyone has a tight fitting suit,
 15 you just have a rack of suits that they choose
 16 from?
 17 MR. RUTHERFORD:
 18 A. It's not that we're not concerned. The
 19 practicalities of a training institution, I
 20 have a limited a number of suits and we have a
 21 very large number of people, so what we have
 22 to do is to basically find a reasonable size
 23 suit that allows a person to undertake the
 24 training exercises. People in training are
 25 not being exposed to the risk of hypothermia,
 26 so there's no real -- the only reason we have

1 the suit is basically to provide training on
 2 the use, what it looks like, how to put it on,
 3 et cetera, et cetera. So we will try and find
 4 a reasonable size suit, but it won't be a
 5 precise size suit, no.
 6 MR. SPENCER:
 7 Q. Okay. So with all these factors in mind, I
 8 guess, the fact that a suit may take on water
 9 during a training exercise isn't necessarily
 10 indicative of whether it would take on water
 11 during an actual scenario?
 12 MR. RUTHERFORD:
 13 A. It's not -- I mean, it's indicative that it
 14 will take on some water during an actual
 15 scenario, but whether that water will exceed
 16 what the test standard of that suit is, I
 17 wouldn't be able to tell you, but if we're
 18 taking on some water in training, then I would
 19 say it's pretty indicative in real service,
 20 you will take on some water, but the standard
 21 allows for taking on some water.
 22 MR. SPENCER:
 23 Q. Sure.
 24 MR. RUTHERFORD:
 25 A. So that's all we can say.
 26 MR. SPENCER:

1 shouldn't have held, but in any event, he will
 2 have lots of time to be able to present his
 3 brief. It's a short brief. It's already on
 4 the file bridge system for those that are in
 5 the room to access. Mr. Harris has not
 6 provided me with a brief, but he'll be in at 2
 7 o'clock, he tells me. He's flying in from
 8 Ottawa tomorrow morning.
 9 COMMISSIONER:
 10 Q. I see. Okay, then, thank you. So 10 o'clock
 11 tomorrow morning.
 12 ADJOURNED TO NOVEMBER 25, 2009 AT 10 AM

1 Q. That's right, and this suit passed those
 2 thermal standards during its testing?
 3 MR. RUTHERFORD:
 4 A. That suit has passed standards, is my
 5 understanding, yes.
 6 MR. SPENCER:
 7 Q. Okay, those are my comments, Mr. Commissioner.
 8 COMMISSIONER:
 9 Q. Okay, thank you, Mr. Spencer. Well, ladies
 10 and gentlemen, in light of the discussion, is
 11 there anybody that would like to ask any
 12 follow-up questions. No, okay then, thank
 13 you. We'll adjourn now to tomorrow morning at
 14 9:30.
 15 ROIL, Q.C.:
 16 Q. Commissioner, a small housekeeping detail and
 17 perhaps for the members of the public who
 18 would not be aware, tomorrow we have two
 19 presenters. We have Williams Parsons, who is
 20 a retired labour leader, who will be doing a
 21 presentation in the morning, and then we have
 22 Jack Harris, MP, who will be doing a
 23 presentation in the afternoon. Mr. Parsons
 24 will be here at 10 o'clock tomorrow morning
 25 rather than at 9:30. That was a little secret
 26 that he and I apparently held, which we

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 24th day of November, 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 24th day of November, 2009
 11 Cindy Sooley
 12 Discoveries Unlimited Inc.
 13 Judy Moss
 14 Discoveries Unlimited Inc.

<p>-\$-</p> <p>\$250,000 [1] 117:22 \$270,000.00 [1] 91:8 \$350,000 [2] 115:5 117:15</p> <p>-'-</p> <p>'09 [1] 111:9 '97 [2] 6:7,8</p> <p>---</p> <p>-as [1] 32:6 -when [1] 133:8</p> <p>-1-</p> <p>10 [4] 164:17 182:24 183:10,12 100 [2] 108:25 109:2 1000 [1] 171:6 107 [1] 156:17 11 [1] 18:2 1200 [1] 171:6 13 [1] 17:22 1300 [1] 91:7 14 [1] 94:18 15 [2] 112:19 167:17 18 [5] 17:15,15,17,24,26 1990 [2] 13:22,26 1993 [1] 80:7 19th [1] 175:2</p> <p>-2-</p> <p>2 [1] 183:6 20 [3] 30:12 47:12 112:11 200 [1] 23:8 2000 [2] 12:10,15 2002 [1] 12:19 2004 [4] 13:5 78:12 87:12 87:19 2005 [15] 12:3,16 13:11 13:11,13 14:19 85:16 86:11 87:12,18,21 88:2 88:4,16 124:4 2006 [2] 78:24 86:11 2007 [5] 12:5 86:11,20 88:6,11 2008 [11] 4:16 6:9 12:4 14:24 15:4 39:25 65:18 79:5 86:25 87:7 95:25 2009 [4] 1:1 183:12 184:4 184:10 2012 [1] 9:24 21 [2] 20:2,4 2121 [1] 55:16 213 [1] 184:5 24 [1] 1:1 24th [2] 184:4,10 25 [1] 183:12</p>	<p>28 [2] 18:18 19:8 28-inch [2] 18:21 19:9 2:00 [1] 131:19</p> <p>-3-</p> <p>3.3 [1] 26:10 3.4 [1] 26:13 30 [2] 44:26 173:5 31 [1] 184:5 315 [1] 172:9 37 [1] 44:22</p> <p>-4-</p> <p>40 [5] 69:14,16 74:2 142:24 146:4 43 [1] 126:7 452 [3] 65:17 101:1 170:23 490 [1] 26:10</p> <p>-5-</p> <p>5 [2] 44:17 45:1 505 [1] 26:13 52 [2] 6:5,9 55 [2] 26:10,12</p> <p>-6-</p> <p>6 [1] 45:1 60 [6] 69:14,17 74:1 145:1 145:3,9</p> <p>-7-</p> <p>70 [1] 50:24</p> <p>-8-</p> <p>8 [1] 94:18 80s [1] 79:21</p> <p>-9-</p> <p>90 [3] 112:2 113:12,15 92 [1] 18:7 92A's [1] 148:9 97 [1] 44:8 9:30 [2] 182:14,25</p> <p>-A-</p> <p>ability [6] 22:1 41:11 76:6 109:15 150:5 184:7 able [21] 26:4 28:7 40:17 47:21 48:7 50:7 53:23 75:20 76:26 82:25 137:13 142:11 145:16 148:9 149:2 150:10,13,16 161:8 181:17 183:2 above [4] 144:1 145:13 149:14 170:23 absolute [2] 89:9 105:25 absolutely [8] 25:26 73:8 94:8 106:22 109:9</p>	<p>166:18 176:10,14 absorb [1] 16:20 absorbed [1] 16:24 abuse [1] 178:26 academic [3] 1:19 40:21 92:5 accept [1] 11:1 acceptable [2] 69:18 94:6 accepted [2] 45:18 82:7 access [1] 183:5 accidents [1] 74:19 accommodate [1] 120:12 according [2] 9:2 145:2 account [1] 74:8 accredit [1] 104:22 accreditation [10] 92:2 92:6,13,20 93:4,9 94:1 104:24,25 105:3 accredited [2] 92:3,12 achieved [1] 34:9 acquired [1] 161:16 acquisition [3] 88:7 107:6 161:21 acquisitions [1] 88:22 acronym [1] 106:15 action [1] 22:20 actions [1] 139:10 active [1] 127:2 actively [2] 13:14 77:20 activities [2] 84:17 163:20 activity [6] 84:14 116:18 144:24 157:22,23 160:6 actual [8] 67:23 69:5 83:7 146:5 164:24 165:2 181:11,14 adapted [1] 169:3 add [5] 5:26 6:13 29:2 53:20 102:3 added [2] 144:12 171:11 adding [1] 28:17 addition [1] 32:21 additional [9] 28:16,22 36:8 72:14 102:3 107:16 110:13 116:19,21 address [1] 157:3 addressed [2] 79:3,8 adequately [1] 157:12 adjourn [1] 182:13 ADJOURNED [1] 183:12 administration [1] 133:4 admit [1] 167:18 adopted [3] 84:26 85:2 85:3 advantage [1] 138:11 advantages [1] 51:23 advice [2] 14:23 81:6 advise [4] 84:7,10,12,15</p>	<p>advised [5] 65:5 78:10 90:18 149:4 150:1 affected [2] 112:3,4 afraid [1] 17:4 Africa [2] 95:14,16 afternoon [4] 111:6 131:26 175:25 182:23 afterwards [1] 167:1 again [33] 12:26 13:2 14:26 15:5 28:10 30:19 33:25 34:8,17,19 36:1 46:15 61:21 65:9 66:3 68:24 72:8,20 73:9 74:8 87:2 98:25 99:5 112:5 113:6 120:21 128:10 141:1 142:5 147:10 173:23 174:2,2 against [3] 25:5 69:1 93:3 agencies [1] 107:4 agency [1] 105:3 agenda [1] 118:9 agent [2] 55:16 177:19 ago [7] 44:13 47:13 62:24 62:26 63:2 162:6 164:5 agree [4] 57:20 97:16 168:17 174:11 agreement [1] 162:26 ahead [11] 4:19 5:7 15:5 82:12,13,16 83:1,2 87:24 88:2 96:9 aid [7] 113:21 114:3,4,6 114:8,15,22 aimed [1] 41:25 air [18] 14:15 22:25 78:11 78:24 79:1,4,22 83:11 84:22 85:3 143:3 167:9 167:25 168:1,9,11,13,24 aircraft [1] 64:9 aisle [2] 22:8 60:17 albeit [2] 80:1 97:7 allow [2] 25:14 28:5 allowed [5] 6:20 8:3 72:22 73:3 113:18 allows [2] 180:23 181:21 alluded [2] 113:21 123:26 almost [4] 30:19,22 33:17 166:5 along [4] 25:3 41:2 122:25 172:11 Alpha [1] 45:3 alternate [2] 149:7,20 always [10] 31:22 40:17 74:6 82:5 91:3 105:25 112:22 140:2 154:18 160:13 amount [15] 52:3,16 68:22 105:2 106:24 115:19 116:14 142:20 143:9 145:13 147:5 171:9 171:10,12,18 analysing [1] 173:25 ANNE [1] 1:10</p>	<p>annual [3] 1:25 8:21 104:25 answer [23] 11:15 17:4 20:15 23:24 25:9 30:3 31:25 56:15,15 58:5 61:15 66:6 75:20 82:23 104:1,2 111:17 137:13 138:22 140:5 146:8 154:2 154:3 answered [2] 91:23 140:8 anticipate [1] 115:20 anticipated [1] 118:11 anticipating [1] 116:22 anyway [3] 36:22 156:11 167:22 apparatus [7] 79:2 134:6 153:20,22 155:10 179:7 184:8 apparatuses [1] 133:17 appear [2] 41:7 157:2 appeared [2] 3:20 78:23 applied [1] 69:11 applying [1] 23:3 appreciate [2] 8:9 175:17 appreciated [1] 26:22 approach [9] 41:18 109:15 110:1 120:13 172:14,20 174:21 175:12 175:18 approaches [1] 173:26 appropriate [6] 50:3,6 97:23 128:6 171:23 172:17 approval [11] 4:19 5:5,8 83:2 86:13 88:14,16 89:4 96:8 97:8 130:23 approve [2] 93:15 104:22 approved [7] 1:20 10:21 86:17,19 93:23 96:18 99:11 Aqua-Lung [1] 79:16 Aqualung [1] 14:2 Arctic [1] 9:25 area [14] 26:6 47:25 48:16 55:23,23 56:2,7 56:24 57:1,4 66:14 77:16 111:13 172:22 areas [6] 26:15 108:7,19 111:12 154:7,11 arm [1] 22:26 arms [2] 50:10 59:13 arranged [1] 133:3 arrangements [1] 132:26 arranges [1] 132:25 arranging [1] 133:8 asks [1] 30:17 aspect [2] 47:9 101:15 aspects [15] 41:4 42:19 43:1 46:21 56:11 57:26 74:9 84:10 106:10 116:7</p>
---	---	--	--	--

<p>134:14 136:19,21,25 164:20 assess [1] 29:20 assessing [1] 127:3 assets [4] 46:18 48:1,10 173:15 assigned [2] 31:13,13 assist [1] 149:18 associated [9] 13:20 15:6 27:26 40:15 92:4 102:12 118:15 126:24 136:1 association [2] 11:26 159:4 associations [1] 9:23 assume [3] 124:4 143:3 146:10 assumes [1] 171:18 assuming [5] 51:21 89:4 89:5,8 144:11 Atlantic [1] 42:22 attempt [1] 93:25 attend [1] 2:1 attended [1] 41:9 attendees [1] 8:19 attention [3] 175:21,22 175:24 author [1] 50:19 authorities [1] 1:20 automatically [1] 167:26 autonomous [3] 43:22 44:19 45:2 auxiliary [7] 21:10,18 22:8 25:3,14 60:20 62:4 avail [2] 137:7 138:20 available [8] 34:10 48:18 70:7 79:24 119:21 141:10 172:21 173:15 availing [1] 139:26 avenue [1] 153:3 average [1] 15:15 aviation [1] 69:9 avoid [2] 52:1,5 aware [29] 2:16 4:24 9:10 9:17 10:9,11 11:14 12:16 23:24 32:4 64:21,21 76:3 77:7 87:12,15 98:15,15 113:16 125:5,7 128:20 133:12 135:4 140:22 152:14 163:15,26 182:18 away [2] 12:26 116:11 awful [1] 55:14</p> <hr/> <p style="text-align: center;">-B-</p> <p>background [3] 86:15 86:15 175:14 backup [1] 79:17 bad [3] 127:4 167:20 179:15 balance [2] 16:8 82:2 balances [1] 40:23 balancing [1] 81:11</p>	<p>banging [1] 147:1 Banks [1] 172:23 bargaining [1] 55:16 Barnes [2] 78:17 91:12 base [5] 74:21 110:17 115:19 153:6,13 based [6] 3:17 14:7 47:11 47:13,22 104:25 basic [11] 34:12,14 72:11 72:11 85:24 114:5 120:14 126:3 135:16,18 136:7 basis [8] 1:25 2:26 3:2 74:26 89:11,11 100:17 142:15 beading [3] 71:7,9,10 become [9] 12:11 35:19 53:23 57:12,12 64:20 123:19 125:7 128:20 becomes [1] 22:10 begin [1] 133:7 beginning [1] 116:22 begs [1] 130:8 behalf [1] 26:17 beings [1] 153:10 belabour [2] 164:3 176:16 bell [1] 66:19 below [2] 82:15 144:5 belt [13] 35:1,4,8,13,17 35:20 36:6,20 37:3 50:16 61:9,23 62:7 belting [1] 67:3 belts [3] 35:16,18 67:4 benchmark [1] 92:15 beneficial [2] 31:16 37:9 benefit [1] 139:22 beside [1] 60:26 best [13] 14:5,16 40:6 43:6 71:2 74:26 78:7 88:25 91:26 135:11 154:20 174:9 184:7 better [20] 4:6 11:15,20 23:2 36:26 37:6 38:4 61:23 91:18,23 119:17 126:12 137:13 140:3 142:11 154:15 155:13 158:25 160:5 170:11 between [16] 18:5,16,18 21:4 23:14 24:7 39:10 52:8,13 69:25 70:2,2 153:11,19 163:1 172:19 beyond [3] 150:19 151:16 152:8 bid [1] 116:2 big [5] 33:18 51:7 73:13 166:3 168:8 bigger [3] 36:13,15 173:14 biggest [1] 169:24 bill [1] 165:25 bit [20] 3:10,22 5:3 17:18 21:4 28:5,9 34:22 36:15 36:16 40:14 60:11 66:2 66:4 90:20 127:21 134:2</p>	<p>141:5 158:25 178:26 black [1] 33:15 blanket [2] 115:6,7 bleed [2] 168:1,11 blow [1] 21:21 BMT [1] 47:3 board [7] 45:10,19,20 80:25 93:22 113:13 150:1 boat [3] 32:16 45:15,15 boats [1] 42:26 body [4] 23:9 97:4,5 146:24 book [1] 133:5 boots [3] 27:15 168:8,8 borne [1] 172:11 bottle [1] 79:16 bottom [1] 109:6 box [4] 23:13,17,19,22 BP [2] 46:5 172:14 brace [13] 49:3,6,8,9,18 50:12,15 51:5,24 59:7 59:10,12,15 breadth [1] 40:11 break [6] 55:6,8 58:18 61:18 88:16 131:20 breaking [1] 49:13 breath [2] 166:7,16 breathe [1] 120:6 breathing [15] 11:24 12:3,9,12 14:9 15:11 79:1 87:21 124:5 133:17 134:6 153:20,22 155:10 179:7 bridge [2] 76:6 183:4 brief [3] 183:3,3,6 briefly [1] 113:21 bring [9] 4:12 11:18 17:16 44:4 45:9 113:13 113:14 120:20 127:24 bringing [2] 175:21,24 brings [2] 75:25 99:11 broader [1] 164:11 broken [1] 9:1 brought [9] 4:18 9:18 44:13 45:7,10 97:20,26 103:12 128:24 BST [7] 7:24 8:2 52:22 93:26 108:20 122:8 134:21 BST-R [2] 93:26 134:21 build [2] 40:16 74:24 bulk [1] 97:6 bunch [1] 92:22 buoyant [2] 23:6 36:22 business [5] 40:15 116:25 121:18 164:24 172:6 butted [1] 25:5 buy [1] 90:17</p> <hr/> <p style="text-align: center;">-C-</p> <p>C [5] 96:20 100:7 125:6</p>	<p>129:5 162:11 C-NLOPB [7] 1:25 96:18,20 100:11 125:11 127:25 129:2 C-NSOPB [2] 127:26 129:6 cagey [1] 104:11 calls [2] 22:20 123:10 Canada [8] 42:9,22 55:24 74:12,16 127:26 162:22 164:6 Canadian [4] 3:19,23 11:26 46:9 cancelled [1] 112:18 cannot [1] 82:2 CanShip [1] 108:3 canvassed [1] 6:14 capabilities [1] 32:6 capability [5] 33:26 44:26 46:16 48:1,2 capable [5] 44:17 172:23 172:24,25 173:18 capacity [5] 107:16 159:11,12,14,19 capital [1] 107:5 CAPP [35] 4:10 5:16 7:9 7:9,15 11:15,21 12:1,8 12:18 13:6,10,11 14:4 26:8,18 27:5 80:24 86:13 86:22 87:12,15 88:15 92:3 93:8,12 99:1 100:24 124:16 127:11,22 128:12 131:11 134:13 156:21 CAPP's [1] 93:24 capsize [4] 74:3 75:18 145:3,8 capsizes [1] 60:10 capsizing [4] 73:18,23 73:26 75:8 care [3] 63:13 92:21,22 careful [1] 145:22 carefully [3] 15:20 72:18 81:9 carry [1] 150:6 carrying [1] 151:2 cart [1] 60:2 case [10] 22:7 25:20 30:9 70:11 74:24 116:23 147:3 148:25 149:5 168:22 cases [2] 122:6 145:4 Caspian [1] 47:6 cater [2] 107:23,24 catering [1] 108:8 caught [2] 155:6 163:21 156:16 ceiling [2] 33:16 168:24 cell [1] 141:22 center [1] 75:4 centre [26] 12:11 17:13 26:12 27:17,18 29:18,22 29:23,24 32:12,18 33:26 34:24 37:20 38:1 42:1 57:17 63:15 64:15 92:3</p>	<p>98:3 113:23 120:5 125:10 132:3 167:3 centres [1] 26:20 CEP [1] 55:16 certain [19] 3:12,19 46:19 49:15 52:16 56:9 56:11 69:10 84:10 93:15 103:22 104:3 105:2 106:12 128:3 139:9 148:26 150:16 171:18 certainly [42] 2:20 22:13 32:20 34:20 45:26 48:24 63:19 66:1 77:22 78:22 79:19,20 84:13,15,17 85:8 98:14 99:18 111:13 114:17 121:25 122:2,14 123:14 127:25,25 139:6 139:15,20 140:2 141:19 142:9,17 147:2 148:17 158:9,11 163:16 172:22 173:1,19 179:4 certificate [4] 121:7 126:11,15 184:1 certified [3] 27:10 41:6 79:13 certify [1] 184:2 cetera [8] 34:6 47:23 89:6,6,6 131:13 181:3,3 chain [1] 152:5 chair [1] 5:4 challenge [4] 35:4 36:16 90:20 171:19 challenges [4] 14:17 15:6 74:17 101:25 challenging [3] 28:26 43:18 141:5 chance [5] 138:25 141:9 147:7 148:9,13 change [53] 1:18,21 2:15 2:17,17 3:3 4:10,14,19 5:7,10,17 6:14 8:15 10:17,19,21,24 11:5 24:14 28:8 29:9,21,24 35:22 48:17 55:4 64:11 64:14,21,24 65:4,5,8 88:8 95:19,23 96:13 97:5 97:11,13,17,23 98:25,25 103:2,4 128:1 130:14,15 154:10 156:17 157:21 changed [7] 3:12,13 6:25 12:6 23:15 24:24 63:25 changes [16] 1:16 2:11 2:13 5:18 13:7 24:2,8 46:10 48:19 63:22,23 64:2,23 96:20 97:18 129:8 changing [2] 27:20 154:9 cheaper [1] 118:2 checklist [1] 92:15 checks [1] 40:23 chest [2] 59:13 166:12 chlorinated [4] 33:4 177:6,10,12 chlorine [1] 75:6 choice [1] 140:15</p>
---	--	--	--	---

<p>choose [2] 140:17 180:15 choosing [1] 140:23 Cindy [1] 184:11 circumstances [1] 69:13 clarification [2] 111:16 161:25 clarified [3] 85:7 103:12 111:26 clarify [2] 114:25 152:24 class [1] 59:23 classroom [3] 64:23 161:5,6 clear [3] 59:17 137:9 157:19 clearance [2] 83:16,18 client [2] 109:26 110:16 clients [3] 109:23 118:7 118:9 Clifford's [1] 50:18 climatize [1] 54:7 close [9] 19:6,8,20 41:16 41:19 117:1,3,6 147:20 closed [2] 29:18 169:26 closely [2] 3:22 121:9 co-counsel [1] 1:26 coast [7] 55:24 74:12,16 95:14,16 133:14 167:17 coastal [1] 173:4 cognizant [1] 40:5 cold [10] 49:4 51:26 52:1 52:4,6,6 54:3,5 56:2 160:17 collaborative [3] 175:4 175:5,18 collecting [1] 148:24 collective [2] 56:21 66:4 combination [3] 172:20 173:1,3 comfort [1] 122:18 comfortable [11] 35:16 53:9,12,16 82:12,15 83:1 101:24 102:1 122:13 169:6 coming [17] 9:23 51:21 65:1 72:16 83:24 94:5 119:11 122:13 158:6,10 164:13,23 165:1 167:22 168:13,14 174:26 comment [20] 2:4 9:16 10:7 21:1 27:21 36:18 37:16,24,24 39:2 49:11 49:18,23 50:8 65:22 82:9 82:10 110:5 150:10 176:2 comments [4] 22:4 39:12,19 182:7 commercial [2] 105:6 105:11 commercially [1] 105:11 Commission [3] 48:25 154:8 162:21 commissioned [1] 12:22 Commissioner [42] 1:2 1:6,7,26 41:8 54:12,15</p>	<p>54:22 61:13,16 110:26 111:6,7 131:16,21 155:19 155:24 160:2 162:2 163:15 164:2 165:7,18 168:6,18 170:7,13,18 172:3 173:21 174:12 176:1,4,9,13,17,18,25 182:7,8,16 183:9 committee [81] 4:13,17 4:21,21,23,23 5:2,5,6,9 5:12,13 7:3,8,10,11,14 7:15 10:15,20,21,26 11:4 11:5,7,11,19 12:15,19 13:1,16 24:11,12 39:25 65:2,4 76:16 93:13 95:21 95:24 96:8,14,21,23 97:2 97:8,10,14,16,21,22 99:1 100:10,12,25 119:20 121:14 123:1 124:3,4 128:10 129:4,11 130:4,5 130:10,12,13,21,25 131:2 131:5,8,13 137:25 158:8 158:11 159:8 162:10,25 174:16 committees [15] 1:23 1:24,24 2:9,12 5:14,15 5:20 7:5,17 8:21 39:16 41:10 96:2 98:23 common [1] 50:17 commonly [1] 14:14 communication [8] 24:5,7,18 63:26 99:24 124:23 152:5 163:18 communications [2] 63:21 163:17 community [4] 82:23 162:22,22 164:11 companies [7] 91:11,18 91:24 106:19 117:13 158:4 163:1 company [10] 5:21 6:16 40:9,15 47:4,12 48:5 106:8 108:6 152:16 compared [5] 18:20 50:3 67:22 110:3 146:3 compares [1] 19:25 comparison [3] 26:17 41:5 126:8 complete [4] 59:5 120:23 120:24 121:12 complexity [1] 13:19 compliance [1] 39:26 component [4] 8:25 52:24 111:26 114:20 compressed [4] 14:15 78:11 79:1 84:22 comprised [1] 12:1 compromise [1] 170:14 computer [2] 76:7,17 CONA [1] 159:7 concept [2] 45:1 173:23 concepts [1] 48:22 concern [5] 7:1 9:20 43:16 91:19 124:18 concerned [4] 166:22 180:12,13,18</p>	<p>concerns [12] 41:11 43:7 82:17,17,18,21 119:22 122:17,20,25 123:3 153:3 conclude [3] 125:25,26 155:25 condition [2] 38:11 72:3 conditioned [1] 53:23 conditions [14] 47:14 48:11,12 75:9,19,22 98:16 103:16,24 111:24 112:15 166:13 167:20 180:6 conducting [1] 32:26 conference [2] 9:22 78:21 configuration [8] 24:3 24:9,14,24 25:13 35:7 141:3,20 configured [1] 45:21 confined [1] 141:4 confirm [1] 4:11 confused [2] 30:20 119:2 connection [2] 7:6 26:3 connotation [1] 164:7 consensus [3] 97:15,22 127:19 consequences [1] 64:17 consider [9] 12:2 13:2 27:20 81:18 99:20 149:16 151:20 161:17 175:20 considerable [3] 51:16 56:23 149:13 considerably [1] 70:16 consideration [7] 12:9 25:24 32:14,17 33:22 101:19 127:3 considerations [1] 76:12 considered [4] 45:11,20 54:9 125:20 considering [3] 34:25 46:2 149:8 consistent [1] 118:25 consistently [1] 151:13 consisting [1] 128:11 consists [2] 128:12,12 consolidate [2] 156:12 158:16 constrain [1] 109:18 constrained [2] 29:1 109:14 constricted [1] 166:25 constructed [1] 90:8 consult [1] 5:14 consultant [1] 12:22 consultation [8] 7:7 8:16 65:10,14 154:23 155:1,8 158:26 consultations [1] 155:13 consulted [7] 2:11,13 7:1,3 8:10 63:20 100:4 consumables [1] 117:12 contact [1] 177:23</p>	<p>contained [1] 171:4 content [1] 3:15 continue [2] 53:11 142:14 continuous [1] 169:16 contract [5] 38:8,12 42:21 116:11,24 contracted [1] 114:11 contracting [1] 115:25 contractor [1] 124:25 contractors [1] 128:12 contracts [4] 42:8,10 115:26 161:15 contractual [1] 106:10 contrary [1] 167:10 control [2] 31:11 33:10 controlled [7] 73:19 75:11,16,22 144:17,20 166:13 convincing [1] 167:19 coordinated [1] 22:12 copilots [2] 137:14 138:23 corner [1] 165:23 corners [1] 22:22 correct [26] 4:7 13:22 19:16 61:2,11 65:25 67:7 67:17,24 78:9,14,17 85:16 94:20 98:4,23 112:5,7 115:14 117:24 128:14 142:22,25 178:9 178:11 184:3 correctly [3] 65:15 172:10 175:3 cost [18] 29:2 32:4,5 77:3 78:4 90:22,26 91:7,12 91:14 101:16 103:6 116:19 117:9,16,22 126:24 173:17 costs [1] 38:17 Cougar [12] 5:9 24:5,8 111:9 133:3,8 135:11 138:15 142:22 149:26 151:4,25 Council [3] 32:25 56:10 160:11 counsel [6] 54:16,25 94:12 111:2 168:19 175:10 Counsel's [1] 175:22 couple [23] 2:3 15:26 17:9 18:3 22:4 26:15 27:3,25 33:18 39:14 43:19 49:3 52:25 62:21 62:24,26 63:2 101:6 122:5 159:24 165:13 176:7,22 course [90] 1:16,21 2:14 2:15,18,21 3:5,5,7,8,12 3:16,18,20 4:5,7,12,26 5:1 6:25 7:19,22,22,24 7:26 8:4,11 28:22 34:13 34:17 51:18 52:20,23,24 74:11 86:2,5,6,17 94:3 94:15 95:1,5 98:26 104:23 105:1 112:4</p>	<p>113:18 116:6 122:9,10 125:18,21 126:3,4,4,5 126:15 134:5,7,8,9,10 134:11 136:16,18,24 137:3,5,5,22 138:5,6,6 138:12,15,19,19,26 139:7 139:13,20,26 141:14 142:13 147:3 151:19 155:11 172:12 179:16 courses [26] 2:12,25,26 3:2 4:9 6:5,9,10,13 24:16 34:2 85:26 86:10 93:16 94:1,26 104:26 107:22 107:24 108:23 110:16 114:22 116:21 134:13 140:2 142:15 cover [7] 111:12 134:14 135:23,24,25,26 136:8 covered [3] 6:12 111:11 137:2 covering [2] 118:15 136:18 covers [2] 157:12,15 craft [19] 43:12,15,22,24 44:1,19,22 45:2,10,14 103:14,15,19,22 172:6,7 172:24 173:4,7 crafts [2] 41:12,26 crash [1] 111:10 create [3] 33:14,19 107:16 creating [3] 46:22 77:24 91:20 crew [8] 41:25 42:13,15 42:17 43:4 132:2,4,7 criterion [1] 93:3 critical [1] 109:15 criticized [1] 110:7 cross [1] 28:16 crossed [1] 59:13 crucial [1] 99:15 crude [1] 76:9 cuffs [1] 177:13 current [5] 57:23 74:2 139:18 141:20 171:10 customer [1] 94:5 customers [1] 109:7</p> <hr/> <p style="text-align: center;">-D-</p> <p>Dacon [2] 42:23 43:13 Dangerous [1] 3:26 dark [1] 71:23 data [8] 48:3 72:4 74:16 74:18,20,24 75:3 102:17 date [3] 40:18 79:19 175:3 Dated [1] 184:9 dates [1] 6:7 DAVID [1] 155:22 days [15] 7:19 8:1,2 94:16,23 95:6,8,10 101:4 102:19 111:19 112:2 113:12,15 135:16 deal [13] 3:24 5:21 9:11</p>
---	---	--	--	--

10:2,3 26:15 28:13 30:25 34:5 44:23 58:18 123:24 124:13 dealing [12] 8:26 15:12 20:21 93:8,9 112:23 122:22,23 124:11 153:9 171:20 173:25 deals [2] 132:22 139:13 dealt [1] 8:25 deceased [3] 111:9 118:19 132:1 December [4] 4:16 6:8 12:4 95:24 decide [1] 121:1 decided [4] 14:25 84:3 86:26 87:19 decision [7] 13:3 65:18 83:21 86:25 89:12 129:3 153:13 decisions [4] 124:12 129:7 151:5 155:5 deck [2] 18:12 26:26 Decker [6] 49:5 50:7 53:26 58:9 150:7 168:12 Decker's [1] 111:22 dedicated [1] 115:5 deep [1] 166:16 deferral [2] 112:1,22 deferred [3] 4:25 112:24 112:25 defined [1] 45:9 definitely [2] 87:20 152:9 definition [1] 57:21 defray [1] 90:26 degrees [1] 167:18 delay [3] 86:24 153:18 156:19 deliberations [1] 12:11 deliver [7] 4:26 5:1 77:4 105:1 110:16 123:16 125:21 delivered [4] 3:7 6:5 108:24 134:11 delivering [6] 2:21 3:1 4:4,6 104:26 125:18 delivery [1] 104:23 demonstration [2] 13:18 83:17 Denness [1] 12:22 denser [1] 22:25 deny [1] 93:4 Department [1] 147:17 depend [7] 20:12 59:1 59:10,18 68:16 116:17 145:26 depending [8] 25:15 46:25 59:9 60:5,13 112:14 147:14 173:11 deploy [2] 103:18,21 deployed [1] 73:14 deploying [2] 103:10,15 deployment [1] 43:15	depth [2] 40:10 68:16 depths [1] 69:4 descent [1] 73:20 describe [1] 2:17 described [6] 1:16 50:11 58:10 61:7 150:7 166:9 design [2] 88:7 138:16 designated [1] 105:6 designed [12] 16:14,20 33:3 42:4 45:17 90:7 102:15 107:22 132:12 139:26 140:3 170:21 desirably [1] 61:8 destroy [1] 89:10 detail [4] 34:16 37:14 59:22 182:16 detailed [1] 27:8 details [2] 31:1 59:24 deterioration [1] 177:13 determine [6] 29:6 48:7 48:10 59:26 60:4 126:21 determined [2] 3:10 115:18 develop [7] 40:16 48:5 85:26 87:25 88:18 139:7 139:20 developed [13] 3:17,21 35:24 46:4,5 86:19,20 134:9 137:23,23 138:3,7 160:18 developing [4] 85:22,24 86:4,10 development [5] 32:21 48:5,16 77:5 159:18 developments [1] 159:16 device [11] 11:24 12:9 12:12 13:24 14:5,9,13 15:6 43:2,14 124:6 devices [5] 37:19 80:23 82:20 135:5,7 dexterity [1] 160:8 dialogue [3] 123:20 125:2,13 dialoguing [1] 174:8 difference [13] 18:5,5 18:16,18,21 19:9 21:1,2 35:2 38:3 40:8 130:19 160:20 differences [3] 21:16 39:10 65:9 different [31] 3:19 7:10 16:7 20:21,25 35:1 40:2 42:13,15 46:10 48:11,11 52:1 59:15,19 60:11 68:7 68:8,8 70:7,18 74:22,23 79:6 85:1 103:3 106:12 120:5 148:22 164:7 170:12 differentiating [1] 106:2 differently [2] 49:10 85:8 difficult [12] 22:10,17 23:1 41:23 62:5,15 68:14	118:25 146:6,6 148:18 151:8 difficulties [1] 37:1 difficulty [4] 52:23 97:4 149:14 150:2 direct [10] 1:14 7:16 14:6 24:2 63:21,26 100:22,23 110:19 125:1 direction [3] 33:10 60:13 60:19 directly [5] 10:14 108:3 112:3 125:22 148:5 disciplines [1] 173:24 disconnect [1] 21:4 Discoveries [2] 184:12 184:14 discuss [4] 100:14,16 149:11 162:4 discussed [6] 5:3 46:11 91:16 128:9,25 162:16 discussing [2] 164:19 173:25 discussion [6] 67:14 162:9 164:25 174:15,25 182:10 discussions [2] 126:22 157:17 disinterested [1] 92:24 disorientation [1] 51:7 disoriented [1] 30:20 dispersed [1] 172:16 disproportional [1] 6:20 distance [2] 25:15 173:8 ditch [1] 144:20 ditches [2] 41:18 141:11 ditching [3] 138:25 139:11 144:17 ditchings [1] 50:20 dive [2] 15:8 59:5 diver [2] 28:7 79:12 divers [6] 36:2 79:14,15 79:20 80:1 83:14 diving [1] 15:9 document [1] 131:10 documentation [2] 86:7 86:16 documents [1] 26:19 doesn't [11] 3:24 35:12 35:17 45:24 57:26 71:10 110:11,15 157:2 168:23 169:16 Dohey [20] 1:10 6:2 25:10,19,25 55:9,12 58:15 70:10,22 71:1 94:19 95:7,11,15 110:22 111:4 131:24 155:22 177:1 done [20] 41:24 42:2 47:11 48:17 52:21 54:6 54:24 56:9 69:2 72:19 83:13 89:9 96:3 98:11 138:18 146:18 147:25 153:25 154:4 180:5	door [1] 59:21 doors [1] 165:1 doubt [3] 14:16 75:26 105:21 down [25] 16:3,22 17:1 20:21 22:13 34:8 35:13 43:25 46:23 51:12 58:19 81:4,26 104:9 115:8 116:9,12,14 136:5 141:1 144:24 147:20,21 168:10 171:22 downed [1] 58:8 downwards [1] 16:25 Dr [2] 54:6 55:12 draft [2] 156:23,25 draw [3] 115:8 116:8,14 draws [1] 116:12 drilling [1] 128:11 driven [1] 36:12 drop [1] 20:9 dropped [3] 89:26 166:2 166:2 drops [1] 17:8 drowning [1] 83:11 dry [2] 143:3 169:6 dunking [2] 179:2,5 dunkings [1] 179:21 duplicate [1] 111:13 duration [7] 3:16 4:3,4 29:3,7 126:9 141:16 during [14] 21:13 34:6 81:6 82:3 116:6 150:15 151:19 155:11 176:3 180:7 181:9,11,14 182:2 duties [1] 3:20 duty [1] 31:15 dynamics [1] 75:3 <hr/> -E- <hr/> Earle [117] 55:2,10,11 55:13 56:17,25 57:19 58:1 61:1,12,20 62:1,11 62:16,23 63:1,6,10 64:1 64:6 65:7,13,26 66:10 66:22 67:10,20 68:1 69:7 69:22 70:19,24 71:12,16 71:26 73:7 74:10 75:1 75:24 78:1,8,15,20 79:10 79:25 80:5,11,17,21 81:10,15 82:4 83:3 84:5 84:19 85:6,15,19 86:3 86:21 87:6,10,23 88:3 88:12 89:1,7,17,24 90:4 90:9 91:5 92:1,10,19 93:7 94:4,9,21 95:4,9,13 95:18,26 96:11,17,22 97:3,24 98:8,18 99:4 100:6,26 102:13 103:8 103:23 104:5,16 105:4 105:15,20,24 106:14,23 107:8,21 108:14,18 109:1 109:5,10,20 110:6,21 111:11 126:17 Earle's [1] 123:25 early [10] 12:3 13:11	50:15 79:21 85:24,25 87:21 90:13 154:23 155:14 easier [2] 40:19 161:13 easily [2] 109:18 145:18 east [4] 55:24 74:12,16 167:17 eastern [2] 93:2 127:26 easy [3] 120:7 154:18 155:2 edge [1] 22:22 EER [1] 156:24 effect [1] 166:10 effectively [2] 6:11 141:23 effort [4] 22:26 70:16 175:4,5 egress [1] 22:1 either [4] 23:19 52:5 119:20 157:4 elements [1] 135:17 eliminate [1] 110:11 eliminated [1] 170:1 embolism [1] 83:11 emergency [10] 12:3 36:2 49:16,25 59:21 79:17 149:5,20 150:3 151:22 emphasis [2] 21:7 73:16 employees [1] 55:17 employer [1] 156:8 enclosed [1] 29:19 encourage [1] 119:14 encouraging [1] 149:23 end [9] 47:1 48:2 51:11 87:19 88:11 89:25 90:11 119:9 129:5 endorsement [2] 108:1 108:5 ends [2] 28:4 140:14 enemies [1] 136:9 energy [3] 16:20,24 42:8 engage [1] 106:9 engaged [3] 77:13,20 108:3 engineer [1] 68:9 engineered [1] 90:7 engines [1] 73:12 enjoyed [1] 167:13 ensure [4] 48:16 100:3 102:24 113:6 ensures [1] 40:22 entered [1] 26:9 entirely [4] 8:7 57:8 107:12 150:22 envelope [2] 74:7 121:20 environment [10] 34:6 37:7 46:9 56:3 81:21,22 81:24 82:26 91:20 102:15 environmental [3] 32:23 33:9 71:19 environments [1] 9:26
---	--	--	---	---

envision [1] 63:4	executive [2] 90:21,23	-F-	fees [1] 116:7	follow-up [4] 140:10 154:6 176:8 182:12
equally [1] 151:13	exemption [3] 111:25 112:22,26	fabricated [2] 89:19,26	feet [3] 168:7,21,24	following [1] 111:11
equipment [29] 34:15 40:18 42:1,4 43:3 47:23 60:26 88:7,10,22,22 103:2,3 107:6 124:21,24 125:16,19,22 131:12 146:11 158:19 159:24 160:26 161:14,16,17,18 162:13	exemptions [2] 111:22 113:3	face [7] 27:15 54:2 160:12,16,18 168:14 169:23	fellows [1] 64:2	force [24] 12:1 13:12 15:1 20:12 23:4,8 68:2,12,16 68:20,25 69:5,11,13 79:5 82:19 87:2,18,22 142:20 145:13,14 147:5 148:8
equipped [1] 103:13	exercise [15] 28:20 29:3 34:19,20 52:19 101:8,10 101:14,26 102:2,10,12 122:3 147:23 181:9	faced [1] 106:17	felt [5] 31:5 66:2 84:21 139:18 164:8	forced [1] 171:21
equivalent [1] 92:14	exercises [14] 30:14 32:16 33:5 34:7 52:26 101:12 112:18 118:1,2 120:24 135:25 179:26 180:2,24	facilities [6] 12:6 32:6 34:22 39:11,20 77:4	few [9] 15:25 17:19 44:12 61:15 156:5 162:4,4,5 164:5	forces [2] 68:7 73:18
escape [21] 27:22 29:17 40:16 66:18 77:9,14 132:11,23 134:6,15,24 135:14,22 136:1,26 137:2 141:4 142:6,10 143:21 179:7	exists [1] 78:5	facility [2] 77:23 107:15	fidelity [12] 16:7 35:9 66:11,15 67:1,12 71:18 72:1,14 76:14,20 78:3	forecasting [1] 3:25
essential [1] 166:18	exit [13] 22:13 29:13 30:8 59:17,18 60:1,4 62:8 63:17 70:3 149:7 150:3 151:22	facility's [1] 32:21	fifteen [1] 61:18	foregoing [1] 184:3
essentially [3] 86:22 94:5 108:8	exiting [1] 58:7	facings [2] 59:12,14	figure [3] 10:2 59:8 116:12	forgotten [2] 30:22 162:24
establish [1] 156:19	exhibits [1] 26:9	fact [14] 7:21 22:14 43:23 50:25 64:3 65:10,14 72:9 79:4,12 144:16 155:8 166:24 181:8	figures [2] 74:12,12	form [14] 4:14 10:19,24 11:5 94:1 105:7 121:12 123:7 124:11 125:13 157:20 158:8 159:3 175:20
established [2] 12:1 93:14	exists [1] 78:5	fact [14] 7:21 22:14 43:23 50:25 64:3 65:10,14 72:9 79:4,12 144:16 155:8 166:24 181:8	file [1] 183:4	formal [10] 24:6,17 64:19,20 78:2 99:2 111:25 122:24 123:14 158:26
estimate [1] 116:5	exit [13] 22:13 29:13 30:8 59:17,18 60:1,4 62:8 63:17 70:3 149:7 150:3 151:22	factors [1] 181:7	fills [1] 10:24	formally [6] 24:17 95:20 96:26 128:9 130:9,18
estimation [1] 75:7	exiting [1] 58:7	Fagan [67] 1:4,5,10,11 5:23 6:22 8:8 10:8,12,23 11:6,10,22 13:17 14:3 15:24 16:26 17:5,23 18:1 18:13,23 19:1,7,13,17 19:23 20:3,7,17 21:17 23:11 24:22 25:17,23 26:1 29:11,16 31:3,10 31:23 32:11 33:13 34:23 36:19 37:10 38:19,24 39:4,9 40:26 44:7,18 48:26 50:9 51:25 53:15 54:10 66:12 94:10 97:25 103:9 111:21 115:4 126:18 153:17 168:20	final [2] 88:14 153:16	forth [2] 9:6 99:13
et [8] 34:6 47:23 89:6,6,6 131:12 181:3,3	exits [7] 59:19,21 70:4,7 149:20 161:10,11	fair [17] 7:11 13:26 16:15 17:6 57:6,8 66:2,4,12 74:11 92:11 110:4 145:19 165:15,17 170:10 178:25	finalize [1] 86:12	forthright [1] 119:14
Europe [4] 14:26 15:2 82:19 87:3	expect [7] 50:5 67:23 81:21 98:20 116:5 148:17 168:2	fairly [11] 14:13 19:6,8 76:9 99:23,24 127:15 145:18,25 169:6,6	finalized [1] 157:1	fortunately [2] 74:18 111:10
evacuation [8] 46:22,23 47:5,20 60:8 101:13,14 156:20	expects [1] 54:26	fall [1] 131:13	finally [2] 94:12 104:6	forum [1] 154:24
evaluate [3] 76:14 92:15 93:3	expensive [4] 33:6,7 38:15,18	familiar [4] 25:8 35:19 92:5 140:20	finds [1] 61:3	forward [9] 59:11 90:23 152:19,26 154:8,25,26 159:13 163:17
evaluate [3] 76:14 92:15 93:3	experience [5] 37:4,22 118:24 119:13 158:18	families [3] 111:2,8 132:1	fire [3] 7:26 8:2 166:12	forum [1] 154:24
evaluating [1] 78:3	experiencing [3] 39:5,6 119:16	fall [1] 131:13	first [37] 1:15 4:11 9:15 12:16 22:4 44:1 52:22 55:1,19 58:19,20,25 63:5 64:8 65:16 70:13 93:21 93:24 99:21 111:17,18 112:24 113:21 114:3,4,6 114:8,15,22 124:22 132:2 145:5 155:5 165:3,19 169:11 172:12	forward [9] 59:11 90:23 152:19,26 154:8,25,26 159:13 163:17
evaluation [4] 64:16 121:11 123:7,10	expert [3] 56:1,12 167:15	fairly [11] 14:13 19:6,8 76:9 99:23,24 127:15 145:18,25 169:6,6	firsthand [1] 158:19	found [2] 50:21 118:24
evaluations [1] 119:13	expertise [13] 55:25,25 56:2,7,24 57:1,4,7,10,14 92:25 97:6 99:6	fall [1] 131:13	fingers [1] 160:8	founded [1] 43:10
event [8] 28:6 47:19 75:15 113:11 120:13 139:11 177:21 183:1	experts [3] 29:20 84:8 92:13	fall [1] 131:13	fire [3] 7:26 8:2 166:12	four [14] 34:25 36:26 37:8 51:1,1,4,10,18 61:22 62:3 95:6 111:14 111:15 128:2
everybody [14] 6:19 27:4 28:19,19 41:4 66:16 72:16 127:19 141:9,13 157:20 162:17 163:20 174:7	explain [7] 16:13 42:3 58:6,11,15 146:20 177:7	familiar [4] 25:8 35:19 92:5 140:20	first [37] 1:15 4:11 9:15 12:16 22:4 44:1 52:22 55:1,19 58:19,20,25 63:5 64:8 65:16 70:13 93:21 93:24 99:21 111:17,18 112:24 113:21 114:3,4,6 114:8,15,22 124:22 132:2 145:5 155:5 165:3,19 169:11 172:12	four-point [3] 34:26 35:3 36:5
evidence [13] 13:24 17:7 53:22 54:5 66:2 78:17 80:6 111:22,23 112:10 118:11 126:16 131:11	explained [4] 16:3 41:14 49:9 140:17	families [3] 111:2,8 132:1	fitting [1] 180:14	fourth [1] 31:5
exact [3] 79:19 134:19 137:15	explanation [1] 49:17	fall [1] 131:13	fittings [1] 180:12	FPSO [1] 55:18
exactly [4] 20:10 106:18 145:25 161:11	explore [2] 12:20 176:23	fairly [11] 14:13 19:6,8 76:9 99:23,24 127:15 145:18,25 169:6,6	Fitzwright [1] 101:24	frame [2] 61:8 62:6
examination [7] 1:10 55:10 111:4 131:24 140:11 155:22 177:2	expose [1] 72:18	fall [1] 131:13	five [4] 8:1 111:14,15 135:16	framework [3] 157:9 157:26 158:26
examine [1] 174:16	exposed [1] 180:25	fall [1] 131:13	five-day [1] 7:25	frequency [4] 127:14,16 127:20 128:5
examined [1] 54:17	express [1] 122:3	fall [1] 131:13	flailing [2] 50:10 51:6	frequently [1] 127:11
example [6] 21:5,8 53:13 60:14 83:19 122:17	extend [5] 128:23 129:1 129:2 141:15 155:1	fall [1] 131:13	Fleet [1] 47:3	friend [1] 66:12
exceed [1] 181:15	extended [2] 95:1 179:8	fall [1] 131:13	flexibility [1] 28:5	friends [1] 75:5
except [1] 14:21	extending [1] 128:1	fall [1] 131:13	flight [10] 132:2,4,6 135:10 141:24 160:4 169:4 170:2,19,21	frightened [1] 118:20
exchange [1] 64:16	extensive [3] 9:5 32:1 164:16	fall [1] 131:13	floatation [1] 22:11	front [3] 49:6 109:7 164:23
	extent [1] 163:2	fall [1] 131:13	floor [3] 18:12 19:25,26	fuel [8] 21:10,18 22:8 25:5 60:20 62:4 141:21 141:22
	externally [1] 77:6	fall [1] 131:13	flotation [2] 37:19 73:14	full [9] 6:10 20:15 29:2 77:19 116:14 161:5 164:18 167:11 168:20
	extra [1] 141:21	fall [1] 131:13	flowing [1] 99:7	fully [3] 38:9,10 125:5
	extracting [1] 162:19	fall [1] 131:13	flows [1] 99:15	fund [2] 91:2 163:3
	extremely [3] 68:14 151:8 163:19	fall [1] 131:13	flying [4] 71:6 103:17 104:2 183:7	
	eye [1] 159:12	fall [1] 131:13	focus [6] 16:9 27:7 40:12 57:16 111:19 126:1	
		fall [1] 131:13	focused [1] 40:13	
		fall [1] 131:13	focuses [3] 16:8 135:21 136:25	
		fall [1] 131:13	focusing [3] 34:13 72:10 102:2	
		fall [1] 131:13	follow [1] 149:25	

<p>fundamental [1] 14:23 fundamentally [7] 9:25 57:15 68:26 85:4 105:14 120:16 121:17 funded [6] 77:6 104:11 104:19,21 159:10 162:26 funding [12] 77:10 89:6 90:15 91:21 105:7 106:26 107:4,7,17,20 110:9 163:5 fuselage [1] 161:9 future [4] 25:22,24 46:13 175:8</p> <hr/> <p style="text-align: center;">-G-</p> <p>gain [1] 171:12 gap [5] 3:11,14,15 4:2,3 gasp [2] 53:21,25 gather [2] 102:24 171:5 geared [1] 12:6 general [9] 4:18 15:16 55:20 109:25 110:17 118:15 121:26 137:5,6 generally [21] 10:13 11:3 15:9,13,14 21:10 35:15 45:9 63:23 100:24 110:3 116:17,24 124:22 126:13 127:17 128:26 135:6 136:24 138:6 144:16 generate [1] 106:11 generations [1] 13:25 gentlemen [5] 1:3 55:12 62:17 111:7 182:10 genuine [1] 55:25 Geoffrey [1] 178:1 given [10] 32:15,17 33:21 81:7 99:5 115:20 138:23 141:19 155:8 165:9 giving [2] 8:5 136:10 glad [1] 85:7 glass [1] 70:14 glove [2] 160:5,5 gloves [9] 37:18,22 122:19 160:1,3 169:19 169:20,25 170:3 God [1] 66:22 goes [12] 1:18 10:19 48:21 105:2 116:8,11 117:11,12,13 136:4 141:13 147:19 goggles [1] 160:14 gone [8] 8:12 57:12,21 57:25 61:6 154:22 177:20 177:22 good [26] 1:3 13:18 16:4 26:20 31:6 37:3 41:7 53:17 55:12 56:5 75:7 77:12 94:11 99:9 109:26 111:6 127:4 131:26 150:12 163:26 164:9,10 164:17 166:16 174:24 179:14 Goods [1] 3:26 government [6] 107:3 107:18,19 110:10 156:18</p>	<p>163:4 Governments [1] 163:4 Grand [1] 172:23 grant [2] 112:26 113:3 grants [1] 106:26 gravity [2] 20:12 75:5 great [1] 73:13 greater [1] 83:11 Greg [7] 36:18,20 44:4 65:22 71:2 73:24 121:23 Greg's [1] 44:2 GREGORY [5] 1:9 55:9 111:3 131:23 155:21 group [4] 6:24 54:13 107:22 173:23 groups [1] 57:13 growing [3] 99:21 157:26 159:12 grows [1] 99:26 Gs [1] 16:22 guess [33] 4:19 14:18 23:24 24:1 30:9 31:24 40:20 43:19 52:25 53:21 54:12 58:14 70:13 78:26 81:4,19 82:17 85:25 87:16 90:17 93:18,24 99:20 106:6,15 111:10 121:26 154:25 156:10 157:16 167:12 178:25 181:8 guessing [1] 62:21 guidance [1] 82:11 guide [7] 39:25 156:24 156:25 157:2,5,8,12 guidelines [2] 106:13 134:14 guides [1] 131:10 guiding [1] 82:5 guys [4] 21:24 27:23 29:22 143:21</p> <hr/> <p style="text-align: center;">-H-</p> <p>half [1] 171:16 Halifax [1] 78:22 hand [5] 22:12,12 62:6 165:21 166:17 handhold [1] 22:15 handle [1] 9:13 handles [1] 70:5 hands [2] 145:24 147:16 Hansen [18] 37:21 38:3 38:9,17,21,25 59:3 99:10 101:16 115:13 116:1 124:1 162:12 167:7 170:22 178:2,7,14 Hansen's [1] 171:15 happening [3] 24:10 63:25 162:15 happy [3] 32:5,7 139:6 hard [5] 68:24 113:5 165:23 179:12,13 hardly [1] 166:6 harm [1] 82:3</p>	<p>harness [11] 34:26 35:3 37:1,9 51:1,2,4,10,18 61:22 62:3 harnesses [2] 34:26 36:5 Harris [2] 182:22 183:5 Harvey [80] 1:9 13:18 13:22 14:1 17:8 18:4,9 18:15,25 19:5,11,15,21 20:1,5 21:3 22:3 30:5 31:8,21 36:24 49:8,20 50:13 52:14 55:9,13 56:8 58:15,17 61:2,10,21,25 62:9,13,19,25 63:3,8 65:24 71:4,14,22 73:11 79:11,18 80:3,8,15,19 110:23 111:3 119:1 121:24 131:23 137:12,19 142:26 143:5,12,16,23 144:2,8 145:2,15 148:6 148:11,16 149:10 150:9 155:21 167:13 168:4,16 169:10 170:9,16 177:1 Harvey's [1] 44:5 hazards [1] 135:24 health [9] 8:20 15:19 41:10 92:21,22 93:2 96:2 98:22 147:20 hear [9] 63:13 65:15 78:2 78:21 98:21 99:2 105:23 154:3 167:6 heard [16] 1:21 12:8 24:26 27:11 49:5 52:10 66:1 85:8 87:11,19 98:3 104:8 142:21 176:19 177:4 184:4 hearing [1] 184:4 heavy [4] 73:11 168:7 177:6 178:24 Hebrides [1] 172:15 heck [1] 76:1 height [5] 17:16 18:5,10 18:11 67:2 held [3] 49:5 182:26 183:1 helicopter [99] 2:16,18 2:20 3:18,22 6:16 16:21 20:13,20 21:22 24:3 25:8 35:20 40:16 41:15,17,18 43:25 46:23 50:16,20 51:15 58:8,24 59:26 60:3 60:6,9 61:4 62:8,18 63:17,22 64:3 65:17 66:26 67:5,23 68:18,18 70:17,17 73:19 74:18,22 75:4,12 77:9,14 81:16 83:9 94:10,14 99:12 101:7,9 102:10 103:11 103:17 111:10 132:11,23 134:5,15,23 135:14,22 136:1,4,5,11,25 137:1,2 137:11,17 138:13 141:3 141:12 142:10 144:17 148:7 150:17 152:12 157:3,6,13 158:12 161:7 165:3,11 166:1,9 169:4 171:21 172:21 173:9,11 179:6 helicopters [15] 25:2 52:8 69:25 70:2,3 72:23</p>	<p>73:10 80:14 103:25 104:1 138:24 142:22 146:5 160:26 172:18 helideck [2] 7:23 8:6 heliport [2] 63:5,24 Helly [19] 37:21 38:3,9 38:17,20,25 59:3 99:10 101:16 115:13 116:1 124:1 162:12 167:7 170:22 171:15 178:2,7 178:13 help [2] 160:16 176:12 helpful [5] 31:18,22 33:21 66:6 161:1 helps [1] 20:19 hereby [1] 184:2 Hibernia [3] 55:18 64:8 172:8 high [15] 41:13,22 43:9 43:16,17 44:23,24,24 68:10 112:19 121:3 162:10,11 173:5,23 high-back [2] 34:25 35:11 higher [3] 17:12 138:26 147:7 highest [1] 163:7 highly [4] 120:8 149:1 152:2 172:23 himself [1] 53:26 hindsight [1] 154:18 historical [1] 6:4 hit [4] 146:1 165:23 166:2 166:12 hits [1] 20:13 hitting [2] 147:15 165:22 hold [6] 15:3 60:18 61:8 87:4 161:8 166:17 holding [3] 60:12,15 168:22 holes [1] 33:16 Hollett [1] 54:18 Holyrood [1] 106:18 hood [2] 59:4 167:26 hoops [1] 43:4 hope [5] 147:1 168:23 174:13 175:12,23 hopefully [2] 60:8 136:11 hoping [1] 142:4 hose [1] 166:12 hoses [1] 33:15 hospital [3] 92:20 93:1 93:2 hospitals [2] 92:23 93:1 host [1] 26:20 hostile [1] 9:25 hour [1] 171:7 hours [2] 94:18,18 house [1] 121:14 housekeeping [1] 182:16 HSE [3] 57:13 123:16</p>	<p>125:4 HUEBA [12] 13:20 78:9 116:21 133:17 134:18 135:5 140:8 165:3,4,8,8 165:12 HUET [59] 15:25 16:4 17:12 18:8,17,21,24 21:5 23:15,18 26:16 27:4,11 27:13,18,18,22 28:2,9 28:19 29:12,18 30:15 36:4 39:17 52:18,24 53:5 64:15 67:4,17 70:25 71:13 72:26 76:8 77:18 102:11 119:3 121:25 122:1,6 132:10,22 133:1 134:7,8,15 135:14,21 136:24 140:16 142:2 143:9,17 145:12 146:10 146:18 147:11 169:14 HUETs [1] 77:24 human [3] 49:13 153:9 153:10 Hurley [8] 54:17,19 155:20,22,23 161:24 162:3,6 husband [1] 118:19 Husky [1] 42:8 hybrid [1] 85:11 hypothermia [1] 180:25</p> <hr/> <p style="text-align: center;">-I-</p> <p>Ian [1] 12:22 ice [8] 8:25 9:1,2,9 10:3 10:4 97:26 98:13 Icelandic [2] 98:6,9 icy [1] 8:26 idea [10] 36:23 41:17 48:3 72:2 97:21 99:9,9 119:17 143:8 164:1 identified [3] 4:2 39:22 151:18 identify [2] 177:20,26 immediate [1] 163:22 immersed [2] 169:1,2 immersion [13] 101:15 117:21 118:1 160:4 168:26 169:2,5,12,13,18 170:2,11 171:1 impact [10] 16:20,21,22 21:26 59:7,16 64:14 73:26,26 103:6 impacts [3] 38:16 103:4 103:5 impediment [1] 63:17 implement [2] 14:4 142:4 implementation [2] 153:21 155:2 implemented [7] 10:22 14:9,12 89:13 97:17 151:4 153:23 implications [1] 13:8 important [14] 28:13 31:1 55:21 73:15 76:11 82:5 157:8 158:13,24</p>
---	---	--	--	---

<p>160:6 163:19,24 166:21 169:21 impossible [1] 62:15 impression [1] 58:9 improve [1] 142:16 improved [2] 158:5,9 improvement [3] 99:14 99:19 157:21 improvements [1] 156:2 in-rush [1] 51:16 inboard [1] 62:4 140:15 140:21 141:1,7,9,15,23 141:25 142:6,6 Inc [2] 184:12,14 inch [2] 142:24 146:4 inches [4] 17:2 18:18 20:2,4 incident [6] 74:22 75:17 147:18 156:16 171:21 173:12 incidents [1] 74:19 include [5] 8:24 64:23 136:6 146:13 149:17 included [3] 114:5 134:23 136:16 including [4] 32:23 56:8 164:15 174:23 incorporate [1] 65:6 incorporated [1] 157:5 increase [8] 28:25 29:7 101:19 126:25 127:16,16 127:20 159:18 increased [2] 141:23 150:25 indeed [5] 25:12 66:9 76:17 105:10 152:22 independence [1] 110:13 independent [2] 106:9 110:19 indicate [4] 75:14 103:12 115:21 121:13 indicated [14] 1:12 8:22 17:11 34:24 90:23 111:7 112:9 113:22 115:4 117:22 118:14,19 126:8 156:18 indicating [1] 12:19 indication [3] 3:4 90:13 90:16 indications [1] 145:20 indicative [3] 181:10,13 181:19 individual [12] 5:21 7:4 7:17 11:11 62:2 118:12 118:18 121:22 126:26 150:23 152:16,19 individually [2] 28:14 120:21 industries [1] 107:25 industry [47] 1:22 14:14 32:2,4 34:4 40:5,6,6,14 44:15 46:7 57:1 93:18 93:19 99:21 107:1,3,9</p>	<p>107:13,17,23,25 108:4,8 108:10,13,24,26 109:16 110:3,14,17 125:4,4,5,9 127:4,23,24 134:12 138:8 156:19 159:12 164:11 174:15,18 175:9 industry's [1] 175:16 inform [1] 16:17 information [23] 2:7 6:12,21,26 24:4 37:13 47:16 48:24 64:16 72:7 86:15 99:7,15 102:17,24 121:8,10 152:1,20 153:7 154:13 161:5 174:8 information/presentation [1] 161:3 ingress [1] 66:25 initial [1] 153:19 initiated [1] 94:23 injured [1] 142:13 injuries [9] 50:22,23,25 50:25 51:3,6 145:24 147:13,24 injuring [2] 147:15,26 injury [3] 81:22,25 147:19 input [6] 76:6 119:8 124:10 138:15 162:17 163:9 Inquiry [10] 45:3 76:12 94:12 118:8 155:25 156:1 156:11 158:7 168:19 175:22 inside [2] 27:14 68:17 insight [1] 2:5 insights [1] 155:26 installations [2] 158:3 172:19 installed [2] 62:18 63:7 instance [7] 44:1 72:5 76:3,5 107:26 125:6 161:6 instantaneous [1] 166:5 instead [1] 49:6 institute [17] 1:17 2:22 6:6 9:10 26:4 27:9 33:11 42:11 76:4 77:3 94:24 100:19 118:13,22 119:15 156:9 163:3 institution [6] 6:18 24:7 39:3 179:14,25 180:19 institutions [2] 38:1 39:23 instruct [2] 59:16 83:19 instructed [1] 49:23 instruction [2] 166:1,19 instructional [1] 41:3 instructions [1] 150:6 instructor [2] 122:8 153:11 instructors [8] 56:6,8 63:23 76:25 120:1,18 121:8,9 instructors' [1] 117:11 insult [1] 109:12</p>	<p>integrate [1] 174:6 integrates [1] 160:23 integration [1] 174:4 intend [2] 26:14 37:13 intended [1] 140:4 intent [2] 45:16 177:18 intentions [2] 77:22 154:20 intents [1] 94:22 interact [1] 160:15 interaction [1] 153:11 interactive [1] 164:26 interest [1] 118:12 interested [1] 6:24 interesting [1] 8:18 internally [1] 2:24 international [1] 126:8 introduce [1] 37:1 introduced [5] 36:9 133:20 134:4,5 165:9 introduction [1] 133:21 inverted [1] 62:10 investigated [1] 8:13 investigating [2] 10:6 173:20 investigation [1] 12:8 investment [1] 107:6 invitation [5] 96:24 97:7 128:17,19 129:15 invited [5] 2:1 128:14 129:22,24 130:5 invitee [2] 123:2 128:11 involuntary [1] 53:24 involve [8] 21:23 57:26 116:19 158:11,12 159:6 162:11 174:22 involved [15] 12:11 13:14 38:5 47:5,25 57:11 68:12 77:16,17,21 138:8 152:5 162:23 166:8 174:7 involvement [10] 7:13 7:16 8:16 100:7,12,21 100:22,23,23 110:20 involves [2] 21:20 159:4 Irving [1] 108:6 Island [1] 47:7 issue [48] 3:8 6:23,26 8:9 8:17 9:12 12:17,20 13:10 13:12 14:18 29:21 35:9 36:13,16 37:26 39:15 47:26 51:7 66:15,18,24 67:1,3 74:5 83:4,25,25 84:2 93:4 97:25 110:11 114:26 117:21 120:3 121:6 122:14 123:12 125:8,17,20 128:20,23 130:2 156:14 159:26 167:14 169:17 issues [51] 2:3,5,8 13:15 14:21,23 15:21 24:1 27:25 34:5 38:20 43:19 66:11 67:11,21 72:24 73:1 75:18 76:15,20,23 77:8 79:2,8 82:14 99:16</p>	<p>100:4,14 103:14 109:16 118:15 121:13,16 123:21 125:1,3,15 126:2,23 127:2,6,10 135:23 149:11 152:14 155:9,11 158:10 159:15 163:10 170:26 it'll [4] 17:20 151:26 152:2 163:16 items [1] 159:24 itinerary [1] 118:9 itself [3] 27:9 39:17 60:3</p> <hr/> <p style="text-align: center;">-J-</p> <p>Jack [1] 182:22 JAMIE [1] 111:4 job [6] 38:4 41:7 57:22 57:25 121:2,5 John's [3] 9:23 184:5,9 JOHS [1] 5:14 joint [2] 8:19 39:16 jostling [1] 150:7 judgment [1] 76:15 judgmental [3] 76:25 152:2 153:9 Judy [1] 184:13 jump [3] 171:3,11,19 jumping [1] 17:18 jurisdiction [6] 3:19,24 4:9 150:20 151:16 157:25 jurisdictions [5] 140:19 140:26 141:7 157:18,19</p> <hr/> <p style="text-align: center;">-K-</p> <p>Kate [2] 131:24,26 keep [6] 29:24 30:6 40:18 53:9 159:11 169:5 Kent [1] 108:5 kept [1] 82:14 kicked [1] 27:15 kilometres [1] 172:9 kind [4] 69:18 93:9 133:8 149:8 kinds [1] 76:11 Kingdom [2] 45:3 106:6 knew [2] 86:1 150:13 knock [4] 22:23 59:20 71:9 165:22 knocked [1] 166:11 knocking [3] 21:20,23 22:21 knots [2] 44:26 173:5 knowing [3] 141:11 146:24 148:8 knowledge [10] 7:7 8:12 14:7 46:6 56:21 72:12 74:2 151:11 153:7 175:13 knowledgeable [1] 164:20 known [2] 31:25 80:24 knows [1] 56:14</p>	<hr/> <p style="text-align: center;">-L-</p> <p>labour [2] 147:18 182:20 Labrador [3] 132:8 162:23 184:6 lack [1] 8:12 ladies [2] 1:3 182:9 lady [1] 164:20 land [4] 28:21 103:11 144:18 145:23 landed [1] 43:26 landing [16] 2:16,18,20 3:18,23 8:25,26 9:2 41:15 75:16,19 94:11,14 97:26 98:13 172:18 lap [5] 35:1,3 37:3 50:16 61:23 large [8] 9:22 27:15 29:13 55:17 97:6 99:6 166:25 180:21 larger [3] 19:12,14 163:25 last [13] 23:16 24:26 26:9 39:16 41:10 52:21 53:3 122:5 159:23 160:24 162:7 165:24 176:1 latch [2] 35:14,14 late [7] 13:5 14:24 78:12 79:5 86:25 120:18 131:17 lateral [1] 61:23 layman's [1] 73:9 leader [2] 44:14 182:20 leading [1] 54:13 leaked [1] 167:5 lean [1] 23:8 learn [1] 154:14 learned [2] 30:23 31:1 lease [1] 38:8 leased [1] 37:21 least [5] 26:5,23 50:10 52:2 112:17 leave [4] 18:3 29:20 30:26 164:13 lecture [2] 21:6 164:25 ledge [7] 18:6,7,19,20 19:25,25 166:17 left [6] 4:25 11:21 30:1 53:7 140:12 165:21 legitimate [1] 124:17 legs [2] 167:9 168:7 length [6] 95:5 126:2,14 126:25 127:16 140:16 lengthy [2] 154:2 169:7 less [9] 70:16 106:20 136:21 137:17,20,22 142:12 145:9 146:6 letter [3] 12:18 64:25 86:26 level [7] 122:18,21 139:18 162:10,11 163:7 173:23 license [1] 132:5 lieu [1] 44:22</p>
--	--	--	--	---

<p>life [8] 32:16 37:8 40:24 42:26 45:15 148:7 154:17 165:15</p> <p>lifting [1] 167:9</p> <p>light [5] 3:9 70:14 71:23 176:12 182:10</p> <p>lighter [1] 70:15</p> <p>likelihood [8] 22:16 50:2 73:18,23,25 74:4 75:8 169:26</p> <p>likely [7] 42:5 47:1 49:25 51:10 118:14 142:12 155:1</p> <p>limit [3] 69:14 72:19 147:21</p> <p>limitations [2] 73:5,5</p> <p>limited [2] 72:9 180:20</p> <p>limits [2] 152:10 159:14</p> <p>line [12] 24:2,6,17 63:21 63:26 109:6 110:18 113:20 118:5 124:23 146:21 150:8</p> <p>lines [4] 41:2 99:24 108:6 111:14</p> <p>list [4] 55:2 111:1 138:6 138:20</p> <p>listening [2] 146:22 173:22</p> <p>literally [1] 106:17</p> <p>litre [1] 171:16</p> <p>Local [1] 55:16</p> <p>location [4] 20:18,22,25 36:14</p> <p>locations [1] 92:24</p> <p>locked [1] 51:19</p> <p>longer [2] 72:15 84:22</p> <p>look [56] 13:7,13 15:2 24:20 27:16 28:9,11,23 29:5 34:22 35:6,22 40:1 42:18,20,22 45:24 46:8 50:20 69:2 72:17 73:10 76:8,13 77:25 79:6 80:25 82:20 92:26 100:18 103:3 107:7,9,13,18 121:15 125:10 126:20 129:1 131:8 142:9,14 149:4,6 150:2 154:18 155:2 157:11 158:8 159:25 160:9,11,19 161:13 163:25 173:14</p> <p>looked [19] 3:9 12:17 26:3 36:9,17 41:1 46:13 48:23 66:21 77:8 98:17 100:2 126:7 130:24 131:4 159:10 170:25 171:15,25</p> <p>looking [34] 13:14 19:9 29:5 34:21 42:25 46:1,3 46:20 47:8,9,18 56:18 56:20 60:12 69:6 74:7 77:7,11,23 87:17 90:11 101:13 142:2,5 154:8,21 155:5 157:2 158:5 159:2 171:16 172:1,15 175:7</p> <p>looks [1] 181:2</p> <p>loose [1] 140:14</p> <p>lose [1] 22:16</p>	<p>lost [1] 22:14</p> <p>lots [4] 17:6 51:23 148:21 183:2</p> <p>low [2] 50:3 146:25</p> <p>low-back [1] 35:11</p> <p>lower [2] 18:19,20</p> <p>lowest [1] 18:17</p> <p>lowly [1] 133:24</p> <p>LUNCH [1] 131:20</p> <hr/> <p style="text-align: center;">-M-</p> <hr/> <p>Magellan [1] 47:12</p> <p>main [1] 30:10</p> <p>maintain [2] 40:22 115:21</p> <p>maintained [1] 110:19</p> <p>maintenance [2] 115:1 117:23</p> <p>major [5] 10:4 35:8 50:21,24 107:6</p> <p>majority [2] 50:21 67:6</p> <p>makes [5] 130:19 141:5 168:14 173:16 179:13</p> <p>Man [1] 46:24</p> <p>manage [6] 29:8 33:11 84:16 102:6 142:11,16</p> <p>manageable [1] 124:11</p> <p>managed [8] 15:20 33:4 81:8,9 82:11,26 85:10 85:11</p> <p>management [8] 13:9 28:1 82:14 85:5 123:18 144:13,24 147:11</p> <p>managing [3] 74:8,9 103:5</p> <p>mannequins [1] 43:5</p> <p>manufacturer [1] 146:13</p> <p>March [3] 6:7,8 111:9</p> <p>marginally [1] 126:12</p> <p>marine [12] 2:22 6:6 34:2,4 40:14 42:10 76:4 77:3 94:23 134:12 138:8 163:3</p> <p>mark [1] 72:3</p> <p>market [2] 79:24 105:6</p> <p>Martin [35] 111:1,4,5 112:8,20 113:8,19,26 114:9,19,24 115:12,17 116:13 117:2,14,20 118:4 122:16 123:23 124:9 125:24 127:7 128:7,18 129:9,14,18,23 130:1,7 130:22 131:3,14,17</p> <p>mask [4] 59:5 160:16,18 160:23</p> <p>masks [1] 160:12</p> <p>mass [1] 101:13</p> <p>material [1] 70:15</p> <p>matter [1] 35:12</p> <p>maximum [2] 69:10 142:23</p> <p>may [31] 24:12,20 25:20</p>	<p>25:21 26:4 27:14 28:2 46:12 54:3 68:20 69:6 73:13 75:17,17,20 102:21 102:25 116:19 118:10 120:2 130:13,15 133:22 138:11 152:15 154:26 159:6 167:18 170:24 173:2 181:8</p> <p>mean [46] 10:17 20:19 21:24 23:14 32:1 35:10 49:14 52:2,9 55:23,25 70:1 71:19 72:1,3 73:9 74:16,18 82:1 85:8,24 89:18,25 91:19 97:12 99:19 101:7 110:1,15 115:18 124:16,22 127:10 128:21 132:4 134:4 144:15 148:20,22 153:5 153:8 154:1 168:2 174:5 176:16 181:13</p> <p>means [8] 4:13 22:6 29:17 74:2,20 76:7 163:24 184:7</p> <p>meant [2] 98:6 177:7</p> <p>meantime [1] 47:17</p> <p>measured [1] 171:8</p> <p>medical [14] 14:22,23 15:14 45:22,23 81:6 82:23 83:5,15,18 84:11 84:11,12 164:16</p> <p>medically [1] 83:14</p> <p>medium [4] 18:24 19:3 19:18 166:24</p> <p>meet [5] 1:24 5:2 100:11 100:13,16</p> <p>meeting [13] 4:16,18 8:20,21 13:11 39:16,23 41:9 95:25 100:19 128:14 129:19,21</p> <p>meetings [4] 2:1,3 100:12 130:5</p> <p>meets [1] 180:4</p> <p>member [2] 10:14 130:21</p> <p>members [20] 4:20 5:6 5:9,13,13 7:4,8,10 8:22 10:26 11:4 12:14 55:15 91:13 97:11,16,18,20 100:11 182:17</p> <p>memory [2] 128:13 171:2</p> <p>mention [4] 7:18 19:9 158:15 167:24</p> <p>mentioned [21] 2:24 4:8 4:14 9:21 10:18 28:24 35:9 36:1 52:20 53:2 57:3 63:20 73:24 77:1 79:15,23 127:12 142:3 156:22 166:4 172:5</p> <p>message [3] 80:22,26 81:2</p> <p>methodologies [1] 81:3</p> <p>methodology [1] 80:23</p> <p>methods [1] 42:20</p> <p>metre [7] 44:23 82:15 171:3,6,11,19 173:6</p> <p>Michael [1] 54:6</p>	<p>mid [1] 79:21</p> <p>might [26] 2:6,7 24:1 28:8 38:13 44:8 49:12 58:2 59:7,8 60:20,20 66:5 67:23 68:7 109:13 121:23 126:20 149:15,16 149:17 157:4 158:7 159:2 173:9 176:12</p> <p>military [2] 80:9,13 21:24 23:14 32:1 35:10</p> <p>millimetre [1] 19:24</p> <p>mind [8] 6:19 140:13 162:7 166:18 168:23 175:4,23 181:7</p> <p>mini [1] 116:10</p> <p>minimize [2] 51:2,6</p> <p>minimized [1] 51:22</p> <p>minimum [1] 69:24</p> <p>minuses [1] 40:25</p> <p>minute [2] 55:5 111:20</p> <p>minutes [8] 16:1 18:4 30:12 55:7,8 61:18 162:6 165:14</p> <p>missed [1] 41:17</p> <p>missing [2] 37:17,22</p> <p>mistook [1] 114:1</p> <p>mixed [1] 127:15</p> <p>mock-up [3] 161:8 165:10 166:2</p> <p>model [2] 28:4 72:4</p> <p>models [1] 161:4</p> <p>modification [1] 116:24</p> <p>modified [1] 71:13</p> <p>moment [9] 46:14 47:10 48:21 74:1 96:10 126:1 130:17 171:3 172:8</p> <p>moments [1] 144:21</p> <p>money [5] 90:11 105:2 117:4,7,10</p> <p>month [1] 23:16</p> <p>months [4] 7:23 9:7 44:12 88:20</p> <p>morning [11] 1:3 55:12 153:17 164:19,19 172:5 182:13,21,24 183:8,11</p> <p>Moss [1] 184:13</p> <p>most [14] 3:1 21:6 35:9 35:15 43:13 107:10,13 112:3 132:15 145:4 164:15,16 165:12 173:16</p> <p>move [15] 5:6 14:20 16:24 22:14 29:26 30:16 78:9 82:16 83:1 90:22 96:9 142:19 152:19,26 173:5</p> <p>moved [6] 15:4 25:2,12 141:21 154:12,25</p> <p>movement [5] 16:23 22:12 61:24 147:4 166:25</p> <p>moves [1] 17:1</p> <p>moving [8] 22:9 82:12 83:1 142:19 154:25 158:1 158:1,4</p> <p>MP [1] 182:22</p> <p>Ms [117] 1:4,5,10,11 5:23</p>	<p>6:22 8:8 10:8,12,23 11:6 11:10,22 13:17 14:3 15:24 16:26 17:5,23 18:1 18:13,23 19:1,7,13,17 19:23 20:3,7,17 21:17 23:11 24:22 25:17,23 26:1 29:11,16 31:3,10 31:23 32:11 33:13 34:23 36:19 37:10 38:19,24 39:4,9 40:26 44:7,18 48:26 50:9 51:25 53:15 54:10,18 66:12 94:10 97:25 103:9 111:21 115:3 126:18 131:18,22,24,25 132:18,24 133:6,15,23 134:1,17,25 135:3,12 136:3,20 137:8,21 138:2 138:14,21 139:16 140:6 141:18 142:18 143:2,7 143:14,19,25 144:4,10 144:26 145:11 146:2,9 146:19 148:3,14,19 149:22 150:11,26 151:17 152:3,18,23 153:15,17 155:16 168:19</p> <p>multiple [2] 158:2,2</p> <p>multipurpose [1] 170:21</p> <p>MUN [1] 32:14</p> <p>must [2] 41:16 66:20</p> <hr/> <p style="text-align: center;">-N-</p> <hr/> <p>name [1] 169:1</p> <p>National [3] 32:25 56:10 160:10</p> <p>nature [4] 49:13 64:17 65:9 149:21</p> <p>Navy [3] 13:21 50:20 166:8</p> <p>near [1] 150:3</p> <p>nearest [1] 172:8</p> <p>necessarily [9] 27:7 36:12 49:16 56:15 59:22 82:18 123:13 127:20 181:9</p> <p>necessary [4] 34:11 89:5 157:9 180:4</p> <p>need [30] 13:7 15:26 21:12 26:24 28:11 34:21 36:3 37:15 44:16 46:7 47:15 48:23 54:4 58:5 69:11,16 76:26 77:6,8 86:5 100:2 157:11 159:9 159:13,20,25 160:9,22 170:25 173:13</p> <p>needed [6] 5:1 79:3,8 81:8,8 147:6</p> <p>needing [1] 81:5</p> <p>needs [6] 10:5 33:9 40:5 156:26 157:20 171:25</p> <p>nervous [1] 53:1</p> <p>never [4] 66:7 112:21 163:18 168:26</p> <p>new [19] 4:22 28:9 32:22 33:26 38:11 42:1,20 47:15 93:18 142:2 159:16 159:17 160:15,25,26</p>
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161:7,14,15 165:1 newcomer [1] 174:19 newer [1] 28:4 Newfoundland [6] 72:5 112:16 132:7 162:23 167:17 184:6 next [19] 22:5 23:5 26:6 59:6 60:21 61:13 67:17 111:1 113:20 118:5 149:18 150:4 151:21 154:5,9,13,15 164:19 169:24 night [4] 53:3 122:4 162:7 164:18 nights [1] 122:5 nine [3] 14:4 153:26 154:5 nine-year [1] 153:18 NL [1] 184:9 NLOPB [5] 96:21 100:8 125:7 129:6 162:12 nobody [1] 166:4 nod [1] 66:7 non-competitive [1] 91:20 non-event [1] 53:6 non-profit [5] 104:20 105:12,13,16 106:1 none [1] 3:6 normal [2] 15:13 144:17 normally [4] 55:6 116:14 144:19 178:26 North [4] 3:17 43:23 47:7,13 Norway [2] 79:7 126:12 not-for [1] 105:25 note [4] 7:20 37:14 158:17 167:24 noted [1] 107:4 nothing [4] 11:14 64:19 125:13 178:19 notice [4] 23:16 29:12 106:24 175:8 noticed [1] 32:12 notification [1] 86:18 notify [2] 58:25 59:7 Nova [7] 6:18 23:18 26:25 29:13 38:26 55:18 56:23 November [4] 1:1 183:12 184:4,10 now [71] 5:11 7:2,3 15:25 16:11 20:8 21:8,14 22:6 23:7 24:23,25 25:4,21 28:2,18 30:22 37:11 38:14 41:7 42:9 44:17 45:7,12 53:9 54:12 58:2 59:2,18 61:13,18 64:13 66:11 68:2 78:9 80:12 84:20 85:20 90:10 92:4 92:11 93:20 94:10 95:5 102:14 109:11 111:1 112:9 125:25 126:7 128:8 131:18 133:19 134:24 135:10 139:3 141:19,22	141:24 142:19,19,21 149:25 155:20 156:22 158:1 167:25 168:20 174:14 179:12 182:13 NRC [3] 32:16 57:3 75:7 number [33] 8:23 9:7 14:17 28:17,21 39:26 43:4 44:4 46:26 47:6 50:14,23 55:17 56:6 58:4 60:21 66:12 67:21 102:8 104:26 114:15 115:18 116:26 121:19 141:11,23 145:16 156:13 157:15 171:7 172:15 180:20,21 numbers [4] 79:6 146:13 146:17 148:23 <hr/> -O- <hr/> O'Brien [50] 131:18,22 131:24,25,26 132:18,24 133:6,15,23 134:1,17,25 135:3,12 136:3,20 137:8 137:21 138:2,14,21 139:16 140:6 141:18 142:18 143:2,7,14,19,25 144:4,10,26 145:11 146:2 146:9,19 148:3,14,19 149:22 150:11,26 151:17 152:3,18,23 153:15 155:16 o'clock [4] 164:18 182:24 183:7,10 obeyed [1] 166:19 objectives [1] 86:6 obligation [1] 152:26 observation [1] 73:9 observe [1] 158:21 obviously [10] 46:2,7 56:5 59:1 60:10 97:12 109:24 135:15 159:26 170:24 occasion [1] 2:10 occasionally [3] 100:13 120:26 121:4 Occupational [5] 8:19 41:10 96:2 98:22 147:19 occurred [2] 49:12 164:4 Ocean [2] 156:15 174:2 October [1] 175:2 off [16] 6:7 30:24 36:20 36:22 51:13 72:2 91:18 95:14,16 133:13 134:14 135:26 136:18 157:26 167:17 172:18 offer [2] 115:10,13 offered [2] 134:10 175:17 offering [2] 134:18,20 officer [4] 2:21 3:23 94:11,14 offshore [55] 1:22 6:17 7:26 8:2,24 12:10 14:14 15:13 25:11 26:11 32:2 35:21 40:13 43:8 47:24 48:8,14 55:24 56:26 57:16 63:15 64:7,22 72:5	72:25 80:25 81:4,12 83:26 84:3 93:19,22 98:2 99:20,26 104:14 107:17 107:23,25 108:4,8,13,20 108:24,26 112:15 132:8 132:13 135:24 156:2 158:3,13 159:16,17 174:20 often [10] 3:1,7 9:7 19:18 105:21 107:18 138:10 154:19 155:6 163:23 oil [12] 56:26 91:10,18,23 106:19,26 107:3,9,13,17 162:19 163:1 older [1] 93:20 once [13] 14:18 45:19 58:20,21 81:16 82:10,25 83:2 116:9 136:10 137:10 137:16 162:16 one [99] 2:1,2,8 4:21 6:4 6:10,23 7:5,20 8:5,18,22 9:13,21,26 10:7 11:4,16 11:23 16:8 17:4 20:16 23:24,26 25:1,7 26:21 27:3,17 30:19 35:25 38:14,17 41:11 43:21 44:6 45:4,5,10 46:21,24 49:1 50:11,26 54:1 56:12 58:6,11,13 59:14,23 60:8 64:8 66:19 67:22 73:10 74:16 77:22 79:12 82:15 83:4 91:21 93:1 94:16 94:23 99:19,23 102:9 118:6,12 120:9 123:3 134:13 136:17,24 140:14 149:19 151:18 156:13,21 156:26 157:15,16 158:15 159:11 160:19,24,25 161:2 164:15,15,18 165:19 167:15 170:25 171:26 172:5 178:18 179:9 one-day [6] 126:5 132:10 132:17 133:1 135:13 136:18 ones [1] 71:19 ongoing [1] 6:13 onto [4] 42:18 121:21 152:15 168:22 open [5] 28:4 35:17 45:14 77:12 154:24 opened [1] 165:1 opening [3] 162:21 169:22,24 openings [1] 169:24 operate [1] 8:6 operates [1] 97:15 operating [6] 48:8 132:7 133:13 134:12 164:12 172:25 operation [5] 60:25 70:20,25 71:7 138:26 operational [1] 32:5 operator [12] 3:18 64:26 91:21,22 95:17 110:20 118:16 123:11 124:14,14 125:23 130:13 operators [28] 6:15 12:2	13:1 43:8 57:12,15 64:22 64:22 81:4 82:22 84:3 87:16 90:15 98:21 99:10 99:23 100:1 114:11,14 122:22 123:8,9,16 126:22 128:13 138:11 162:11,18 opinion [1] 160:20 opinions [1] 76:25 OPITO [5] 72:22 84:21 104:14,19 105:2 opportunity [6] 50:5 121:11 141:14 158:18,21 170:5 opposed [3] 37:3 51:12 122:10 opted [1] 85:10 OPTI [2] 104:7,11 option [2] 23:10 30:9 orally [1] 66:6 order [5] 12:7 115:6,7 117:7 142:24 orderly [1] 60:7 ordinary [1] 80:7 organization [19] 40:10 56:18,20,22 89:11,20 91:1 104:15,21,22 105:13 105:14,17 106:1,9,16 108:1,2 164:14 organizations [3] 40:8 57:15 92:14 orientation [1] 22:16 orienting [1] 60:12 original [1] 175:1 originally [1] 3:17 OSI [1] 132:21 ostensibly [1] 130:20 Ottawa [2] 47:12 183:8 ought [2] 160:3 163:8 ourselves [2] 40:4 159:5 outboard [2] 140:18 141:15 outcomes [3] 45:5 86:6 154:21 outline [3] 4:5 86:5,17 outside [5] 5:15 11:3 45:25 68:18 177:20 overall [1] 76:16 overboard [1] 46:24 overdue [1] 165:13 overlay [1] 55:22 overseas [1] 157:19 oversight [1] 157:22 overstepping [1] 152:10 overt [1] 110:8 overtime [1] 3:13 overwhelming [1] 67:6 own [13] 21:22 28:2 41:5 81:5 83:23 89:20 140:13 141:3 146:24 147:4 156:6 163:21,22 <hr/> -P- <hr/>	P-STASS [1] 80:6 page [2] 18:2 26:13 Panel [1] 1:3 paper [1] 78:23 parameters [1] 76:17 Parsons [2] 182:19,23 part [25] 21:6,20 33:25 42:17 47:2,17,24 57:12 57:13 65:3 73:23 77:10 84:17 96:21 115:6 119:19 130:9,18 133:20 134:21 136:7,8 161:16 175:11 175:16 participating [1] 14:19 participation [1] 13:15 particular [32] 8:4 13:24 35:19 43:1 45:17 49:13 56:7,12 60:4 69:3,4 75:12,13 76:23 104:23 111:20 113:1 118:12,18 120:20 121:25 122:1 123:21 126:23 127:8 150:21,21,24 155:10 170:22 173:19 180:2 particularly [4] 77:14 90:5 120:14 179:6 party [1] 54:17 pass [8] 9:15 25:7 31:2 119:26 121:22 122:25 152:1 161:22 passed [3] 118:6 182:1,4 passenger [11] 59:25 60:23 101:7,9 102:10 115:2 116:20 153:2 157:3 157:6,13 passengers [9] 41:20 52:15 80:7,9 111:9 134:20 135:6 137:15,18 past [1] 175:7 Pat [4] 3:21 5:26 25:7 70:9 PATRICK [7] 1:9 55:9 111:3 131:23 155:21 177:1,1 pay [7] 90:25 104:23,24 117:11,12,13,15 paying [1] 162:19 pays [1] 117:7 Peet [1] 184:5 people [123] 8:5 15:8,12 21:2,24 24:19 28:13 34:3 34:12 35:10,15,19 36:6 41:13,21 45:7 46:3,26 47:21 48:8,8,14 49:25 52:1,5 53:14,22 54:4,24 55:14 57:2,9 58:4 67:22 69:9,16 72:4,11,18 73:1 79:13,26 80:13 81:21 82:2 83:6,15,17,23,26 83:26 84:1,7,12 91:7,9 91:10 92:24 94:13 99:5 100:3 101:3,26 113:6,12 113:14 119:2,10,14 120:4 120:6,8,12,15,16,19,26 121:4 122:25 123:16 124:12 125:4 127:15,17 127:19 134:11 136:10
---	---	--	---	---

138:7,10,10,12 140:17 141:11,25 142:12 143:26 145:20,22,23 146:23 147:14,26 148:22,26 149:4,24,25 150:13 151:10,10 152:12,13 154:25 155:4 161:11 171:7 172:24 179:5,8,20 179:20 180:21,24	piggyback [1] 42:18 pillows [1] 37:18 pilot [2] 139:8 166:9 pilots [17] 58:24 59:7 80:12 132:5,16,26 133:9 134:10,19 135:4 136:13 137:7,11,14 138:20,23 139:8 Piper [1] 45:3 place [59] 15:11 24:9 38:12 42:21 43:21 45:7 45:8,12,13,16 47:16 63:12 64:7,20,25 65:5 77:5 81:3 82:21,26 83:23 84:15,23 85:12 88:8,11 88:26 91:25,25 93:12 97:19 99:13,25 100:15 101:10 105:8 122:24 123:14,20 125:13 140:12 145:8 147:10,24 154:20 155:5 157:10,14,24 159:17 160:7 161:15,21 163:6,13 170:23 173:3 173:12 184:5 placement [2] 17:10,11 plan [2] 88:18,20 plane [1] 150:1 planning [3] 46:17,18 159:13 plans [2] 33:25 142:1 platform [7] 1:23 9:2 55:18 64:7,8 89:26 172:9 platforms [3] 7:6 46:26 172:16 play [2] 32:9 158:13 pluck [1] 41:20 plus [2] 8:2,2 pluses [2] 40:24 41:2 point [27] 21:11,13 22:19 34:26 37:1,9 51:1,2,4,10 51:18 60:22 61:22 62:3 64:9,10 65:8 79:13 84:20 84:25 110:9 111:18 125:25 126:20 134:8 164:3 176:16 points [2] 6:3 68:8 pool [20] 28:25 29:1 32:22 34:1,19 53:3,11 72:2,3 75:6 77:18 88:8 90:1 101:11 102:11 118:1 166:14 178:18 179:2,21 pools [1] 77:24 poor [1] 37:17 population [1] 15:15 populations [1] 137:6 port [1] 31:14 position [20] 20:25 22:7 40:17 49:3,7,8,9,19 50:15 51:5,17,24 59:11 59:12,15 67:12,13 109:14 150:7 151:14 positioned [1] 11:15 positions [1] 21:9 positive [1] 151:6 possibility [2] 48:15 173:10	possible [8] 9:11 52:3 61:8 89:13 109:18 150:25 156:1 157:1 possibly [5] 36:6 40:7 73:3 103:5 116:18 postponed [2] 112:12 112:18 potential [2] 15:18 102:16 pounds [7] 23:8 69:14 69:15,16,17 142:24 146:4 poured [2] 167:1,8 PRAC [4] 42:21 44:11 90:11,25 practical [1] 148:26 practicalities [2] 32:9 180:19 practicality [1] 122:19 practice [7] 50:5 53:12 83:7 131:12 150:5 151:3 151:9 practised [1] 122:12 practitioners [1] 84:11 precise [1] 181:5 precisely [1] 146:8 preclude [1] 11:17 predictions [1] 47:10 prepare [1] 52:6 prepared [1] 148:12 preparing [3] 21:2 53:4 118:7 prerequisites [1] 7:21 prescriptive [1] 27:8 present [8] 63:16 77:11 101:22 102:26 139:25 156:25 172:1 183:2 presentation [15] 11:25 21:13 44:2,3,5,14 50:19 70:6 73:24 79:23 127:12 167:13 171:15 182:21,23 presentations [1] 64:24 presenters [2] 10:1 182:19 pressure [4] 128:3,26 142:23 143:9 pressurized [5] 13:4 15:11 82:13 85:3 87:21 presumably [2] 80:18 138:24 presume [1] 92:4 pretty [6] 31:5 75:7 116:26 167:11 170:1 181:19 prevent [1] 83:23 previous [2] 6:13 57:9 previously [2] 1:10 141:26 price [1] 101:20 primarily [3] 77:15 134:11 138:7 primary [1] 102:9 principle [2] 82:6,7 priority [3] 59:6,17	89:10 private [1] 40:9 proactive [1] 110:2 problem [11] 3:4 4:25 10:4 30:21 58:21,22 99:6 99:25 147:16 165:26 166:17 problems [13] 37:5,22 39:6 119:15 120:13,17 120:20 123:12 145:21 147:13 150:14 151:21 159:16 procedure [2] 60:10 147:11 procedures [2] 115:25 147:25 proceeding [1] 126:1 process [32] 1:16 2:23 4:8 5:15 8:16 14:20 30:23 60:5 61:5,7 64:12 64:15,20 72:26 76:13,19 78:3 84:18 85:20 87:1 90:10,14 96:6 118:20 123:14 154:11 155:12,14 162:20 164:5 175:1 179:1 processes [7] 27:10,16 28:14 40:21 100:2 119:21 122:24 produced [1] 156:23 Producers [1] 11:26 product [2] 14:2 94:6 production [1] 163:9 professionals [1] 92:23 proficiency [1] 31:18 proficient [1] 31:19 profile [2] 28:8 51:20 profit [2] 105:26 106:11 program [6] 76:7,17 92:11,16 111:26 114:20 programs [2] 92:6 126:10 progressive [2] 20:14 20:14 prohibitively [1] 33:6 project [5] 44:13,14 102:23 106:26 160:10 prolong [1] 136:12 proper [5] 51:5,17,24 84:6 160:22 properly [2] 160:17,23 proposal [8] 32:20,22 44:11 46:13,21 47:18 48:20 100:15 proposals [1] 43:20 proposed [1] 162:16 proposing [2] 47:3 111:12 prospective [1] 175:7 protect [1] 81:5 protection [1] 81:12 protocol [4] 10:15,17 41:15 58:7 prototype [1] 35:23 prove [1] 168:3	proven [1] 13:21 provide [33] 2:4 11:4 12:7 32:8 34:1 39:12 40:12 48:2,24 49:18 72:10,13 74:4,26 85:21 110:1,13 114:3,6,7 116:5 116:7 118:21 123:6,9 132:3,6 151:10 152:13 156:1 172:17 179:17 181:1 provided [6] 73:22 125:19 145:3 157:23,26 183:6 provider [14] 75:14 76:22 77:2 83:22 105:7 105:12 110:14,15 147:17 148:2 152:1,11 159:3 161:2 providers [12] 40:2,3 78:22 79:7 93:15,22,23 114:15,17 158:17 159:5 159:6 provides [1] 157:8 providing [9] 6:16 34:3 72:11 77:21 91:21 102:26 114:17 144:19 159:7 proviso [1] 156:6 public [3] 40:9 91:1 182:17 pull [3] 87:11 166:20 174:10 pulled [1] 87:15 Puma [4] 64:10 70:11 71:5,6 punch [1] 22:1 purely [3] 76:5,24 156:6 purpose [3] 140:1,4 167:21 purposes [5] 32:26 33:3 33:4 94:22 178:22 push [15] 61:7 70:4,13 70:16,26 74:7 121:20 143:26 144:6 145:18,20 148:10,22 149:2,6 put [46] 15:3 21:7 23:8 24:15 27:12,19 28:15,15 30:12 33:15 43:5 44:10 46:14,19 59:5 71:19 81:20 82:2,25 83:22 84:22 88:25 91:24,25 100:15 116:21 126:5,6 145:16 146:23,26 147:10 147:24 148:5 150:20,24 151:8 153:24 157:14,14 161:15 163:13 169:8,14 170:3 181:2 puts [2] 27:17,18 putting [5] 15:10 121:21 158:23 169:25 174:8
---	---	---	---	--

-Q-

Q.C [117] 54:19 55:10,11
56:17,25 57:19 58:1 61:1
61:12,20 62:1,11,16,23
63:1,6,10 64:1,6 65:7,13
65:26 66:10 67:10,20
68:1 69:7,22 70:19,24

71:12,16,26 73:7 74:10 75:1,24 78:1,8,15,20 79:10,25 80:5,11,17,21 81:10,15 82:4 83:3 84:5 84:19 85:6,15,19 86:3 86:21 87:6,10,23 88:3 88:12 89:1,7,17,24 90:4 90:9 91:5 92:1,10,19 93:7 94:4,9,21 95:4,9,13 95:18,26 96:11,17,22 97:3,24 98:8,18 99:4 100:6,26 102:13 103:8 103:23 104:5,16 105:4 105:15,20,24 106:14,23 107:8,21 108:14,18 109:1 109:5,10,20 110:6,21 155:22,23 161:24 182:15 qualifications [23] 4:13 4:17 5:4 7:14 10:20 11:7 12:15 24:12 39:25 65:1 93:13 96:7,14 119:19 123:1 124:4 128:10 129:11 130:24 131:5,7,9 137:24 quantify [2] 68:15,21 quarters [1] 128:3 questioning [5] 111:15 113:20 118:5 125:26 146:21 questions [33] 1:13,14 11:23 15:25 17:9,20 39:13,14,18 49:2 54:11 54:21,26 66:13 76:2 77:12 115:3 123:26 126:17,18 131:15 140:8 140:9,11,13 146:25 155:17 161:26 162:4 175:21 176:2,8 182:12 quick [1] 155:6 quicker [1] 14:10 quickly [10] 14:13 36:4 48:7 89:13 153:23,26 154:5,12 166:4,14 quite [23] 9:4 24:5 32:5 38:15,18 40:21 46:5 47:25 72:26 73:5 99:22 101:23 112:16 116:18 127:11 133:24 141:4,16 164:7 166:14 167:10 168:26 173:8 quotation [1] 116:3	Ranger [2] 156:15 174:3 rare [2] 74:19 113:14 rate [1] 165:26 rather [5] 54:24 55:20 58:3 159:21 182:25 ratified [1] 96:20 ratify [1] 129:6 ratio [1] 41:3 re-evaluate [2] 87:2,3 reached [1] 97:22 react [3] 49:16 159:21 159:22 reacted [1] 49:10 reaction [2] 49:14 174:17 read [1] 41:5 readily [1] 48:17 reading [1] 166:7 ready [5] 1:4 55:5,7 85:20 88:10 real [8] 6:26 24:2 37:7 44:16 146:25 148:6 180:26 181:19 realism [1] 33:20 realistic [3] 36:25 47:19 47:20 realistically [1] 147:22 reality [6] 16:6,10,10 20:26 21:21 82:1 really [51] 6:3 20:25 23:4 26:7 33:9 34:8 35:12 38:15 45:15 46:14 47:24 49:23 53:25 57:16 69:1 74:23 82:9,23 84:2,4 89:25 93:16,24 100:2 111:14 118:20,20 119:5 130:20 134:8 140:7,9 141:2,22 147:22 151:12 152:24 153:16 159:25 160:2,13,14 161:1,1 163:23 166:6 167:13,20 170:14 173:22 174:6 rear [1] 59:14 reason [10] 14:24 27:19 27:26 30:10 43:18 85:5 146:21 157:7 162:17 180:26 reasonable [4] 46:22 109:12 180:22 181:4 reasonably [8] 14:21 34:9 47:1 48:6 68:24 89:13 93:18 102:1 reasons [7] 9:21 50:12 50:14 54:1 101:6 102:9 120:9 rebid [1] 115:25 rebreather [4] 12:25 14:13 85:4,11 receive [3] 52:4 90:14 119:9 received [8] 37:12 50:1 82:11 86:18,26 90:16 98:11 124:10 recent [1] 24:26 recently [5] 25:8,11	52:18 72:22 77:16 RECESS [1] 61:19 recognize [5] 58:21,22 58:23 73:4 123:15 recognized [2] 92:25 96:26 recommend [4] 95:1,2 95:3 129:5 recommendation [2] 12:24 156:17 recommendations [4] 12:4 40:1 45:5 153:6 recommended [3] 58:12 124:2 160:13 recommending [1] 151:14 reconsider [1] 87:17 record [2] 13:21 58:6 recover [5] 42:24 43:6 43:24 91:12 117:16 recovered [1] 47:22 recovery [10] 42:11,16 42:20,22,26 43:1,13,17 77:3 117:9 recreational [4] 79:14 79:20,26 83:14 rectify [1] 175:6 recurrent [4] 34:17 52:20,22 122:10 redo [1] 113:17 reduce [4] 127:17 128:24 129:1 160:16 reduced [1] 7:19 refer [3] 50:17 71:2 175:17 reference [7] 11:17 60:18 72:20 97:1 130:16 130:17,18 referencing [2] 60:2,16 referred [4] 50:18,19 115:1,7 referring [1] 104:14 reflection [1] 118:22 reflex [2] 53:21,25 refresher [1] 126:4 regard [2] 54:7 60:24 regarding [1] 156:20 Regardless [1] 130:2 regime [3] 58:10 84:23 84:26 registered [3] 113:12 119:23 122:20 Registrar [4] 16:2 17:16 17:21,25 regular [2] 137:17 142:15 regularly [1] 24:6 regulated [3] 10:18 69:19 134:13 regulation [2] 3:3 132:14 regulator [8] 4:11 7:8,9 45:18 118:17 122:23	124:15 129:3 regulators [1] 12:2 regulatory [2] 4:9 100:20 relate [2] 52:17 125:15 related [8] 9:25 14:23 28:1 33:5 80:9 84:16 108:19 155:9 relates [3] 43:21 46:15 46:15 relating [13] 14:22 24:8 34:6 43:8 48:10 72:24 75:18 76:24 100:23 126:2 127:13 135:23 147:12 relation [5] 14:2 49:21 101:25 118:13 149:12 relationship [2] 118:16 118:17 relatively [2] 74:19 126:14 relay [1] 118:6 release [2] 61:9 62:7 releases [1] 36:2 reliable [1] 46:22 reliably [1] 179:24 reliant [1] 163:4 relook [1] 47:15 rely [3] 43:12 57:2,6 remarks [2] 162:21 175:1 remember [6] 38:14 64:26 164:5 166:7 172:10 175:3 remove [10] 22:19 68:24 68:25 70:12,20 71:8 142:20,24 143:10,17 renewal [3] 126:11,15 127:1 rent [1] 33:5 repair [2] 37:17,23 repaired [1] 37:21 repeat [1] 52:25 repeated [2] 179:2,21 replaced [1] 177:22 replacing [1] 177:24 report [10] 5:17,19 37:11 37:25 47:11 125:14 156:15,18 166:7 174:3 reporting [2] 24:8 110:10 reports [1] 27:2 represent [2] 55:14 111:8 representative [1] 124:16 representatives [3] 174:14,23 175:9 represented [1] 173:24 representing [1] 132:1 request [25] 1:17 4:14 6:14 9:10,17 10:11,19 10:24 11:5 95:20,20,23 97:11,12 98:1,3,12,13 98:20,25 99:8 110:16	150:16 151:25 153:19 requested [3] 35:6 128:15 139:8 requesting [1] 97:5 requests [2] 10:13 30:7 require [9] 15:14 42:10 43:12,14 46:10 70:4,4 145:19 171:1 required [8] 3:16 15:17 68:2,25 69:13,17 115:24 143:10 requirement [3] 5:11 98:26 120:23 requirements [7] 39:24 97:19 100:20,20 139:14 159:19 163:23 requires [3] 22:11 38:9 53:25 rescue [31] 39:15 41:8 41:12,22,26 43:3,3,12 43:15,22 44:19,22 45:2 45:14 46:15,18 47:26,26 48:2,9 103:14,15,18,21 136:13 172:6,6,11,21 173:16 174:4 rescued [1] 169:8 research [20] 32:25,26 42:19,22 47:5 49:24 56:10 68:22 69:3 77:13 77:15,17,25 100:14 102:23 153:7 157:10 160:10,11 180:6 researchers [2] 33:2 148:23 resistant [2] 128:1 129:7 resisted [1] 128:4 resources [2] 45:22,22 respect [14] 2:11,13,15 12:5 32:24 35:18 53:21 91:6 94:13 101:1 103:9 109:25 129:8 140:14 respond [11] 32:7 48:19 49:26 50:6 53:23,24 63:19 84:4 119:26 120:2 147:18 responders [1] 172:12 responding [5] 50:2 158:22 159:14 163:22 173:18 response [7] 49:14 98:1 115:3 123:25 126:17,18 172:17 responses [1] 127:14 responsibility [5] 4:1 48:9 52:17 59:25 113:23 responsible [1] 120:15 responsive [1] 40:5 rest [3] 31:15 63:14 97:16 restrained [1] 51:9 restraining [1] 51:3 restraint [2] 50:17 61:23 restricted [1] 147:5 result [2] 44:11 50:22 resume [1] 131:18 rethink [1] 175:12
---	--	--	---	---

-R-

rack [1] 180:15
rafts [1] 60:9
rain [4] 33:15,18 34:1
71:20
raise [6] 111:18 116:10
117:6 156:13,21 160:25
raised [13] 2:3,5,8 8:17
24:1 39:15 43:19 44:10
82:18,22 122:18 124:18
159:26
raises [1] 83:25
Randell [3] 55:10,13
66:22
range [4] 35:16 68:19
114:6,7

retired [1] 182:20	132:16	156:3 158:14,19 163:8 163:10 164:9,21 174:19	see [28] 21:19 23:19 26:24 38:13 42:5,25 44:21 46:8 48:21 54:21 61:15 66:26 94:11 97:4 99:6,14 100:19 106:7 122:7,8 125:10,11 157:12 158:21 168:12 170:8 172:4 183:10	short [5] 30:11 34:17,19 140:9 183:3	
retrieve [1] 41:13	runs [1] 57:22	Sakhalin [1] 47:7	63:24 79:24	shorten [1] 94:15	
retrofitted [2] 146:16 146:17	rushing [1] 51:21	salaries [1] 117:12	seeing [2] 63:24 79:24	shortened [1] 95:2	
returned [2] 38:11 178:14	Russia [1] 47:7	salt [1] 102:15	seek [4] 111:16,17 126:11 127:1	shorter [1] 135:15	
revenue [7] 90:24 108:9 108:12,15,21,23,25	Rutherford [236] 1:9,13 1:15 2:19 5:25 7:12 9:14 10:10,16,25 11:8,12,24 12:13 14:5,11 16:3,18 17:3,10 20:11 23:23 25:6 27:12,24 29:14 31:26 32:19 33:24 35:5 38:7 38:22 39:1,7,21 41:23 42:7 44:9,20 53:19 55:9 55:13 56:4,19 57:5,20 57:24 63:18 64:4,18 65:11,20 66:1,8 67:8,18 67:25 68:9,13 69:20,26 71:24 72:6 73:21 74:14 75:2,10 76:21 78:6,13 78:16,18,25 80:2 81:1 81:13,17 82:8 83:4,20 84:6,9,20,24 85:13,17 85:23 86:9,23 87:8,14 88:1,5,19 89:3,15,22 90:2,6,12 91:6,15 92:8 92:17 93:5,11 94:7,17 94:25 95:22 96:5,15,19 96:25 97:9 98:5,10,24 99:17 100:9 101:5 102:20 103:20,26 104:13,18 105:9,18,22 106:4,21 107:2,11 108:11,16,22 109:3,8,17,22 110:12,22 110:24 111:3 112:6,13 113:2,10,24 114:2,13,21 115:9,15,23 116:16 117:5 117:17,25 119:6,25 123:5 124:7,20 127:5,9 128:16 128:22 129:12,16,20,25 130:3,11,26 131:6,23 132:9,20 133:2,11,18,25 134:3,22 135:1,8,20 136:15,23 137:26 138:4 138:17 139:5,24 140:25 142:8 144:11,14 145:7 145:17 146:7,15 147:9 150:18 151:7,23 152:7 152:21 153:4,17 154:16 155:21,24 156:4 163:14 165:5,16 167:14 170:20 172:13 174:1 176:23 177:1,8,17 178:3,10,15 178:21 179:3,23 180:17 181:12,24 182:3	save [1] 165:15	Science [1] 163:3	selected [2] 78:12 86:2	shortly [2] 62:21 73:26
review [19] 2:25,26 3:1 3:9 14:26 26:7,11,14 27:10 39:13,17,19,22 41:1 60:23 93:25,26 94:3 94:26	saw [4] 27:1 63:5 154:7 165:24	scenario [6] 20:22 46:23 144:1,6 181:11,15	select [2] 15:8 121:1	shoulders [2] 36:21 66:24	
reviewed [2] 3:5 26:19	scale [1] 161:5	scenarios [2] 42:16,16	selecting [1] 15:17	show [4] 21:15 44:5 129:19 161:11	
reviewer [1] 26:17	scales [1] 73:3	scene [1] 44:1	selection [4] 14:15 78:23 79:1,4	showed [5] 17:15 38:14 49:8 131:10,11	
reviewing [1] 60:3	scheduled [1] 118:10	screen [1] 83:14	self [3] 15:8,16 121:1	shown [1] 17:14	
reviews [1] 26:18	school [1] 68:10	screening [1] 83:5	self-selecting [1] 80:1	shows [1] 49:24	
riding [1] 67:7	Science [1] 163:3	scuba [5] 15:7,8,9 79:14 79:14	semi-submerged [1] 61:4	Shtokman [1] 47:7	
rig [2] 1:23 41:19	scoop [3] 42:23,23 43:13	sea [40] 3:17 34:5,7,16 34:20 41:21 43:17,23 44:23,24,26 45:1 47:6 47:13 48:11 54:3,5 71:20 72:4,7 75:3,13,19 101:4 101:12,26 102:19 103:16 103:22 104:2,3 111:19 111:25 113:4,7 118:2 135:24 138:26 172:10 173:6	send [1] 177:10	shut [1] 81:26	
rig's [1] 11:11	Scotia [6] 6:18 23:18 26:25 29:13 38:26 56:23	seal [5] 70:23 169:16,17 169:22,23	send [1] 177:18	sic [2] 104:7,11	
right [34] 16:11 17:20 23:7 24:23,25 25:21 30:1 41:6 53:14 54:23 55:1 59:2,18 61:17 66:26 67:1 69:19 80:14 89:21 100:3 100:4,5,17 107:10 139:3 142:21 147:26 153:16 156:14 163:8 164:23 167:18 178:16 182:1	screen [1] 83:14	seals [3] 169:25,26 170:6	sense [9] 63:14 66:4 139:12 164:12,21 168:14 168:15 172:7 173:16	side [17] 25:3,4,13 27:13 27:13 30:18 31:20 40:19 40:22 51:13 61:24,24 67:15,15 140:18,24 165:21	
rigidity [1] 99:7	scuba [5] 15:7,8,9 79:14 79:14	search [3] 48:9 172:21 174:4	self-selecting [1] 80:1	signature [1] 5:12	
rigorous [2] 40:20 141:8	sea [40] 3:17 34:5,7,16 34:20 41:21 43:17,23 44:23,24,26 45:1 47:6 47:13 48:11 54:3,5 71:20 72:4,7 75:3,13,19 101:4 101:12,26 102:19 103:16 103:22 104:2,3 111:19 111:25 113:4,7 118:2 135:24 138:26 172:10 173:6	seas [3] 41:13 43:9,16	semi-submerged [1] 61:4	significance [2] 76:14 76:19	
rigs [4] 2:13 9:8 46:26 119:10	seal [5] 70:23 169:16,17 169:22,23	seasoned [1] 9:4	send [1] 177:10	significant [8] 15:5 68:21 73:6 79:2 145:19 145:25 156:16 162:7	
ring [1] 66:19	seals [3] 169:25,26 170:6	seat [39] 16:12,13,23,24 17:8 18:6,7,10 20:8,9 22:8 23:14 29:25 30:8 31:14,14 35:7,11,12,26 36:2 49:6 51:9,14,19 59:12 60:17,21 61:9 62:3 62:7 67:4,13,17 89:18 140:18 150:21,21,24	sending [1] 177:18	significantly [4] 72:15 101:17 118:2 141:17	
rise [1] 125:9	search [3] 48:9 172:21 174:4	seats [15] 16:16 21:9 24:15,26 25:2,4 29:22 29:24 30:6 34:25 35:10 59:14 67:15 141:24,25	sense [9] 63:14 66:4 139:12 164:12,21 168:14 168:15 172:7 173:16	Sikorsky [3] 64:11,13 69:2	
risk [23] 13:9 15:19 28:1 28:8 29:8 36:8 57:22 74:8 82:14 83:10 84:13 84:16 85:5 103:6 110:8 142:12,17 144:12,12,24 147:11 150:25 180:25	seas [3] 41:13 43:9,16	second [5] 8:17 26:25 112:25 157:16 166:15	self-selecting [1] 80:1	similar [3] 6:19 16:6 79:16	
risks [7] 13:19 33:12 72:18 81:8 82:11 85:9 102:7	seasoned [1] 9:4	secondly [1] 9:11	semi-submerged [1] 61:4	simple [1] 58:3	
risky [1] 83:6	seats [15] 16:16 21:9 24:15,26 25:2,4 29:22 29:24 30:6 34:25 35:10 59:14 67:15 141:24,25	seconds [2] 61:15 145:9	send [1] 177:10	simply [3] 83:4,13 91:11	
Robert [7] 1:9 53:26 55:9 111:3 131:23 155:21 177:1	safe [3] 45:20 103:18 104:3	secret [1] 182:25	self-selecting [1] 80:1	simulate [2] 23:13 26:5	
Roil [3] 1:26 41:9 182:15	safety [43] 1:22,23,24 2:12 5:14 7:5,17,25 8:20 8:21 10:14 11:11 24:11 26:11 29:23 39:16 41:10 42:1 45:7,8,12,13,16 57:17 60:2 63:15 96:2 98:2,23 99:16 109:16 125:17,20 131:1 147:17	Section [2] 26:10,12	semi-submerged [1] 61:4	simulated [1] 23:17	
role [5] 102:26 131:8 158:13 172:10 175:16	S [2] 18:6 148:8	sector [1] 157:23	send [1] 177:10	simulates [1] 29:19	
roles [4] 28:17,18,22 29:25	S-92 [11] 16:11,12 17:12 18:19 19:4 21:5,7 25:14 59:19 71:10 141:20	sectors [1] 110:4	send [1] 177:18	simulation [1] 76:9	
roll [2] 31:5 51:8	safe [3] 45:20 103:18 104:3	secure [1] 180:2	send [1] 177:18	simulator [3] 16:5 29:10 76:6	
rolls [2] 51:15 145:6	safety [43] 1:22,23,24 2:12 5:14 7:5,17,25 8:20 8:21 10:14 11:11 24:11 26:11 29:23 39:16 41:10 42:1 45:7,8,12,13,16 57:17 60:2 63:15 96:2 98:2,23 99:16 109:16 125:17,20 131:1 147:17		send [1] 177:18	single [1] 70:25	
room [4] 58:4 99:14,18 183:5	S [2] 18:6 148:8		send [1] 177:18	sinvention [1] 104:12	
rotors [1] 73:13	S-92 [11] 16:11,12 17:12 18:19 19:4 21:5,7 25:14 59:19 71:10 141:20		send [1] 177:18	sit [7] 31:12 35:13 100:10 109:26 141:14 150:3 152:12	
round [2] 154:13 163:10	safe [3] 45:20 103:18 104:3		send [1] 177:18	sits [3] 96:21 151:15,15	
route [2] 140:23 172:7	safety [43] 1:22,23,24 2:12 5:14 7:5,17,25 8:20 8:21 10:14 11:11 24:11 26:11 29:23 39:16 41:10 42:1 45:7,8,12,13,16 57:17 60:2 63:15 96:2 98:2,23 99:16 109:16 125:17,20 131:1 147:17		send [1] 177:18	sitting [15] 59:10 60:1,1 60:14,25 61:5 62:3 75:26 97:21 109:6 141:25 146:22 149:17,19 151:21	
routine [1] 31:7	safe [3] 45:20 103:18 104:3		send [1] 177:18	situation [13] 8:26 21:12 26:6 37:8 76:23 102:4,5 115:26 116:4 146:26 148:7,26 158:2	
run [4] 42:11,13,15	safety [43] 1:22,23,24 2:12 5:14 7:5,17,25 8:20 8:21 10:14 11:11 24:11 26:11 29:23 39:16 41:10 42:1 45:7,8,12,13,16 57:17 60:2 63:15 96:2 98:2,23 99:16 109:16 125:17,20 131:1 147:17		send [1] 177:18	situations [5] 36:5 46:19 49:25 158:23 173:19	

-S-

<p>sizes [1] 68:8</p> <p>skills [5] 34:14 53:10 72:12 151:10 175:14</p> <p>skin [1] 52:3</p> <p>slept [1] 122:4</p> <p>slide [4] 21:8 44:17 126:6 126:7</p> <p>slightly [1] 59:15</p> <p>slip [1] 36:22</p> <p>slow [2] 22:13 120:11</p> <p>slush [1] 10:4</p> <p>slushy [1] 9:1</p> <p>small [3] 3:13 77:2 182:16</p> <p>smaller [1] 43:2</p> <p>software [2] 46:16 48:5</p> <p>sole [1] 116:1</p> <p>solicitor [1] 178:2</p> <p>solid [6] 9:2 22:22 40:21 60:12,19 153:7</p> <p>solitudes [2] 164:6,8</p> <p>solution [2] 74:26 155:6</p> <p>someone [9] 17:7 49:15 55:26 61:3 115:26 148:6 150:4,24,25</p> <p>sometimes [2] 94:26 95:2</p> <p>somewhat [3] 103:12 109:14 118:24</p> <p>somewhere [1] 76:18</p> <p>Sooley [1] 184:11</p> <p>soon [4] 12:20,25 157:1 166:1</p> <p>sooner [2] 175:19,20</p> <p>sophisticated [2] 45:24 45:25</p> <p>sort [19] 49:13 86:6 100:7 108:6 116:10 121:13 123:20 125:12 140:10,12 153:18 157:9 158:22 161:3 162:26 163:20 172:16 173:15 174:25</p> <p>sorts [1] 33:20</p> <p>sound [3] 33:19 74:24 184:7</p> <p>source [2] 102:16 116:1</p> <p>sources [2] 90:24 107:19</p> <p>span [1] 6:11</p> <p>Spare [1] 79:22</p> <p>speak [5] 7:3 15:22 118:10 133:24 134:2</p> <p>speaking [17] 7:4 11:3 45:9 65:14 105:16,19 110:3 116:17,25 124:22 126:13 127:18 128:26 138:6 144:16 149:1 174:14</p> <p>special [2] 147:11,24</p> <p>specialized [1] 139:13</p> <p>specific [11] 10:11 28:2 58:10,10 85:26 86:2 110:16 125:15,15 141:2 179:22</p>	<p>specifically [11] 10:1,3 132:22 134:9 135:21 136:25 139:7,14 140:3 161:12 178:19</p> <p>specification [2] 69:9 177:22</p> <p>specifications [3] 146:11,12 177:21</p> <p>specified [1] 69:10</p> <p>specs [1] 70:14</p> <p>speed [1] 44:24</p> <p>Spencer [21] 175:26 176:6,11,15,21 177:2,3 177:15,25 178:1,5,12,17 178:23 179:19 180:9 181:6,22,26 182:6,9</p> <p>spend [5] 26:8,14 32:2 66:13 138:23</p> <p>spinal [2] 50:22,25</p> <p>spinning [1] 107:15</p> <p>spirit [1] 176:1</p> <p>split [1] 169:17</p> <p>spoke [2] 65:16 140:16</p> <p>sprinkler [1] 33:17</p> <p>square [3] 30:19 142:24 146:4</p> <p>St [3] 9:23 184:5,9</p> <p>stage [3] 70:20,25 71:6</p> <p>stages [2] 61:6 85:25</p> <p>stakeholder [1] 174:7</p> <p>stakeholders [2] 154:24 174:22</p> <p>stand [1] 130:17</p> <p>standard [13] 69:19,24 131:9,12 138:5,19 146:4 170:24,26 171:10,23 181:16,20</p> <p>standards [11] 83:23 96:13 110:18 156:20,24 157:6 170:25 172:1 180:5 182:2,4</p> <p>standby [2] 41:25,26</p> <p>standing [7] 92:25 115:10,10,13 128:17,19 129:15</p> <p>stands [3] 74:1 128:6 171:2</p> <p>starboard [3] 25:4,12 31:14</p> <p>start [12] 28:17 54:13,16 55:7 85:21 86:4,8 131:18 133:7,8,9 134:18</p> <p>started [9] 12:9 14:20 79:22,23 134:20 135:5,6 164:4 175:2</p> <p>starting [3] 12:20 93:20 157:25</p> <p>state [9] 41:21 43:17 45:1 45:1 71:20 72:4,7 75:3 103:17</p> <p>statement [3] 74:11 165:15,17</p> <p>states [8] 44:24,25 75:13 103:22 104:2,3 172:26 173:6</p>	<p>statistically [1] 149:1</p> <p>statistics [1] 168:2</p> <p>stats [2] 145:2 148:21</p> <p>stay [2] 120:18 179:22</p> <p>staying [1] 53:11</p> <p>stays [1] 60:6</p> <p>steady [1] 23:3</p> <p>step [10] 14:25 28:14,15 58:19,20,25 86:25 123:4 151:6 163:24</p> <p>Stephenville [1] 107:15</p> <p>stepping [1] 87:1</p> <p>steps [4] 34:11,12 58:19 120:11</p> <p>still [13] 14:21 75:16,18 78:24 79:4,8 82:16,19 127:23 142:16 165:11 169:15,16</p> <p>stood [1] 101:22</p> <p>stop [1] 4:6</p> <p>story [1] 118:6</p> <p>straps [1] 51:19</p> <p>strategic [1] 46:17</p> <p>Street [1] 184:5</p> <p>strength [1] 146:24</p> <p>stress [2] 121:3,21</p> <p>stressed [3] 119:4,5 120:8</p> <p>stresses [2] 102:3 119:12</p> <p>stressful [2] 72:26 73:1</p> <p>strictly [3] 105:16,19 108:19</p> <p>strike [1] 23:1</p> <p>striking [2] 22:20 158:7</p> <p>stroking [3] 16:12,13 20:8</p> <p>stronger [1] 150:4</p> <p>structure [1] 78:4</p> <p>structured [5] 102:23 107:5 125:14 130:12,13</p> <p>student [12] 30:7,15,17 41:3 53:2,5,7 107:26 122:2 149:13 151:24 153:12</p> <p>students [9] 30:12 37:2 52:19 59:16 67:6 71:8 122:15 123:6 149:12</p> <p>study [5] 12:23 50:18,26 75:11,21</p> <p>stuff [2] 86:7 108:7</p> <p>subject [3] 9:24 177:6 179:2</p> <p>submerged [5] 61:4 66:25 68:6 147:3 148:8</p> <p>submersed [3] 143:4,11 143:18</p> <p>submitted [2] 11:2 95:24</p> <p>successful [1] 52:26</p> <p>successfully [2] 43:23 102:6</p> <p>such [18] 3:24 4:9 29:9 45:21 86:1,12,17 98:20 98:25 99:8 124:21 125:6</p>	<p>125:9 153:6 159:5,6,8 174:15</p> <p>sudden [1] 124:2</p> <p>sufficient [3] 4:5 139:4 139:19</p> <p>suggest [3] 67:11 156:26 158:6</p> <p>suggesting [1] 152:25</p> <p>suggestion [6] 2:6 53:7 53:18 149:15 155:15 163:12</p> <p>suggestions [4] 156:5,7 156:7,10</p> <p>suit [73] 36:21 38:2 59:1 59:3 65:17 66:5 99:11 101:1,2,7,11,15,16,18 101:21,23,24 102:5,7,12 102:14 116:9,20 117:21 117:23 118:1,3 124:1,22 125:6 130:23 131:1 160:15,23 166:22,26 167:8,10 168:25 169:1,3 169:12,13,18,23 170:2,3 170:11,19,21,22 171:5 171:14,17,24 176:3 178:8 178:9 179:14,15 180:1,2 180:4,8,14,23 181:1,4,5 181:8,16 182:1,4</p> <p>Suite [1] 184:5</p> <p>suits [37] 22:11 26:16 37:16,20,23,25,26 38:5 38:26 102:17 103:1,1 115:1,3,21 122:18 160:4 160:4 162:13 167:4,25 169:5 175:15 177:5,9,14 178:6,13,14,18,22,25 179:11,15 180:13,15,20</p> <p>summer [1] 167:16</p> <p>Suncor [1] 42:9</p> <p>Super [4] 64:10 70:11 71:5,6</p> <p>supplied [1] 47:23</p> <p>supplier [5] 116:2 124:23,26 125:2 158:12</p> <p>suppliers [1] 162:12</p> <p>supply [9] 41:12,16,19 42:12,14 43:11 45:11 103:10,13</p> <p>support [11] 42:12 43:11 45:10,23 46:16,18 88:24 89:20 173:16 174:5,6</p> <p>supporting [1] 23:6</p> <p>suppose [1] 71:23</p> <p>supposed [2] 101:2 167:26</p> <p>surely [3] 80:22 83:4,12</p> <p>surface [7] 22:24 43:26 62:10 136:6 148:18 149:15 170:4</p> <p>surprise [1] 166:3</p> <p>surprised [4] 78:21 141:13 167:5,6</p> <p>surrounding [1] 137:1</p> <p>survey [1] 127:13</p> <p>survival [46] 12:10 26:12 26:13 27:17 28:3 29:22</p>	<p>29:23 32:12 37:11 40:4 40:8,12 47:9,11,16 56:2 56:3,11,22 57:3,10,11 57:17,17 63:15 71:3 84:8 98:2 106:17 114:5 120:14 126:4 132:6 135:16,18 135:25 136:7,9,13 137:10 137:16 139:2 158:19 159:5 160:6 175:14</p> <p>survived [2] 54:1 165:25</p> <p>suspect [5] 68:22 141:10 141:10 169:13 171:24</p> <p>suspended [1] 73:13</p> <p>swim [3] 54:4 171:6,13</p> <p>swimming [1] 53:16</p> <p>swing [1] 22:26</p> <p>switching [1] 64:13</p> <p>SWORN [1] 1:10</p> <p>system [34] 12:3,23,25 13:4 14:16,16 15:7,10 15:11 28:3 33:17,19 42:24 45:6 67:3 73:14 78:11,24 79:22 82:13 84:22 85:1,3,4 86:1,13 87:21 92:21 96:9 110:7 110:9 125:14 157:24 183:4</p> <p>systems [16] 14:26 15:2 26:13 37:12 40:4,9,12 56:22 57:3,10,18 84:14 87:4 106:18 156:21 159:6</p> <hr/> <p style="text-align: center;">-T-</p> <p>tab [1] 70:12</p> <p>table [4] 127:11,24 128:25 174:9</p> <p>tactical [1] 46:17</p> <p>takes [10] 22:26 30:12 48:13 101:10 125:13 145:14 160:7 161:21 171:9 173:12</p> <p>taking [9] 63:24 74:8 149:14,18 159:17 172:18 180:8 181:18,21</p> <p>tangled [1] 36:6</p> <p>tank [23] 21:10,18 22:8 23:13 25:3,5,12 32:14 32:16,23,24,25 33:1,3,6 33:7,9 60:20 62:4,17 67:14 99:12 141:22</p> <p>tanker [4] 108:1,4,5 138:10</p> <p>tanks [2] 25:14,15</p> <p>Tara [1] 184:5</p> <p>targeted [1] 139:7</p> <p>task [9] 12:1 13:12 15:1 16:9 79:5 82:19 87:2,18 87:22</p> <p>taught [5] 49:7,11 135:17 135:18 137:6</p> <p>TDG [1] 3:25</p> <p>teach [2] 50:14 145:22</p> <p>teachers [1] 31:24</p> <p>team [4] 7:26 8:2 44:13 92:13</p>
---	--	---	---	--

technical [4] 88:23,24 89:20 159:7	153:19 154:11 164:26 165:11 177:4	158:21	3:26 50:16 65:17 101:10 102:10 115:2 116:20 138:9 157:4,7,13	Um-hm [1] 101:1	
technique [1] 58:16	three [15] 1:14 13:25 16:7 16:9 46:21 52:10 54:26 59:19,20 127:1 128:2 171:3,11,11,19	trainer [15] 27:7 28:3 36:20 52:9 67:22 77:9 137:12 141:4 142:10,13 150:2,12,20,23 161:2	transported [1] 80:13	uncomfortable [1] 101:23	
techniques [1] 136:12	through [55] 1:17,19 2:23 13:25 24:11 26:24 27:3 28:14,17 30:13 34:11 37:14 42:15 51:22 53:5 54:13,25 59:23,24 61:6 66:23 70:6 72:16 83:24 86:11 93:23 98:20 98:21,22 99:1 100:24 104:19 113:15 118:8 120:6,22,25 122:9,11 123:17,18,19 127:22 132:10,16,16 133:3 137:23,24 141:14 149:25 157:2 163:5 168:11 170:6	trainers [12] 12:2 14:8 20:18 21:24 26:22 28:12 31:24 35:2 40:16 57:10 140:22 151:18	trapped [2] 168:9,25	under [24] 7:15 22:24 23:2,3,10 33:10 51:14 75:22 84:21,23 93:12,17 96:13 106:12 127:2 131:1 131:13 132:13 134:13 147:17 169:12 171:22 179:8 180:5	
technology [2] 47:4 76:4	throws [1] 30:24	training [290] 4:13,17 5:1,4 6:18 7:13,25,26 8:6 8:24 9:10,23 10:18,20 11:7 12:5,7,14 13:9 15:18 20:26 21:20,24 23:26 24:7,12,16 26:4 26:21 27:9 28:16,23 32:3 32:8,15 33:3,5,11 34:3 34:10,12,13 36:7 37:5,7 39:2,11,20,23,24 40:2,3 40:11 49:5,21 50:1 52:8 52:11 56:3 57:11 58:18 65:1,6 68:23 72:8,10,13 72:15,20,25 73:16,22 74:5,6 75:14 76:22,24 77:2,4,21 80:22 81:2,6 81:19,20,22,24,26 82:3 82:20 83:17,22,24 84:8 84:13,14,16 85:21,22,25 86:10 87:26 88:18,20,23 90:19 91:13,21,22,25,25 93:13,15,21 94:11 96:7 97:19,26 98:1,7,13 99:1 100:10,12,18,18,24 102:2 102:7 103:1,7 104:15,19 104:22 110:2,14,15,18 110:18 112:11 113:5,22 114:4,5,7,8,16,22 115:19 116:18 117:8,10 117:19 118:16,21 119:3 119:16,19 120:3,4,7,10 120:14,15,24 121:26 122:1,21 123:1,7,15,17 123:18 124:3,19 126:25 127:14,14,21 128:9 129:1 129:2,4,10 130:4,5,24 131:5,7,9 132:3,6,11,12 132:13,15,17,21,23 133:1 133:9,10,16,21 134:6,16 134:19,24 135:15,16,18 135:21,22 136:2,7,10,14 137:11,14,24 139:1,3,9 139:13,22 140:15,21,24 141:1,6,7,12,16 142:3,6 142:6,15 143:21,21 144:19 147:12,23 148:2 149:7,9 150:16 151:3,11 151:19,26 152:11,13 156:8 157:18,22,22 158:17 159:3,5,7,19 160:14 161:10,20 164:13 164:24 165:2,9 167:3,23 168:20 175:15 176:3 178:8,18,19,22 179:1,8 179:14,16,25 180:7,19 180:24,24 181:1,9,18	travel [4] 20:15 22:6 25:16 44:24	travelling [4] 9:6,8,8 138:13	underestimated [1] 163:18
telling [5] 67:16 106:19 119:15 149:24 168:23	thunder [1] 33:19	trains [2] 23:13,20	travelled [1] 25:11	undergoing [1] 124:18	
tells [1] 183:7	tie [1] 140:13	transcribed [1] 184:6	travellers [2] 9:3 52:7	underneath [1] 157:11	
temperature [1] 71:21	tied [1] 106:25	transcript [2] 66:7 184:3	treat [2] 109:24 151:10	undersigned [1] 184:2	
ten [5] 2:22 55:6,8 106:20 112:17	ties [1] 141:2	transiting [3] 172:18,19 173:9	treated [1] 151:12	undersigned [1] 184:2	
ten-year [1] 6:6	tight [2] 180:1,14	transportation [11]	tremendous [1] 106:24	understand [15] 16:12 24:23,25 31:17 56:1 67:15 69:15 73:8 94:15 95:5 107:26 143:20 148:4 151:1 180:10	
tend [2] 112:17 125:8	tightened [1] 100:3		trialed [1] 43:22	understood [2] 114:10 168:26	
tended [1] 128:26	timeframe [1] 6:20		trials [4] 42:11,12,17,19	undertake [5] 15:18 47:3 101:12 139:10 180:23	
tends [3] 24:10 40:12 163:20	times [8] 8:23 33:2 47:19 105:23 126:16 129:2 171:12 179:5		tried [1] 90:26	undertaken [2] 75:12 75:22	
term [2] 102:18 115:7	Tipton [1] 54:6		trip [1] 63:4	undertaking [2] 140:26 141:6	
terminology [1] 136:9	today [3] 119:1 158:10 177:4		trouble [2] 28:6 104:9	underwater [21] 62:12 62:14 77:9,14 83:8 124:5 132:11,23 133:16 134:6 134:15,24 135:14,22 136:26 137:2 141:3 142:10 153:20 179:7,22	
terms [48] 3:11 4:3 11:17 13:8 24:9 40:2,11 55:21 61:24 67:12,16 72:1,8 72:14 73:15 74:25 75:4 76:11,22 77:8 88:21 96:1 97:1,19 105:25 110:17 117:1 119:11,12 120:5 122:18,22 124:11 125:18 126:9 127:3 128:8 130:16 130:16,18 137:9,15 139:2 141:5 160:9 170:26 179:1 180:13	together [2] 48:3 174:10		true [9] 8:7 65:22 84:18 92:18 93:6 96:26 106:22 107:12 184:3	undertaking [2] 140:26 141:6	
Terra [1] 55:18	tomorrow [5] 182:13,18 182:24 183:8,11		try [14] 24:15 30:7,17 43:2 68:23 90:24,25 91:2 112:4 120:11 121:20 129:1 150:3 181:3	undertaking [2] 140:26 141:6	
terrifying [1] 118:24	too [8] 17:19 26:14 41:22 83:6 121:3,21 131:17 144:25		trying [15] 10:1,2 27:22 35:2 42:18 63:4 66:23 68:6 74:25 98:7 126:21 129:1 149:5 159:15,21	undoubtedly [1] 126:24	
test [3] 36:10 171:24 181:16	took [7] 13:1 14:4 65:4 88:8 164:14 169:13 172:14		tucked [2] 29:19 51:14	unfortunately [1] 32:10	
tested [2] 102:14 170:23	tool [3] 46:17 48:5,18		tug [1] 42:23	union [1] 174:23	
testimony [2] 155:25 156:22	top [5] 73:11,12 157:9 167:25 168:12		turn [2] 33:16 168:2	unit [6] 21:15 64:14 77:2 77:3,25 91:14	
testing [3] 171:14,17 182:2	topics [2] 9:26 111:15		turned [3] 70:5 144:23 171:22	United [2] 45:3 106:6	
thank [23] 11:23 18:4 49:1 54:11,14,16,23 55:1 61:21 110:22,25 111:6 131:15,17 155:17,20,24 161:26 162:3 174:13 182:9,12 183:10	Total [1] 108:17		turns [2] 60:9 144:22	units [1] 90:17	
thanks [1] 66:21	touch [8] 13:5,6,10 52:3 71:17 114:26 123:11 133:4		two [31] 6:3 7:19 11:23 18:16 23:16 25:14,14 27:12,16,17,18,19 30:12 30:13 39:11 49:1 66:19 67:14 70:20 71:6 77:24 77:24 94:15,22 95:8,10 99:23 120:1 140:9 164:6 182:18	university [5] 35:24 92:7 92:12 163:2,5	
their [1] 23:19	touched [1] 67:2		two-day [1] 6:10	unknown [1] 122:7	
themselves [8] 52:6,15 60:23 61:3 62:7 120:16 125:11,12	tours [1] 31:15		twofold [1] 6:23	unless [6] 21:21 23:15 30:7 55:2 97:15 161:25	
there'd [1] 154:23	toward [1] 175:8		type [16] 9:12 12:25 40:18 48:1 51:2 59:1,10 59:18 70:3,14 74:17 85:1 120:3 136:14 153:13 155:10	unlikely [2] 106:15,16	
therefore [1] 162:25	track [1] 13:21		types [13] 16:7 33:22 35:10 40:11 43:3 48:11 48:12 70:6 74:21 77:5 84:13 92:14 160:3	unlikely [1] 149:2	
thermal [3] 171:13,17 182:2	tracking [1] 16:2		typically [5] 22:21 23:2 30:6 123:24 124:17	Unlimited [2] 184:12,14	
they've [14] 25:2 30:22 30:23,23,26 57:25 84:26 113:17 122:11,12 133:12 133:13 138:18 150:1	train [11] 23:21 26:5 43:4 43:5 49:14 68:26 71:2 79:13 83:6 91:8 140:17			unnecessary [2] 32:18 33:20	
thinking [8] 9:20 66:17 66:18 122:26 159:20 162:8 165:1 167:1	trained [12] 49:22,26 50:4 55:15 80:2,18 84:1 84:2 91:6 161:19,20 164:14			unsafe [1] 103:21	
third [3] 47:24 112:25 114:25	traine [2] 27:14 29:25			unsurvivable [1] 75:17	
thought [11] 8:14,18 66:5 98:6 104:8 153:1	trainees [3] 27:12 30:2			unusual [1] 122:2	

-U-

Uh-hm [1] 96:16**UK** [11] 50:20 72:21 79:7

84:23,26 85:10 95:6

106:16 110:7,9 126:12

129:19 134:2 140:14 145:23 150:22 151:26 152:16,19 155:7 158:25 159:8 163:8,21 164:23 166:5 167:9,17 168:8,9 168:10,13,21,24 169:26 172:14,20,22 update [1] 142:1 upgrading [1] 77:23 upper [1] 146:24 upright [1] 60:7 upside [3] 20:21 51:12 171:22 urgency [1] 88:13 usage [2] 178:7 179:4 used [28] 13:26 14:14 17:13 19:18 25:15 30:1 37:20 42:6 48:6 54:2 64:9 70:11 72:23 80:7 101:3,7 102:6 104:12 119:4,6 160:3 164:5 169:3,19 171:13 177:9 178:19,24 useful [2] 102:25 174:21 users [4] 82:7 119:9 127:8,13 using [13] 6:15 23:25 32:24 34:25 38:1 51:1 79:15 102:19 125:21 135:5,6 142:13 146:5 usually [1] 116:26 utilize [12] 12:24 34:2,14 101:9,11,14,20 102:5,11 103:3 116:6 117:26 utilized [4] 28:3 29:1 43:24 48:4 utilizing [3] 42:12,23 102:7	vetted [1] 1:18 view [4] 2:9 21:25 52:12 109:13 views [1] 63:12 vis [2] 67:12,12 visit [1] 63:24 visualize [1] 62:2 vitality [1] 166:21 voting [1] 130:20	whole [9] 23:8 47:26 68:19 74:20 114:6,7 156:9 162:20,22 wide [5] 70:1,2,8 154:23 155:7 widely [3] 120:5,5 172:16 wider [1] 155:13 Williams [1] 182:19 willing [2] 46:4,5 wind [4] 33:15,18 34:1 71:20 window [78] 17:10,11 17:12 18:6,7,11,12,17 18:19,20,24 19:3,4,12 19:14,18,19 20:19,23,24 21:21,23 22:1,2,5,9,22 23:1,5,9,14 30:8,18 51:22 60:15,16,17 61:5 61:7,9 62:6 66:15,16,18 66:23 67:2,13,17 68:3,5 68:6,23,25 69:11,17 70:14,17,21,26 71:8,9 140:18,24 144:7,21 146:1 147:1,6,15 148:10 149:2 149:6,19 165:19,22,24 166:17 168:22 windows [22] 18:17 21:21 22:20 36:14,25 59:20 68:9 69:3 72:23 142:20,21 143:9,17,26 144:9 145:5,13 146:16 146:23 147:12 149:12,14 windshield [1] 166:11 wish [1] 48:25 within [16] 4:9 34:1 56:10,21 57:14 73:3 78:4 97:1 101:8 102:2 106:6 113:11 125:4 136:17,17 141:12 without [3] 7:24 121:21 156:19 witnesses [1] 1:14 wonderful [1] 76:5 wondering [10] 76:1 116:15 132:5 140:19 141:26 148:20,24 149:8 153:1 176:7 word [4] 104:12 119:4,6 164:6 words [1] 118:23 worked [2] 99:22 157:24 worker [3] 10:14 81:12 81:20 workers [8] 8:24 9:4 15:13 16:11 31:11 52:5 98:22 174:24 workforce [2] 15:16 81:5 works [3] 22:23 60:4 102:8 workshop [1] 44:12 world [2] 92:5 163:21 worst [1] 154:21 worth [8] 7:20 29:4,4 34:20 46:1,2 159:2	173:20 worthwhile [1] 153:2 worthy [1] 158:4 wrist [2] 169:25,26 written [1] 178:8 wrong [7] 13:23 23:21 58:12,24 68:11 106:16 142:23	<hr/> -Y- <hr/> year [23] 5:16,19 6:8 42:8 42:14 88:25 89:2,14,16 112:12,14,14 115:5,20 115:24 116:3,6,8,15,19 116:23 117:22 132:15 years [18] 2:22 3:6,11,14 14:4 47:13 52:10 55:15 62:22,26 63:2 116:26 121:19 127:1 128:2 153:26 154:5 164:5 yesterday [30] 1:12 2:25 4:8,15 9:22 10:19 11:25 13:19 16:4 17:14,17 26:8 36:1 38:15 41:24 43:20 45:4 51:7,9 73:25 77:1 104:10 111:21 112:10 113:22 115:2 118:26 167:6 177:5 180:11 yet [2] 85:2 91:9 young [1] 15:9 yourself [7] 23:6 54:8 58:23 59:9 83:10 106:7 150:3 yourselves [3] 57:2 106:2 162:14	<hr/> -Z- <hr/> zipper [1] 59:4
<hr/> -V- <hr/> valuable [8] 108:2,5 163:17 164:22,26 165:12 173:2,3 value [2] 33:8 159:9 variable [3] 68:3,4 112:16 variables [1] 76:7 variation [5] 68:11,15 68:20 70:8 117:7 variations [5] 60:22 69:23,24 70:1,2 variety [2] 42:15,16 various [13] 1:19 5:8 35:10 43:3 82:14,20 88:23 97:20 106:10 107:19 157:17 174:5 177:13 versus [3] 18:7 35:3 104:7 vessel [12] 39:14 41:8,16 41:20 42:14 44:17,23 45:17,25 46:11 103:10 103:13 vessels [7] 41:12,25 42:13 43:11,11 45:11 138:9	wait [2] 54:20 55:5 waiting [2] 86:22,24 wants [5] 5:26 9:12,16 15:22 36:18 waste [1] 149:5 watched [1] 26:26 water [89] 9:1 20:13 22:10,24,25 23:2,3,7,10 36:22 41:13,21 42:25,26 43:5 45:13 47:1,22 49:4 51:17,21,26 52:2,4,6,7 53:9,16 54:3,5 56:3 58:8 66:25 68:17,17 69:4 75:16 101:3 102:15 121:26 136:12 144:1,5 144:18,21 145:14 166:3 166:5,10,15 167:1,8,11 167:16 168:21 169:2,12 169:20 170:1,6,26 171:4 171:4,8,9,10,12,17,18 171:22 172:25 176:2 177:6,10,12 179:8,10,16 179:17,26 180:3,8 181:8 181:10,14,15,18,20,21 watertight [3] 58:26,26 59:6 wave [4] 32:13,16,24,25 waves [4] 32:13,17,18 32:24 ways [8] 52:1 66:19 84:15 91:2,4 158:5,8 159:15 wear [2] 167:4 169:11 wearer [1] 169:2 wearing [3] 59:2,2 122:19 weather [4] 3:25 111:24 112:12,15 week [4] 25:1 26:9 39:17 41:11 weeks [2] 53:4 62:24 weigh [2] 76:19,23 weight [3] 23:9 66:25 75:4 Wells [2] 111:7 160:2 wet [1] 169:15 wetter [1] 169:15 whatnot [1] 118:18 whereas [1] 45:13 whereby [2] 45:6 125:14 whilst [3] 68:19 123:13 141:10 whistles [1] 37:18				