OPUS₂

The Cranston Inquiry

Day 12

March 24, 2025

Opus 2 - Official Court Reporters

Phone: 020 4515 2252 Email: transcripts@opus2.com Website: https://www.opus2.com

A. Yes. that's correct.

1	Monday, 24 March 2025
2	(9.59 am)
3	MR MATTHEW LEAT (called)
4	SIR ROSS CRANSTON: Yes, good morning, everyone. Good
5	morning, Mr Leat. Mr Rory Phillips, counsel to the
6	Inquiry, has got some questions for you, but just before
7	he begins could you read the affirmation?
8	A. Yes, certainly.
9	MR MATTHEW LEAT (affirmed)
10	Questions by MR PHILLIPS KC
11	SIR ROSS CRANSTON: Thank you very much. Mr Phillips.
12	MR PHILLIPS: Good morning, Mr Leat. You have provided two
13	statements to the Inquiry on behalf of the Maritime $\&$
14	Coastguard Agency, MCA. A first statement 1 November
15	last year, which is 135 pages long.
16	A. That's correct.
17	Q. And a second one, thank you, dated 17 February, this
18	year, which is seven pages long.
19	A. That's correct.
20	Q. Thank you. And you are still, as we can see, employed
21	by His Majesty's Coastguard which is part of the MCA?
22	A. That is correct.
23	Q. Thank you, and I think you have been employed by the
24	Coastguard since November 2010, is that right?
25	A. Yes, that's correct.

1

1 Q. Can you give us a brief outline of how your career has 2 progressed? 3 A. Yes, certainly. So I joined His Majesty's Coastguard in 4 2010. I joined at MRSC London. I then progressed 5 through various roles taking on search mission 6 co-ordinator training. I was a team leader, a maritime 7 controller and then latterly, I moved to be head of 8 technical infrastructure , which $--\ensuremath{\,\mathrm{I}}$ was, at the time of 9 this incident, in that post ${\sf I}$ was responsible for 10 effectively being the intelligent customer between 11 Coastguard operations and our IT department, ensuring 12 that Coastguard had the best equipment that it could. 13 Previous to that which I think may be relevant is 14 I served just over 20 years with the RNLI as 15 a volunteer. I was a commander of the RNLI's busiest 16 lifeboat station and I also operated as the master of 17 a class 5 passenger vessel in the early part of my 18 career carrying 220 people on board fast passenger 19 ferries 20 Q. And the busiest RNLI station, is that the one in London? 21 A. Yes. that's correct. 2.2 Q. Thank you. Now just taking us forward from the time of

Q. Thank you. Now just taking us forward from the time of the incident, I think it's right that in January '22 you

- took up a new role, Assistant Chief Coastguard Migrant
- and Maritime Security Operations, is that right?

2

2 Q. And were there for a year before moving to the role of 3 Assistant Chief Coastguard National Network Operations 4 and Infrastructure, which I think is still your role, is 5 that right? A. Yes, that's my current role. Yes. 6 7 $\mathsf{Q}.\;\;\mathsf{Can}\;\mathsf{I}\;\mathsf{just}\;\mathsf{ask}\;\mathsf{this}\,.\;\;\mathsf{Does}\;\mathsf{your}\;\mathsf{previous}\;\mathsf{role},\;\mathsf{Assistant}\;$ 8 Chief Coastguard Migrant and Maritime Security 9 Operations, does that role still exist? 10 A. The -- the role does still exist. It has a slightly 11 different title . It's now Assistant Chief Coastguard 12 Channel Operations, but the purpose of that role still 13 exists and there is a person in post in that position 14 today. 15 Q. And is that -- the person at that level within the organisation who's responsible for the search and rescue 16 17 work of the Coastguard? 18 A. They lead strategically on engagement around small boat 19 activity , engaging with stakeholders, other Government 20 departments and ensuring that HM Coastguard is 21 delivering its mandate of search and rescue in the 22 English channel. 23 $\mathsf{Q}.\;$ Yes, but in your current role, going back to you, the 2.4 one you have had since '23, National Network Operations 25 and Infrastructure, do you have any current 3

1		responsibility for the Coastguard search and rescue work
2		in the Channel?
3	Α.	So I oversee HM Coastguard's national network which
4		I believe the Inquiry has heard about during this
5		process.
6		So I ensure that HM Coastguard delivers its state
7		obligations and then I work closely with two other
8		assistant chief coastguards who have the line management
9		responsibility of the staff at those stations, but
10		I make sure, centrally, that HM Coastguard is delivering
11		its service.
12	Q.	Thank you. Just by way of introduction to my questions,
13		I think it's right $$ fair to say, given the 135-page
14		statement, that you have made yourself familiar with the
15		background and events which preceded the incident on
16		23 November '21, is that fair?
17	Α.	Yes, I attempted to make myself as familiar as possible.
18	Q.	Thank you very much because you are appearing today in

- 19 effect as a corporate witness on behalf of the MCA.
- 20 A. Yes, that's correct.
- 21 Q. Thank you and I take it also that that applies to the
- 22 period before the incident and during the night itself ,
- 23 is that fair?
- A. Yes, I have attempted to review as much material aspossible, but as you say, I wasn't involved in the

March 24, 2025

1		incident itself on the evening. So I have read the	1		increase in crossings over those years, wasn't there?
2		documents disclosed to the Inquiry.	2	Α.	Yes, that's $$ that's correct. The number grew and
3	Q.	Thank you. Well, you will be relieved to hear I am not	3		I think as the Inquiry has heard, events in November
4		going to take you through a full chronology of all of	4		grew significantly and were not predicted.
5		the events, but what I would like to do instead,	5	Q.	It was a very, very heavy month indeed, November '21,
6		Mr Leat, is to focus on the issues that have been	6		wasn't it?
7		identified by the Inquiry as relevant to its terms of	7	Α.	It was a very heavy month indeed and I think, as we have
8		reference .	8		heard in evidence previously to the Inquiry that's been
9		But first a little background, if we may. On the	9		given, that Home Office colleagues were able to predict
10		question of the small boat problem and the increases in	10		with very good accuracy, within a few percent, what the
11		small boat activity in the period leading up to the	11		expected crossings were able to be, but November very
12		incident, as you know, we have heard a vast amount of	12		much bucked that trend and the increase was huge.
13		evidence about how the problem originated and the	13	Q.	Let's have a look at the more detailed breakdown because
14		increases over the years.	14		in fact, Mr O'Mahoney who you mentioned, sets this out
15		Now, you address that in your statement. If we	15		in his own statement. So could we have Mr O'Mahoney's
16		could go please to $\{INQ010098/8\}$, and page 8 within the	16		statement up, please, $\{INQ010134/1\}$ and if we go to
17		statement, we see here, do you see, paragraph 1.20, you	17		page 28 $\{INQ010134/28\}$ and paragraph 79 and if we can
18		say the Coastguard first became alerted to small boats	18		enlarge that, please, thank you very much.
19		crossing from France in 2016. And we know, for example,	19		That shows a detailed account of the month by month
20		that the Border Force became involved in the dealing	20		numbers and it's obvious from that, isn't it, if you
21		with the problem in about 2018, I think that's right,	21		look at the individual months in 2021 and then '22 and
22		isn't it?	22		'23 of course, that there was a huge increase continuing
23	Α.	Yes, that's correct.	23		throughout this period from 2018, albeit with the
24	Q.	And as you note in the statement, it's at the very	24		monthly variations that we can see there?
25		bottom of this page, in December that year, the then	25	Α.	Yes, I think the numbers grow, but we do see, I think in
		5			7
1		Home Secretary declared a major incident in relation to	1		2020 for example, during the winter period the numbers
2		small boat crossings.	2		do drop off $$
3		That's $$ again, that's right, isn't it?	3	Q.	Yes.
4	Α.	I believe the Home Secretary used the language "major	4	Α.	and through professional opinion, I believe that's
5		incident", but I don't believe that that's the same	5		due to the weather and obviously the conditions in the
6		language or applies in the same way that we, as	6		English Channel worsen during the winter months, but yes
7		a category 1 responder, would apply major incident and	7		there is a $$ an increase, with November being very much
8		I think Mr O'Mahoney in his evidence actually used the	8		an outlier, an anomaly, in that year of 2021.
9		term " critical incident —— "	9	Q.	Yes. Well, the '21 numbers overall are much higher, we
10	Q.	Yes.	10		can see can't we, than the 2020 numbers because, for
11	Α.	which I believe is an internal recognition of the	11		example, May, June, July, August, September, they are
12		challenge that's being faced.	12		all far higher than any individual month in the previous
13	Q.	Yes, that is the point you make at the end of your	13		year, do you see that?
14		paragraph there, do you see at the top of the next	14	Α.	Yes, yes, that's correct they have grown.
15		page {INQ010098/9}?	15	Q.	But as you say, November of that year was a vast number
16	Α.	Yes.	16		and you can just see on the table itself that it was
17	Q.	That there is a distinction between, as it were, your	17		only surpassed in the three heaviest months of the end
18		understanding of that terminology and the	18		of '22, do you see, August, September and,
19		Home Secretary's.	19		well, October?
20	Α.	Yes.	20	Α.	Yes, correct.
20	0	Thank you. Well, we will come back to that, if we may,	21	Q.	Thank you. Could we go back to your statement, please,
21	φ.				
	ч.	but here you give $$ the same page, 1.23, the raw	22		$\{INQ010098/9\}$ and this time to page 9. Thank you. Do
21	ч.	but here you give $$ the same page, 1.23, the raw figures for '22 $$ sorry, between 2019, I'm sorry, and	22 23		{INQ010098/9} and this time to page 9. Thank you. Do you see there which is the next paragraph 1.24 you
21 22	ч.				

6

1		following year, '22, could reach 60,000 people. So just
2		doing simple maths 5,000 a month on average.
3	Α.	Correct.
4	Q.	So by the summer of that year, you, as an
5		organisation $$ and in my questions, that's the way I am
6		going to do it $$
7	Α.	Yes.
8	Q.	because that's why you are here.
9	Α.	Yes.
10	Q.	You were on notice by the summer that the trend of
11		increasing crossings was likely to continue?
12	Α.	Yes, that's correct. In that summer the organisation
13		was made aware through prediction through Home Office
14		colleagues that 60,000 was predicted for the year of
15		2022. So His Majesty's Coastguard took, as it says in
16		the statement there, some proactive action in terms of
17		recruiting staff to prepare for 2022 which was expected
18		to be a significantly challenging year.
19	Q.	Yes. Well, we will come back to the question of
20		recruitment in a moment, if we may. But looking at the
21		numbers again with one further sort of measure in mind,
22		the material the Inquiry has received shows that
23		although November itself was a very high month, as we
24		have seen, within the month, this particular night, 23rd
25		and 24th, was not itself particularly high, is that

1		correct?
2	Δ	So L belie

-		
2	Α.	So I believe there were 15 days during $$ or periods of
3		crossing during the month of November. I believe, and
4		I would have to look at the data, but I believe the
5		numbers were $$ were high across the month. There was
6		a lot of people that, that made the crossing
7		during November, but I can't recall if they were
8		significantly high. I think the whole month was high
9		numbers which were un-forecast.
10	Q.	Yes. Okay, well, let's look at the challenges
11		associated with this phenomenon and go back in your
12		statement to page 8 {INQ010098/8}, please, where you
13		make the point, and again we have heard a lot of
14		evidence about this, that small boat crossings $$ do you
15		see the second sentence $$
16	Α.	Yes.
17	Q.	have inevitably given rise to new and distinct
18		challenges.
19		And the starting point for this in your statement is
20		on pages 6 and 7, where we have paragraph 1.15
21		$\{INQ010098/6{-7}\}$ because here, thank you, you set out the
22		normal position, what normal vessels in the Channel or
23		elsewhere have by way of equipment, lifesaving
24		apparatus, means of communication, navigation, means of
25		detection etc.

10

1		And the point you make in the later section of your
2		statement, if we could go to page 9 and 10
3		${INQ010098/9-10}$, please, paragraph 1.25, is that for
4		the most part the small boats have none of them. Is
5		that fair?
6	Α.	Yes, that $$ pardon me, that's absolutely correct. As
7		is referred to in the statement, a conventional vessel,
8		be that a commercial vessel or even a leisure vessel,
9		will carry lifesaving equipment. It will have
10		navigation equipment on board, it has means for being
11		able to attract attention and to the best of my
12		knowledge, that equipment and the training that $$ that
13		goes with, you know, those who operate a commercial
14		vessel at sea, unfortunately those on board small boats
15		who make the crossing do not have any of that.
16	Q.	No. And in terms of the evidence we have received, can
17		I suggest there were some further challenges associated
18		with these types of crossing. First, the situation
19		which often arose; that calls came from a number of
20		different people within the same vessel with no single
21		point of contact; that was a challenge, wasn't it?
22	Α.	That absolutely that's a challenge. There was no
23		designated and $$ person on board that would be making
24		calls to the emergency authorities. So if you look at
25		how that would operate with a commercial vessel,

11

-		
1		a single person would be charged to alert the Coastguard
2		and then continually have communication with the
3		Coastguard so there was a single point of contact.
4		Multiple calls coming from a single vessel created
5		a situation for our staff where it may have appeared
6		that there were more small boats than there actually
7		were. So very, very difficult for our staff and also
8		very distressing hearing lots of people who $$ reporting
9		that they are in distress.
10	Q.	Yes. The second thing I want to suggest added to the
11		difficulties was that there was generally no properly
12		qualified person helming the boat?
13	Α.	Yes, that $$ to the best of my knowledge, that's
14		correct. There was no training that we are aware of
15		that individuals who piloted the small boats across one
16		of the busiest shipping lanes in the world in very
17		treacherous conditions that they had had any training
18		made available to them.
19	Q.	Next, that there were often communication difficulties
20		because English wasn't the first language of those on
21		board?
22	Α.	Yes. That, that's correct. Those crossing the Channel
23		come from various countries and, therefore, there's lots
24		of different languages and English is not always spoken.
25	Q.	And last, that the problem of inaccurate information

- 1 being provided, whether intentionally or not, about, for
- example, the number of people on board? 2
- 3 A. Yes, that's correct. I think it's the organisation's
- 4 experience and still is today that information passed to
- 5 His Majesty's Coastguard isn't always accurate and that
- may be through people, you know for example, estimating 6
- 7 how many persons are on board, it is very difficult
- potentially for them to do so. 8
- 9 So the information that is shared is often
- 10 incorrect. But I think I make the point that that
- 11 doesn't really matter to us. I think our staff, day in
- 12 day out, will treat every report of someone being in
- 13 distress as being in distress and therefore a response
- 14 is initiated to that search and rescue case.
- 15 Q. Thank you. But would it be fair to say, looking at all 16 of the various challenges in your statement, the ones we 17 have just discussed, that taken together, they made the
- 18 task of those involved in the search and rescue response 19 the more difficult?
- 20 A. Absolutely, it makes it very, very difficult for any SAR
- 21 professional to be able to pull all this together, but 22 as I say, we take the information and we respond to
- 23 those in distress.

- 24 Q. And would this also be fair, as far as you are
 - concerned: that the organisation, in other words

13

- 1 His Majesty's Coastguard, became aware of these
- 2 particular challenges associated with small boats fairly 3 early on in the time of your involvement?
- 4 A. Yes, I think that -- that's fair to say, that the
- organisation was aware of all of these different --5
- 6 these difficulties and challenges, be that the construct
- 7 of the boat, the training of those on board, or lack of
- 8 the equipment and the lack of -- so the organisation was 9 verv much aware of that.
- 10 Q. Are you able to help with when, in other words, would it 11 have been from the first emergence of the problem, let's 12 sav in 2018?
- A. I wouldn't be able to say for certainty, but I would --13
- 14 I would consider that 2018 would be an appropriate 15 timeframe
- 16 Q. Right. Can we look now at some internal reviews or 17 reports about your organisation's response to small
- 18 boats which took place before the incident in 2021, and
- 19 could we bring up, please, $\{INQ007279/1\}$ and if possible have alongside it $\{INQ003323/1\}.$ 20
- 21 Thank you. The first point is that it looks from
- 2.2 the document on the left as though actually its date is
- 23 from August and that the date July, which appears 24
- I think a couple of times including in the heading, is 25
 - wrong. You can see that from, for example, the second

14

- 1 paragraph which refers to a date at the beginning 2 of August, so I think it happened after -3 A. Yes 4 Q. -- after then. And you will be no doubt familiar, as 5 a result of your reading, of these reports, is that 6 right? 7 A. Yes, I have seen these documents. $\mathsf{Q}.\;$ Thank you. So they were both produced in August '21. 8 9 On the left, we have a report from the Clandestine 10 Operations Liaison Officer and I am going to call that 11 person COLO. 12 A. Yes. 13 Q. And the right is from the Coastguard's Head of 14 International Liaison. So if we start on the right, 15 please, and take the other document -- sorry, start on 16 the left and take the other document off the screen 17 please. Thank you, we can see from the text of this 18 that the COLO had observed his colleagues' performance 19 on 4 August and he sets out, at the bottom of the page, 2.0 if we could lift the document, please, his observations. 21 Do you see the second line: 22 " ... my overall impression of how migrant incidents 23 generally develop as a pattern of activity over 24 5 phases." 25 And if we turn over to the next page, please, 15 1 $\{INQ007279/2\},$ you see the five phases there too, ending 2 up with "Review and Completion" and then he moves on to 3 specific observations and I would like to pick up some 4 of those 5 The first is that there had been a delay in 6 providing the French tracker; do you see that, that's 7 paragraph 1?
 - 8 A. Yes, I see that.
- 9 And the second thing to note in paragraph 3 is that the 0 10 SMC for the day was remotely located at the station in 11 Humber. 12 A. Correct. 13 0, 4. 14 "As the 'apparent' number of ... vessels in distress 15 [had] increased ... "
- 16 There had been an obvious and understandable loss of 17 effective communication with that person:
- 18 " ... the remote SMC which had consequences to shared 19 situational awareness and joint understanding of risk."
- 2.0 Then turning the page {INQ007279/3}: 21 ... [during] a 10-minute Aerial Tasking meeting
- 2.2 I witnessed another four Distress Phase incidents being 23 created based on 999 calls (many on review, from the 2.4 same vessel)." 25

That's the point we touched on just a little while

Day 12

1		ago.
2		And then lower down on page 3, there were issues
3		with sufficiency of resources to attend incidents, one
4		migrant vessel had been left for over two hours with
5		a single Border Force jet ski and the general impression
6		of resources being stretched. Do you see that?
7	Α.	Yes, I do.
8	Q.	And there were often, it is reported in the second
9		sentence of paragraph 5:
10		" no available assets to cover the number of
11		'apparent' distress incidents that were being logged."
12		And then moving down the page, please, to the bottom
13		in $% \left({{{\left({{{_{{\rm{T}}}}} \right)}_{{\rm{T}}}}}} \right)$ is a state of the second state of the second state of the
14		elected to stand down. And the replacement had focused,
15		unsurprisingly, on reviewing the open incidents and
16		analysing where there were overlaps or duplications.
17		Moving to page 4 $\{INQ007279/4\}$, the Maritime
18		Operations Officers, MOO, had been struggling with the
19		amount of information, logging it, analysing it and
20		communicating with the remote CMC and had inadequate
21		times for breaks. And then, under that and $$ two
22		paragraphs down:
23		"These are not new observations (some being raised
24		by Border Force colleagues), where previous 'red days'
25		have seen staff at MRCC Dover displaying signs of
		17
1		tiredness bordering on exhaustion with a consequent drop
2		in performance. This [became] particularly apparent
3		when there had been multiple 'red and/or amber days'
4		with the same team (often with MOOs under training)
5		having to manage the SAR response."
6		Now, just standing back from this. The issues which
7		have been identified by the COLO here are all serious

7 have been identified by the COLO here are all serious8 problems, aren't they?

- 9 A. So I think, first of all, you know, HM Coastguard is
- 10a learning organisation. So it's absolutely appropriate11that we review our response and we, where we can, amend
- 12 our response or review processes/procedures. And
- 13 I think probably what may be helpful, whilst you have
- 14 moved through at some pace there in terms of each of
- 15 those times, is potentially go back just to talk about
- 16 each of those.
- 17 Q. Please.
- A. So I wonder if we could take the document back to the first point {INQ007279/1}, if that's okay.
- 20 Q. Do you mean of his observations on the second page?
- A. Sorry, second page, yes {INQ007279/2}.
- 22 Q. Thank you. Can we go to the second page, please.
- 23 EPE OPERATOR: It has frozen.
- 24 $\,$ MR PHILLIPS: Oh, it's frozen. Mr Leat, you have broken the
- 25 system.

18

1		Well, the first paragraph of his observations was:
2		despite repeated requests from Dover, once the French
3		migrant tracker was finally shared at approximately
4		06:30 it already contained 23 plus incidents.
5	Α.	Yes. So I think on that one I think the Inquiry has
6		seen through evidence and through meetings regular
7		engagement with the French Coastguard, that we were
8		aware at times, that delays occurred. And obviously, if
9		delays occur, that means that we can't $$ were unable to
10		take proactive action which we try to always do when we
11		are aware of crossings. And I think through meetings
12		that's been disclosed to the Inquiry, there's notes of
13		HM Coastguard raising this with colleagues at MRCC
14		Gris-Nez. So whilst on that specific event it may have
15		occurred, I do know through reading documents that
16		engagement with the French Coastguard occurred on
17		a basis to remind them of the importance of sharing
18		information.
19	Q.	There we are. It's on to the next page, if you can
20		{INQ003323/2}. I think you are on the wrong document,
21		I'm afraid. What we want is {INQ007279/2}, yes, thank
22		you. Sorry.
23	Α.	No worries. So yes, so whilst this occurred on this
24		event as the Inquiry has seen, we as an organisation
25		have liaised and reminded colleagues in the French
		19
		17

1		Coastguard that the importance of sharing information.
2		That information is required under the Mancheplan to be
3		shared with His Majesty's Coastguard.
4	Q.	Yes. Well, yes. I think it might be more helpful
5		because what I am going to do is to take you through
6		these documents and then we will get to the question of
7		what the organisation did about them. So if we go
8		through this document to the next page, which I am
9		interested in, which page 4 $\{INQ007279/4\}$, you will see
10		risks are identified there. Loss of organisational
11		reputation; staff retention, welfare and morale; loss of
12		life at sea from ineffective / inadequate preparation
13		and/or response, etc.
14		Failure to recognise and/or declare a major
15		incident; and inability to adequately defend the
16		organisation at any subsequent investigation, inquest or
17		Inquiry .
18		And you will see that the same Coastguard official,
19		the COLO, made nine recommendations on the next page,
20		please, $\{INQ007279/5\}$, thank you. Basically, get the
21		SMC physically based at Dover; get sufficient trained
22		personnel at Dover for all amber and red days;
23		conducting adequate preparation and resourcing when
24		there is credible intelligence and/or information that
25		an amber or red day is likely ; implementation of all

- standard operating procedures and protocols that are
 tested, trained, exercised and regularly reviewed; the
 implementation of migrant specific post—incident reviews
- 4 both internally to ensure that lessons are learned and
- 5 new strategy and/or tactics can be developed; welfare
- 6 support for staff exhibiting any signs of stress,
- $7 \hspace{1.5cm} {\rm tiredness}$, etc due to repetitive exposure to amber and
- 8 red days; proportionate and careful use of broadcast
- 9 action; early access to the French migrant tracker, the
- 10 point you were just talking about; and the creation of 11 one UK migrant incident tracker which all parties can
- 12 access and input into.
- 13 And we know, for example, to take that last example,
- 14 $\,$ 9, that that indeed did happen, didn't it , just before
- 15 the incident with which we are concerned?
- 16 A. Yes, in fact, I believe it was instigated, I believe 17 in August or September, but it took time for that to
- 17
 In August of September, but it took time for that to

 18
 actually go live due to challenges in security between

 19
 the Home Office and His Majesty's Coastguard in terms of
- 20 making sure that documents were controlled and stored 21 safely.
- 22 Q. Yes. And again, just leaving for the moment what you
- 23 did in response as a separate question. Do you agree
- 24 that all of these are serious and important points which 25 needed to be taken on board by the organisation?

1	Α.	Yes, I do agree and, that's why the organisation
2		responded and took certain actions to respond to these.
3	Q.	Great. Let's look at the other document we looked at
4		before from the same month, and there it is, thank you
5		very much, {INQ003323/1}. Again, I am not going to take
6		you through the detail of this one, but I think it's
7		fair to say, isn't it, that it echoed many of the
8		concerns that we have seen in the report of the
9		4 August, is that fair?
10	Α.	I believe so. I think it would be helpful just turn to
11		the latter pages, if that's okay, just to verify that.
12	Q.	Yes, well if we start with the specific observations, it
13		is the same structure.
14	Α.	Yes.
15	Q.	So there is the problems with the tracker, problems with
16		staffing , the SMC working remotely, the lack of
17		effective communication, the loss of situational
18		awareness. Do you see paragraph 5? And then the basis
19		for that is set out.
20		If we go to page 4 $\{INQ003323/4\}$ similar risks are
21		identified , although this time, interestingly , loss of
22		life has come to the top, but the others are basically
23		the same.

- And then a series of recommendations. We have 1-7
- 25 here, rather than 1-9, but again, they cover very much
 - 22

- 1 the same territory, don't they, is that fair? A. Yes, I think they are similar themes, yes. 2 3 Q. Thank you. Now then, please, to a document slightly 4 later in the month, which is $\{INQ003379/1\}$. This is the 21 August, entitled "Migrant activity, Full Debrief 5 Report to Follow". 6 7 We haven't seen a full debrief report. Are you 8 aware, can you help on that, was there a full debrief as 9 far as you are aware? 10 A. I am unable to comment, I don't know. Q. Thank you. And it records a number of actions to be 11 12 taken under the headings "Strategic", "Tactical", 13 "Support" and "Risks"; we have got strategic on the 14 screen at the moment. 15 Can you help us with what sort of document this is, 16 what it refers to? 17 A. So from my reading of this document, this looks like 18 a report from an individual who would have been at 19 Dover. I don't see a name on the document. My 20 assumption would be it's from a COLO who was operating 21 at Dover and these would be observations that they have 2.2 made or actions that they have taken. 23 Q. And, again, without wishing to go through the whole 24 thing, it looks as though it's covering quite a lot of
- 25 the same points that we have seen. For example, it's

23

1		just an example, under "Tactical" if we can go to
2		page 2, $\{INQ003379/2\}$, the second bullet there:
3		" overwhelmed by [the] volume of work."
4		And overwhelmed at an operational:
5		"Operational level also overwhelmed."
6		A couple of paragraphs down:
7		"Migrant incidents as Distress "
8		That's the categorisation we know that you applied.
9		Refers to the failure there to undertake the $R{-}A{-}G$
10		reviews, the RAG reviews for small boat distress
11		incidents, and again, we will come back to that. But if
12		we go over the page, to page 3, $\{INQ003379/3\}$ and the
13		"Risks" section, again, they are very familiar and
14		again, "Loss of life through ineffective [or] inadequate
15		preparation and/or response" is at the top.
16		Again, it does cover a similar set of concerns
17		expressed by colleagues within the organisation, doesn't
18		it?
19	Α.	Yes. They are issues that had been observed and that $$
20		they are feeding back to the organisation so the
21		organisation can take appropriate steps to modify or
22		change how we do things. And I think risk number $1 \\$
23		there, loss of life.
24	Q.	Yes.
25	Α.	${\sf I}$ would expect that in any review because ultimately, as

1		
1		a lifesaving organisation, we want to do the best we
2		can. We want to save every life that is possible to be
3		saved. So, therefore, that is an appropriate risk in
4		any incident review, to be able to have that listed .
5	Q.	And indeed, you would normally expect it, wouldn't you,
6		at the top?
7	Α.	Yes.
8	Q.	Number 1?
9	Α.	Yes, that $$ that's our organisation's purpose is to
10		save life .
11	Q.	Yes, exactly. Yes. And on the point about colleagues
12		expressing their concerns, I imagine that that's, as an
13		organisation, what you would hope and expect so that, as
14		you said earlier , you can do the lesson learning that
15		you say is part of the way you approach things?
16	Α.	Yes, the organisation is a learning organisation, it
17		wants to take on board feedback, it wants to learn from
18		every incident. And in fact, if we look into some of
19		the international legislation , we have to be a learning
20		organisation. So IAMSAR tells us that's what we need to
21		do and we do that to great detail.
22	Q.	Yes. Well, a final document from this phase, please,
23		in August is at $\{INQ003322/1\}$ and this is the email from
24		Mike Bill and as I am sure you know, he wrote on
25		17 August, he was then I think a divisional commander,
		25
		23
1		wasn't he?
~		

1		wash t he:
2	Α.	Yes, that's correct.
3	Q.	And he was writing to the Chief Coastguard at the time
4		raising concerns about the organisation's response to
5		small boat activity and listing various recommendations,
6		do you see, starting at the bottom the page there: lack
7		of situational awareness and challenges of the remote
8		SMC.
9		Again, I don't want to go through all of them with
10		you. But it looks as though what he was doing here was
11		to summarise the areas of concern that we saw identified
12		in the 2 August report, is that a fair way of putting
13		it, do you think?
14	Α.	I $$ I believe so and I would expect any of our
15		strategic leaders to not only identify any risk or
16		challenge, but then to take action to make changes
17		modifications etc, to be able to deal with those.
18		So this is what I would expect a senior leader at
19		strategic level of our organisation to be doing.
20	Q.	Yes. Well, if we turn over the page, that $$ as we saw,
21		situational awareness was at the bottom of page 1. It
22		continues on to 2 $\{INQ003322/2\}$ with the details there,
23		the challenges, the options for the organisation.
24		Then at the bottom the page, if we can go down,
25		places thank you "Staff at capacity for long periods"

25 please, thank you, "Staff at capacity for long periods"

26

1	including a, do you see in italics , genuine concern for
2	the welfare of those officers involved, no adequate time
3	available for rest, comfort or meal breaks."
4	And then going on over the page {INQ003322/3}:
5	"No single version of the truth "
6	Of the problem of the various trackers and trying to
7	reconcile them. And at the bottom of that page:
8	"High level migrant activity is not restricted to
9	Red days and is commonly experienced on Amber and Yellow
10	days as well as days that were considered Green 5 days
11	earlier ."
12	And he then, going over the page again, please,
13	${INQ003322/4}$, refers to the question of major incident:
14	"These high intensity days meet our [that's the
15	point you were making before] definition of Major
16	incident however we are not declaring it as such. To do
17	so would advertise to the wider world (perhaps not
18	preferred by Home Office) but would also inform our
19	partner agencies that we are stretched at Dover and may
20	not be able to support any [response] coming from them."
21	And then he sets out his own version of
22	recommendations at 1 to 10 on the next $$ this page and
23	the next page, $\{INQ003322/4-5\}$.
24	So is this a fair summary of this material
25	from August '21: that your colleagues in the

27

1		organisation, including, as you said, somebody in
2		a senior leadership role here, were sounding warnings of
3		significant inadequacies and risks linked to the
4		organisation's then response to the small boats
5		challenge?
6	Α.	I think I would dispute the word "inadequacies"; I don't
7		agree with that. I think what we saw through the summer
8		of '21 and as $$ as the $$ as the situation develops as
9		today, the dynamics of small boat crossings change on
10		a daily basis and we, as an organisation, have to adapt
11		at pace to change how we respond to try and rescue those
12		that make the very dangerous crossing on small boats.
13		So I don't agree with the wording "inadequacies",
14		I think what the organisation was doing was observing,
15		learning, tactics were changing from those organised
16		crime gangs that were launching small boats and people
17		making the very dangerous crossing and our organisation
18		was reviewing and modifying. But yes, I don't $$
19		I don't agree with inadequacies.
20	Q.	Well, would you agree with this: that what we have seen
21		here is a picture in the summer of 2021 of some of your
22		colleagues, including a senior colleague, raising the
23		alarm?
24	Α.	I think colleagues are observing that the situation is
25		evolving and therefore are highlighting areas where the

- 1 organisation needs to adapt and therefore -- and after 2 that, as we can see here, through the divisional 3 commander, they are identifying ways to adapt to that. 4 And I think there's a number of elements I could 5 talk about in terms of some of these points in terms of things like staff welfare, for example. The 6 7 organisation has a trauma risk incident management 8 system in place to be able to support staff. It's got 9 an employee assistance programme and then elements 10 around breaks, for example. I think we heard -- the 11 Inquiry has heard from a number of Coastguard staff. 12 And I think staff on their breaks is a really important 13 point. Coastguard staff are not forced to not take 14 their breaks, but I think coastguards being coastguards 15 and the fact they want to save life, they want to help 16 everybody, they will often decide through a voluntary 17 means they want to stay and they want to assist, to help 18 as much as they can. 19 And that's the culture of the organisation, is that 2.0 our people want to help people and that's why, on 21 occasion, staff wouldn't take their full rest breaks and 22 I think as Mr Papadopoulos talked about in his evidence,
- he referred to the staff still had the ability to usewelfare facilities , still were able to eat a meal. So
- 25 I think I could probably go through each of these points

1 and give an organisational view, but ${\sf I}$ am not sure how the rest of your questioning is going to go, sir . 2 3 Q. We are going to pick them up as we go when we look at 4 the themes later. 5 A. Okay. 6 $\mathsf{Q}.\;$ What I am doing now is really to look at what the 7 organisation was being told by its own people about 8 perceived problems, just three months before. And the 9 next thing I want to do, if I may, is to broaden this 10 out slightly in terms of the material we are looking at, 11 still some internal material and then touch -- begin to 12 touch, anyway -- on what was done by the organisation to 13 address these concerns. 14 A. Okav. 15 Q. So can we start, please, by looking at the MCA's risk 16 register and that is $\{INQ000167/1\}$ and hard to read. 17 This is the register from May 2020 as you see. If we 18 can go to page 24, please, {INQ000167/24}, and here, if 19 we can enlarge that: 20 "Extract from Corp Risk Register November 2021, New 21 Risk " 2.2 And you deal with this in your statement, for 23 completeness, at paragraph 7.19, page 121, 24 $\{INQ010098/121\}$ where you say that this entry was added 25 in November, as it says. And what it says is:

30

1		"HMCG may become overwhelmed due to unquantifiable
2		levels of migrant channel crossing activity occurring
3		during periods of good weather."
4		And it's right, isn't it, just on the material we
5		have looked at, that that risk , that the Coastguard
6		might become overwhelmed in that way, was identified,
7		for example in the COLO report, the very first one we
8		saw from 4 August?
9	Α.	I think $$ so, for context, this risk was discussed at
10		the executive in November.
11	Q.	Yes.
12	Α.	'21 and this risk supports the view of the increase of
13		crossing numbers looking into 2022 where we were
14		anticipating 60,000 people crossing. So whilst the risk
15		is labelled as being in November, this was for
16		discussion, I believe, but I wasn't involved in creating
17		or lodging this risk.
18	Q.	Right. But $$ but, it looks, as I say, as though the
19		first $$ in the documents we have been looking at, this
20		concern was identified in August. With hindsight, don't
21		you think it should have made its way on to this
22		register rather than earlier than November?
23	Α.	I am unable to comment. Unfortunately, I wasn't
24		involved in that.
25	Q.	Thank you. Would an earlier appearance in the corporate
		31
1		risk register have had any impact on the way the
2		organisation conducted itself?
3	A.	I think what's really important is whilst this risk was
4		lodged in the November executive, a lot of action had
5		taken place ahead of this. So in August '21,
6		HM Coastguard commenced recruitment for additional
7		staff ——
8	Q.	Yes.
9	A.	to be located at MRCC Dover. The organisation
10		commenced work around CAESAR, as we call it, which was
11		the increase of aerial surveillance and that was through
12		the provision of an unmanned drone and fixed-wing
13		aircraft and I think as the Inquiry has heard throughout

- 14 that aeronautical assets provided the best way for us to
- be able to have a maritime domain awareness.
 So the organisation was taking a lot of steps ahead
- 10 So the organisation was taking a lot of steps anead
 17 of this risk being lodged logged, sorry but I am
 18 unable to talk about the timing of why this occurred
 - unable to talk about the timing of why this occurred
 then.
- then.
 Q. Well, we will come back to both of those points you have made, don't worry.
- 22 And you fairly said that this isn't something you
- 23 can assist on. So let's move on. Looking next at the
- 24 question of Department for Transport, as it were the
- 25 umbrella organisation, or the sponsor department.

1		Can we go please to $\{INQ010337/1\}$. That is the
2		corporate statement, so as it were the equivalent
3		statement, to yours
4	A.	Yes.
5	Q.	from the Department for Transport. And if we go to
6		page 30 and paragraph 83, please, {INQ010337/30}, you
7		see there set out the DfT's understanding in November
8		for the situation $$ of the situation for the
9		Coastguard, do you see from the third line?
10	A.	Yes.
11	Q.	This was being successfully managed:
12	•	" whilst high crossing numbers and landside
13		issues were putting maritime operations under pressure,
14		and were increasing the risk of maritime capabilities
15		being overwhelmed, this was being successfully managed
16		and an appropriate SOLAS response continued to be
17		delivered."
18		And then there is a quotation from an email at the
19		time from the director of the JMSC, that the maritime
20		element of small boat operations was business as usual,
21		though stretched. And:
22		"The critical incident is focused on the land
23		response."
24		So that understanding, that everything was, broadly
25		speaking, fine and being managed, is rather at odds with
		33
		33
1		the reports we have seen from August '21, isn't it?
2	Α.	I $$ I don't think so. I think this, this report
3		acknowledges that resourcing was stretched but not
4		overwhelmed.
5	Q.	Yes.
6	Α.	And I think in the documents that we looked at a short
7		while ago, whilst there were some challenges, the
8		organisation was still successfully delivering search
9		and rescue capability and rescuing those who were making
10		that very dangerous crossing from small boats. And
11		I think it's really important that an independent, be
12		that the director of the Joint Maritime Security Centre,
13		someone who has an understanding of the maritime domain,
14		has $$ has noted this as well: that whilst it is
15		stretched, we are continuing to deliver an efficient and
16		effective service.
17	Q.	Right. Do you know, as a matter of interest, whether
18		the DfT was briefed on the sort of concerns we have seen
19		expressed by colleagues in August reports?
20	Α.	I know at the time that there was liaison between
21		Department for Transport and the MCA. There were weekly
22		calls that —— that were undertaken. But I don't know
23		the content of those calls, but I suspect that the
		·

- high-level themes would have been discussed.
- 25 $\,$ Q. Do you know whether a decision was taken within your $\,$

1		organisation not to raise the alarm with the sponsor
2		department, as it were to give the message that there
3		was $$ you know, everything was under control?
4	Α.	I know that submissions were made to ministers during
5		2021 on a number of issues which I think the Inquiry has
6		had disclosed. And therefore briefings were being
7		shared appropriately. I think the issues that you raise
8		and showed in those documents are very much operational
9		issues , but the important point being, I think $% \mathcal{A}^{(1)}(\mathcal{A})$ is a subscription of the set
10		emphasised here by the director of the JMSC, is that we
11		were continuing to run although being stretched and that
12		shows the nature of the continued evolving picture that
13		was being presented to HM Coastguard.
14	Q.	Right. I mean, if the department had been briefed on
15		these sort of concerns, would there have been
16		an opportunity for, for example, further resources or
17		funding to be directed to the operation via the DfT?
18	Α.	Can you just say the question again for me, please?
19	Q.	If the DfT had been briefed on the context of those
20		reports, would there have been an opportunity for the
21		Coastguard to get further funding to increase resources
22		and to assist with the difficulties in dealing with the
23		small boats problem?
24	Α.	I think as I mentioned in my statement, for example
25		Project CAESAR, that was delivered $$ it was delivered
		35
1		through the MCA's own funding, but the department were
2		fully aware of that. The increase in staffing that
3		commenced in August, the department were aware of that.
4		So whether additional funding will have been available
5		or not, I don't know, but from the information I've seen
6		at this time, the organisation was in a good place and
7		was evolving its response.
8	Q.	Thank you. And we are staying with the question of
9		politics , as it were, and departments of State, we have
10		already discussed the Home Secretary's declaration
11		in December 2018, the major incident, and we have looked
12		at the passage of your statement which is paragraph 1.2
13		on page 9, about the difference between his
14		interpretation and yours.
15		Could we look at your statement, please, 1.22, it's
16		{INQ010098/8}.
17		Sorry, that's $$ I think, yes do you see at the end
18		of the paragraph $$
19	Α.	Yes.
2.0	~	

- 22 A. Well, I think -- I am not sure on what basis the
- 23Home Secretary made the declaration. We would be24looking at the Civil Contingencies Act and effectively,
- it's looking at the implementation of special measures.

- 1 And I think for HM Coastguard to declare a major
- 2 incident, I think there's a couple of things in the
- 3 small boat space. I think 1) declaring a major incident
- 4 would have the greatest impact on landside resources.
- 5 And what I mean by that is for us to declare a major
- 6 incident, colleagues from the national health service,
- 7 police, fire, etc would, for example, send
- 8 a predetermined attendance. They may deploy numerous
- 9 ambulances which would then be sent to a rendezvous
- 10 point. None of the emergency services or the local 11 resilience forum have any ability to provide additional
- 11 resilience forum have any ability to provide additional 12 capability, be that at sea or air, to support a major
- 12 capability, be that at sea or air, to support a 13 incident.
- 14That doesn't mean that HM Coastguard would not15declare a major incident in the English Channel. And
- 16 I think, specifically, if we look at the events that the
- 17 Inquiry is interested in, at the point of the incident
- 18 in the early hours of the morning, there were four small
- 19 boats that HM Coastguard was aware of coming. So at
- 20 that point, there was appropriate asset available and
- 21 there was no requirement to notify landside
- 22 organisations because of the set up of the structure at
- 23 the Tug Haven and the facilities that were available
- 24 there.
- 25 $\,$ Q. Sorry, just to be clear on that. Are you saying that

- 1 a major incident should have been declared on the night?
- 2 $\,$ A. No, I am not saying that at all . In fact , far from it .
- 3 Q. Yes.
- 4 A. In my -- my understanding and my view, having completed 5 my multi-agency gold incident commander's course, which 6 is the course that all strategic commanders in the 7 emergency services attend, the threshold was not met and 8 from information I've seen, was nowhere near being close 9 to met at the time of that incident. 10 Q. Thank you. Going then to, back to Mike Bill's email on 11 17 August, this was a topic he dealt with at 12 {INQ003322/4} please, page 4 of the document. "Major 13 department or not", do you see? He says: 14 "These high intensity days meet our definition of 15 Major Incident however we are not declaring it as such. 16 To do so would advertise to the wider world (perhaps not 17 preferred by Home Office) but would also inform our 18 partner agencies that we are stretched at Dover and may 19 not be able to support any requests coming from them." 2.0 Well, let's, with that in mind, look, please, at 21 vour major incident plan and that is $\{INQ000415/1\}$, and 2.2 if we go within this document to the foot of page 8, 23 please {INQ000415/8}, you will see at 3.5, which is part 24 of section 3 obviously, definition of an emergency and
- 25 major incident. 3.5, there is a list of the types of

38

1		risk identified by you as being potential major
2		incidents, which include: the search for, or rescue of,
3		large numbers of people, or many small craft in distress
4		simultaneously in a geographic region and then later,
5		over the page, please, {INQ000415/9}:
6		"The effects of [the] emergency situation on MCA
7		and/or its partner organisations' own staff, facilities
8		or infrastructure which limits the ability to respond."
9		Now, do you accept, as Mike Bill was suggesting,
10		that during the summer of 2021 the ingredients existed
11		which would have enabled Coastguard to declare a major
12		incident?
13	Α.	So, not having the detail of the days that Mr Bill is
14		referring to, I am unable to give a comment with $$ with
15		great detail . But if we look at the point $$ I think it
16		was point number 1, where it refers to many small craft,
17		that isn't just small boats, in fact far from that.
18		That could be for a significant sailing event, such as
19		the round the island race that takes place where
20		thousands of boats circle the Isle of Wight. So it is
21		a consideration and actually declaring a major incident,
22		I do not believe at that time as well, that any
23		additional resourcing would have been available.
24		So it wouldn't have changed the response and during
25		the summer, to the best of my knowledge, HM Coastguard

39

- 1 successfully co-ordinated the response of those 2 incidents. Yes, they were challenging because of all of 3 the things we have talked about in terms of the multiple 4 calls coming in, etc, but I don't believe it would have 5 made a difference, be that in the summer or be that on 6 the night of the incident the Inquiry is looking at. 7 $\mathsf{Q}.\;$ Well, sticking with the summer and the time when 8 Mike Bill was making this comment. Are you -- do you 9 know and are you therefore able to tell us, what the 10 thinking was within the organisation, presumably at the 11 top of the organisation, as to why a major incident was 12 not declared? 13 A. I wasn't involved in the thinking. But as I have said, 14 whilst some of the ingredients, as you put it, may be 15 there, there was a view that the threshold had not been 16 reached and therefore it was not required. Q. Can we go back to his email, please, at $\{INQ003322/1\}$ 17 18 and if we go to the fourth page again, please, 19 $\{INQ003322/4\}$ under "Major incident or not" as far as 2.0 you are aware, were concerns about the political 21 implications of declaring a major incident part of the 2.2 Coastguard's decision-making? 23 Α. Not to the best of my knowledge.
- 24 Q. And do you agree now --- I think I know the answer from 25 what you have been saving --- that a major incident
 - what you have been saying -- that a major incident

1		should have been declared by the Coastguard in August of	
2		2021?	
3	Α.	With the information I have, and this is a very high	
4		level view, no, I do not believe a major incident should	
5		have been declared.	
6	Q.	If a major incident had been declared, would it, or	
7		could it, have led to a request for military aid to the	
8		civil authorities, MACA as it is sometimes referred to?	
9	Α.	A MACA request can be done at any time.	
10	Q.	Yes.	
11	Α.	And therefore, the declaration of a major incident isn't	
12		necessarily required. And I think if we fast forward to	
13		2022, in terms of the supports and the working with the	
14		MoD during Op Isotrope, whilst additional asset from MoD	
15		was provided, that asset wasn't involved in lifesaving	
16		operations as such.	
17		So therefore, ${\sf I}$ am not sure that a MACA request	
18		would have borne any fruit in terms of asset	
19		availability .	
20	Q.	Well, let's have a look at the Ministry of Defence	
21		position on that, and it's their corporate statement,	
22		$\{INQ009649/1\}$, this is the statement, as you see, of	
23		Jennifer Armstrong. She explains, if we go to para 1.6,	
24		please, on page 2, {INQ009649/2}:	
25		"In general the MoD has provided support to other	
		41	
1		government departments in relation to small boat	
2		crossings through the Military (MACA) request	
3		process. There were no such requests in November	
4		and seven in total (one of which was withdrawn)	
5		between January 2019 and November 2021."	
6		Now, as you $$ and then if we go on, please, to 2.2	
7		122 and 23 and 122 (INO000640/2) whether summary	

7 and 2.3, she explains {INQ009649/3}, what the support 8 consisted of, 2.3 at the bottom of the page, do you see: 9 range of support, provision of surveillance, defence 10 estate, planning expertise, assistance for novel tactics 11 trials, etc. 12 Now after the incident, we know of course, and you 13 have mentioned this, that under Operation Isotrope the 14 MoD took primacy for the small boats problem; that's 15 right, isn't it?

A. They took primacy for the small boats problem, but
His Majesty's Coastguard retained primacy for all search
and rescue activity and worked in partnership with MoD
and other stakeholders.
Q. Indeed. But if we look at 1.8, this is their account of

- what happened, please back to page 2, {INQ009649/2}:
 "The MoD assumed operational primacy in relation to
- small boats attempting to cross the Dover Strait ...
- $24 \qquad \qquad$ Whilst the operation was in force there were only seven
- $25 \qquad \text{uncontrolled landings } \dots \text{ compares with 39} \dots \text{ in ['21]}.$

42

1		This improved performance took place against
2		a particularly challenging backdrop"
3		And in her statement she goes on later on page 15,
4		$\{{\sf INQ009649}/{15}\}$ in paragraph 7, to set out what happened
5		in detail under Operation Isotrope. They provided
6		maritime assets, aviation assets, service personnel,
7		they brought in enhanced operational co-ordination and,
8		as she puts it $$ and this is now 7.8, please, on
9		page 18, {INQ009649/18}:
10		"The legacy of [Operation] Isotrope included the
11		procurement of crew transfer vehicles for [the]
12		Border Force's use "
13		And they were used for SOLAS purposes, weren't they?
14	Α.	Correct, and still are today.
15	Q.	Still are, exactly:
16		" an uplift in the infrastructure available in
17		the relevant [operation] rooms managing the response to
18		small boats, and enhanced multi-agency working."
19		Was $$ as far as you are aware, again, was
20		consideration given within your organisation to making
21		a MACA request for MoD assistance before the time of the
22		incident?
23	Α.	To the best of my knowledge, no. But I have to caveat
24		answering that question that I wasn't involved in

25 leadership conversations, but I don't think so.

43

1	Q.	With hindsight, do you think that consideration to
2		making such a request should have been given?
3	Α.	No, at $$ at the time, I think, as the JMSC Director
4		talks about, assets were busy, were stretched, but were
5		coping and we were dealing with things and work was
6		ongoing. As we looked forward into 2022 to look at the
7		increase of surface assets, to ensure that the
8		organisation $$ so, the Government ensuring it delivered
9		its SOLAS response $$ was prepared. And I think the
10		Inquiry has heard through various places around
11		conversations that took place, both within HM Coastguard
12		but also within the Home Office, looking to bolster
13		uplift, increase capability during 2022.
14		And I think the asset that was available in 2021 was
15		wholly suited . The $$ the Border Force cutters, whilst
16		not designed specifically for search and rescue, were
17		capable of doing the job and that was evidenced through
18		the great work that they had done since 2018 and also
19		their work in the Aegean.
20		There was also asset available to HM Coastguard from
21		the RNLI, as well as our own search and rescue
22		helicopters and aircraft. So the asset that was there
23		in 2021 was busy, but not overwhelmed. It was
24		stretched, as has been observed, but we were still
25		delivering a service and preparations were well underway

- 1 for 2022 in terms of uplift of aeronautical capability
- for that maritime domain awareness and also land sorry, maritime asset.
- 4 Q. Thank you. So can I take it from that -- and again,
- 5 just looking at it in general at this stage before we
- $\mathbf{6}$ look at the detail , do you -- is it your position that
- 7 the issues which were identified in those August
- 8 documents we saw had been resolved, or the risks either
- 9 resolved or appropriately mitigated by the time of the 10 incident in November?
- 13 addressed and I think as I made the point earlier those
- 14 risks would continually evolve as they do today because
- 15 operations change, tactics change from those organised
- 16 crime gangs, so we are constantly having to modify our
- $17 \qquad \mbox{response to ensure that we can do the best we can for;}$
- 18 those making that dangerous crossing.
- 19 Q. Well, just looking at an aspect of this, I don't know if20 you are aware that Mike Bill in his evidence told us as
- 21 far as he could recall that no action plan was put in
- 22 place to implement his own August 2020 recommendations.
- He didn't know whether that was considered or whether
- 24 decisions were made or not to progress them and that he
- 25 hadn't, in fact, received a written response.

- 1 Is that acceptable?
- 2 A. So I think there's a couple of things to say on that.
- 3 Q. Yes
- 4 A. 1) Mr Bill was the strategic leader in the southeast and
- 5 therefore, would have been responsible for delivering
- 6 the changes or -- or whatever it was that was required.
- 7 And I - I note that he emailed, but didn't have
- 8 a response from the chief Coastguard.
- 9 My line management at the time was to the chief
- 10 Coastguard and I am absolutely certain that the chief
- 11 Coastguard would have engaged on that topic, probably
- $12 \qquad \mbox{ over a phone call}. That was the working relationship <math display="block">$
- 13 % 13 that I had with the chief Coastguard at the time. And
- 14 he would have given clear instruction for action to be 15 taken by appropriate leaders, Mr Bill being one of
- 15 taken by 16 those.
- 17 Q. Well, thank you for that. And it's right, isn't it,
- 18 that the points he was making in his August email were 19 worthy of the chief Coastguard's serious consideration
- 20 and action? 21 A L think the small boat crossings are a significant let
- 21A. I think the small boat crossings are a significant level22of incident to His Majesty's Coastguard. They make up
- 23 \qquad a large proportion of the work we do and the evolving
- 24 picture that's presented by them. It was appropriate
- 25 that the chief Coastguard was aware of any areas where

46

- 1 the organisation could be adapted or make change, as an
- 2 organisation that wants to continually improve.
- 3 It also shows that leadership and oversight so
- 4 I think it was wholly appropriate that the chief
- 5 Coastguard was aware and I am in no doubt, having worked
- $\boldsymbol{6}$ for the chief Coastguard, that he would have been very
- 7 robust in ensuring that action was taken.
- 8 $\,$ $\,$ Q. Well, as I say, we will come back to that. But the next
- 9 topic I would like to look at with you please are the
- $10 \qquad \mbox{ reports that have been produced since the incident }$
- 11 because there were a number of reviews after the
- incident, including a report completed by the US
 Coastguard at the MCA's request.
- 14 A. Correct.
- 15 Q. A report, obviously, completed by Maritime
- 16 Accident & Investigation Branch, MAIB.
- 17 A. Correct.
- 18 Q. And your own internal MCA review and report.
- 19 A. Yes, that's correct. That -- that report still stands
- 20 in draft.

25

- 21 Q. Yes, we will look at that.
- 22 A. Because unfortunately, we have not had all the
- 23 information we require due to the law enforcement
- 24 proceedings in France.
 - Q. Yes.

47

- A. Therefore, that report has not been able to be 1 2 completed 3 Q. Thank you. Well, let's look at them briefly, if we may, 4 because as I say I don't think we have touched on this with any of the other witnesses thus far. 5 6 First , the US Coastguard and that's at 7 $\{INQ004345/1\},$ it is dated 14 July, as you see there on 8 the screen. 9 Yes Α. 10 Q. And they were commissioned, I think, by the Coastguard 11 to conduct this case study review, is that correct?
- 14 guidance that's within IAMSAR, it's really important
- 15 that we go and have a peer review completed and we do
- 16 that actually regularly throughout our business.
- 17 So every year there's at least two peer reviews done
- 18 by other coastguard and that's bringing SAR
- 19 professionals in to effectively come and peer review our 20 work.
- 21 Q. Thank you. And again in short, if we go, please, to
- 22 pages 21 and following, so start with {INQ004345/21}
- 23 here are there recommendations. They made 14 in all,
- $24 \qquad \mbox{directed}\,, \mbox{ for example, at your working relationship with}$
- 25 $% 10^{-1}$ the French authorities, your organisational processes,

- 1 resource management, communications, and at 2 $\{INQ004342/1\}$ please, we can see the MCA's response 3 dated 28 May, the next year, so about 10 months later and about four months after this Inquiry started its 4 work. And I think, again, in summary, you went 5 through -- or the writer of this letter went through all 6 7 of the recommendations. If we turn over the page, please, $\{INQ004342/3\},$ 8 9 there recommendation 2, 3, went through all of the 10 recommendation up to and including 15, I think, and 11 accepted, in part or in full, and implemented, I think, 12 seven of them. And with the others, the other seven. 13 either took no action or didn't accept the 14 recommendations because it considered that the actions 15 were already part of the Coastguard's policies and 16 procedures 17 And you deal with this in your statement at 7.31 on 18 page {INQ010098/124} but for the record, I think that's 19 correct? 20 A. Yes, that's correct. 21 Q. Thank you. 2.2 A. Yes, it is in my statement at 7.31 and I think the 23 important point to note there is that two of the
- 24 recommendations were classed as not accepted and there's 25
 - rationale in there. The rest were all taken on board.

- 1 Q. One way or another?
- 2 A. Yes
- 3 Q. Exactly, yes, and then the MAIB report, at {INQ010445/1} 4 we know it is November '23, and you will see it's 5 a safety investigation -- sorry, that's the wrong reference -- {INQ010445/1}, please. Thank you. 6 We see on page 2, $\{INQ010445/2\}$ it is a safety 7 8 report, the safety investigation report. And at 9 page 98, {INQ010445/98}, we have the recommendations --10 the formal recommendations there to you and the second 11 one to Border Force. 12 And again, just to complete the picture, at 13 $\{{\rm INQ009981}/1\}$ we have your response or the MCA's 14 response, this time July 24, and in short, is this 15 right, that having considered your responses and indeed 16 the Home Office responses, the MAIB closed the 17 recommendations as complete? 18 A. Yes, that's correct. They, they closed them as complete 19 and accepted the response and the work that had been 2.0 done by HM Coastguard. 21 MR PHILLIPS: Sir, would that be a convenient moment? 2.2 SIR ROSS CRANSTON: Yes, of course. So 10 minutes, 23 past. 23 (11.13 am) 24 (A short break)
- 25 (11.24 am)
- 50

- SIR ROSS CRANSTON: Mr Phillips. 1 MR PHILLIPS: Yes, Mr Leat, can we have up, please 2 3 ${INQ008905/1}$, this is the internal review that we were 4 just talking about and as you pointed out to us a little earlier, it says "May 2024 Draft Final Review (subject 5 to French Information)". 6 7 That's point about the French criminal proceedings 8 that you mentioned, isn't it? 9 A. Yes, absolutely. For this review to be complete, 10 HM Coastguard would want to have a understanding of 11 events leading up to the point that the incident came 12 into the UK and therefore, would want to understand more 13 from the French Coastguard about their involvement that 14 evening, calls that they received, etc. 15 So until we are ability to do that, the report will 16 remain in draft 17 $\mathsf{Q}.\;$ Yes. Well, it's obviously been underway, the exercise, 18 as we will see, for quite a while. Just to check one 19 thing, is this the latest version of it the one that we 2.0 have been sent? 21 A. To the best of my knowledge, yes. 22 Q. Right, let's look at what it was and who was involved in 23 it. If we turn to page 5, please, the introduction, 24 {INQ008905/5}, thank you. "Commission" there, at 1.3.1, 25 by the Director of His Majesty's Coastguard, and this 51 1 is, we will learn, a tier 3 review. Can you explain to us what that means, please? 2
 - 3 A. Yes, I think, as it says slightly further down there, 4 it's the highest level of review that we as an 5 organisation can internally undertake. It's undertaken 6 independently by a team outside of operations and it's 7 where a fatality has occurred during an incident 8 co-ordinated by His Majesty's Coastguard. Or another 9 organisation looks to conduct an investigation. for 10 example, the Marine Accident Investigation Branch. 11 Q. So it is an internal review, as you say, but conducted 12 by people who weren't involved operationally? 13 A. Absolutely, absolutely. And there's -- through our organisational structure, there is design of 14 15 independence so that our -- I will call them standards 16 department just for ease of understanding, they 17 effectively can review incidents post-event. Again, 18 coming back to the point of us wanting to ensure that we 19 learn from every -- every event that HM Coastguard 2.0 responds to. 21 Yes. And at 1.3.2, we can see that the lead reviewer Q 2.2 Julie-Anne Wood is the Assistant Director and then 23 "Governance, Policy, Standards and International". Is 24 that the department you are talking about? 25 A. Yes, that's correct.

- 1 Q. Great, thank you. And she, within the organisation,
- 2 without getting into too much detail, is at roughly the
- 3 same level as you, is that right, or is she a bit senior
- 4 to you?
- 5 A. Slightly senior to me.
- 6 Q. Yes.
- 7 A. And she has a long career within His Majesty's
- 8 Coastguard as a qualified SMC. Ran a co-ordination
- 9 centre, led the operation, led training. So has
- $10\,$ a wealth of experience and knowledge that's recognised
- 11 not only in the UK, but also globally as well.
- 12~ Q. And the terms of reference, I don't think we need to go
- 13through them are at 111 to 115 of the document, annex A.14And we can see there that she had a team working with
- 15 her within Coastguard, that's at 115.
- 16
 {INQ008905/115} Yes, there they are. "Supporting

 17
 Investigator and Technical Matter Expert(s)", do you see
- 18 that?
- A. Yes, that's correct. So in any tier 3 investigation,the person leading it will use resource across
- 21 HM Coastguard and outwith if required, but I suspect
- 22 it 'd be specialist resource to enable them to be able to
- 23 complete the review that they are undertaking to ensure
- it is done to a high quality and standard.
- 25~ Q. Thank you. Now going back to the French point, if I can

- put it that way, pages 6 and 7, please of the document
 {INQ008905/6-7} if we can have both of those on the
 screen, thank you.
 Here, you -- here, the reviewer explains the effect
- 4 Here, you here, the reviewer explains the effect
- 5 of French Coastguard involvement and in short, as you
- 6 have explained, because of the French criminal
- $7 \qquad \mbox{investigation}$, you have not received the material on the
- 8 French side that you would otherwise or the reviewer, 9 rather would otherwise have wished to consider before
- 9 rather, would otherwise have wished to consider before
 10 reaching her conclusions, is that a fair way of putting
 11 it?
- A. Yes, that's a fair way of putting it. I think that also applies to the US Coastguard report and I also believe the MAIB report as well. So it's information that's
- 15 lacking across reports.
- Q. Yes, and it looks, from 1.5.3, that the reviewer, the
 Coastguard, it says there, in the second sentence.
 has not had access to information that would
- .8 "... has not had access to information that would
- 19 provide the full knowledge and content of the calls made 20 and the actions taken by the French Coastguard whilst
- and the actions taken by the French Coastguard whilst
 the small boat incidents were in the French search and
 rescue region ... "
- rescue region ... "And how, then, is this going to work through? Is it
- $24\qquad$ anticipated within the organisation that you will, at
- 25 some point, receive this further information from the

54

- 1 French? 2 A. I think the organisation -- our organisation would like 3 to receive that, pending the ongoing criminal 4 investigation and I think if the organisation does then receive that, then the review will be able to be 5 completed. There may be additional recommendations as 6 7 an example that may come from that. 8 I don't know -- I don't know how the information 9 will change or modify the information that was available 10 to the reviewer at the time. But the report was created 11 with the best of the information they had available to 12 them 13 Q. But obviously, as time goes on and we are now a number 14 of years since the incident, the value of the 15 review/report decreases, does it not? 16 A. So I don't think it decreases by any means. As I am 17 sure we will touch on at some point, there are several 18 recommendations in this report which have been dealt 19 with. 20 Q. Yes 21 A. And if there are lessons or opportunities for 22 improvement that can be made once that final information is received, then the organisation will do that and if 23 24 they are relevant to current operations, it will be 25 implemented. If it's irrelevant because of the passage 55 1 of time, that will also be noted. But I think for 2 completeness, it's appropriate that that is
- 3 acknowledged, dealt with and then the report can be 4 finalised .
- 5~ Q. Thank you and you talked about the recommendations in
- 6 this report. Let's look at those, please. They begin
- $7 \qquad \mbox{ at } \{ INQ008905/106 \} \mbox{ and we see there the introduction }$
- 8 first and in the two introductory paragraphs, the second
- 9 paragraph, as you see, 7.1.2, the reviewer says:
 10 "These were the recommendations which were provided
- 11 to HM Coastguard Operations on 18 March 2022."
- 12 And there are, in fact, I think 21 of them in all,
- 13 is that right?
- 14~ A. Yes, that's correct.
- 15~ Q. Again, just to summarise, covering: information
- $16 \qquad \qquad {\rm gathering, \ ViSION, \ Coastguard \ communication, \ Coastguard} \\$
- 17 procedures, the role of the SMC and the tactical
- 18 commander, stakeholder liaison, search planning,
- 19 post-incident actions and training and exercise.
- $20 \qquad \qquad \text{And my understanding from your statement } --\text{ and it's}$
- 21 paragraph 7.35 on page 128, {INQ010098/128} -- is that
- 22 the Coastguard has, broadly speaking, accepted and
- implemented certainly the vast majority of theserecommendations: is that right?
- recommendations; is that right?A. Yes, correct. Action has been taken on them all. There

1		are a couple where it's been accepted and implemented in	
2		part.	:
3	Q.	In part, yes.	
4	Α.	And ultimately, a specific one around that would be the	
5		one around the establishment of a search planning cell.	
6	•	Yes.	
7	Α.	And actually, rather than establishing a dedicated	
8		location and a cell to support our concept of operations	
9		with the national network, a dedicated search planner is	
10		now assigned. So whilst the concept of a dedicated	1
11		search planning cell hasn't come to fruition at this	1
12		time, there is still a dedicated search planner for	1
13		small boat operations.	1
14		So the spirit of the recommendation has been met and	1
15 16		is $$ and is embedded. It's just not been delivered in	1
17		full as per the report, but the outcome is still the same. We have a dedicated search planner available for	1
18		days when small boat crossings are occurring.	1
19	0	Thank you. And again, can I take it that the work where	1
20	ч.	recommendations were accepted began after, as the	2
21		reviewer puts it, they were provided to the Coastguard	2
22		in March '22?	2
23	A.	Correct. Yes, work —— work was underway as soon as	2
24		possible to be able to take these recommendations and	2
25		implement them.	2
		57	
		37	
1	Q.	And again, just for completeness, are you aware of any	
2		other reports or investigations in relation to the	:
3		incidents with which we are concerned which have been	
4		undertaken since the incident?	
5		Not that I can recall.	
6	Q.	No. Just looking at the reports we have seen and	
7		broadening out the question rather, what are the ways in	
8		which the HM Coastguard is subject to independent	
9		oversight?	1
10	А.	So I think in terms of independent oversight, through the IMO, there is a scheme called the IIIC code.	1
11 12		Through that, as a coastal state, we are effectively	1
13		audited every five years.	1
14	0	Yes.	1
15		We were last audited in October 2021 and during that	1
16	73.	audit there were no recommendations for His Majesty's	1
17		Coastguard. I have talked about peer reviews that we	1
18		instigate to ensure that people external can come in and	1
19		review the work that we do. We also do that to other	1
20		coastal states, so we will send people abroad anywhere	2
21		across the globe to look at the work that they do.	2

- across the globe to look at the work that they do.In terms of internally, we have, as we have seen
- here, a tier 3 review, so there's independence from the
- 24 operation. And then we also have independent oversight
- in terms of the MCA sponsorship board, so DfT giving

1		oversight around the work that the MCA and us,
2		HM Coastguard, also do.
3		They are just a few of the areas where others are
4		looking at the work that we do to make sure that we are
5		doing it the best we can and where there is opportunity
6		to improve, that's $$ that's shared and delivered.
7	Q.	Well, obviously of the examples you have given, and the
8		tier 3 review is obviously the one that delivered its
9		recommendations earliest to the ones we have looked at
10		in a long series of recommendations which, as we said,
11		mostly you have implemented, I understand that.
12		But isn't there, in principle, a difficulty with an
13		organisation such as yours in effect marking its own
14		homework?
15	Α.	So I think, as I alluded to, the department sits outside
16		of the operational chain. But we also then have the
17		ability , like we did for this incident , where we
18		contacted another competent SAR authority, such as the
19		United States Coastguard, to come in and independently
20		review the work that we have undertaken. So there are
21		mechanisms to both learn internally by that independent
22		team but also use other SAR professionals. And I think
23		the challenge is that search and rescue, and search and
24		rescue co-ordination specifically, there is a very small
25		pool of people globally that have the relevant

59

1		experience and knowledge to be able to do such
2		a detailed review. And that is why the peer reviews and
3		also the IMO's independent review to ensure that we are
4		meeting our coastal state obligations occurs.
5	Q.	Yes, I understand that. But obviously, you would accept
6		that you $$ you are responsible, as an organisation, for
7		deciding to bring in a peer organisation to do a review.
8		You had to decide to ask the US Coastguard to look at
9		the incident, didn't you?
10	Α.	Yes, we $$ we $$ we did that because we wanted to learn.
11	Q.	Yes. But the question arises of why the Coastguard,
12		like is the case with land-based emergency services,
13		shouldn't be $$ such as the police, the Fire Service $$
14		shouldn't be subject to independent oversight?
15	Α.	I think as I allude to in my previous response, there is
16		a very small global network of individuals that have the
17		relevant experience and exposure to be able to provide
18		that.
19		So I would struggle to see how that would occur to
20		any level of credibility . And that's why, you know, in
21		any significant incident, as I alluded to with
22		United States and other states, we will go out and
23		review that. There's also the MAIB who will, as they
24		did in this case, review the work of the incident that
25		evening.

Q. Yes, well the MAIB's remit, as we both know, is a rather 1

- 2 limited one. This was a safety investigation .
- 3 A. Correct.
- 4 ${\sf Q}. \$ Their remit, for example, is a lot narrower than the
- 5 remit of this Inquiry.
- 6 A. Correct. 7
 - Q. If we think though, again, about the police and the Fire Service, her Majesty's -- or His Majesty's inspectorate
- 9 of constabulary and now fire and rescue.
- 10 A Yes

8

- 11 Q. Monitors and reports on the efficiency and the
- 12 effectiveness of the police and the fire and rescue
- 13 services in the public interest.
- 14 A. Correct
- 15 Q. Publicly funded emergency services, the inspectorate
- 16 regime is set up, isn't it, in the public interest? 17 A. Correct.
- 18 Q. Why should that not apply to His Majesty's Coastguard?
- A. I think I have outlined a number of ways that there's 19
- 20 already independent review and the fact that Department 21
- for Transport, we maintain operational independence from $\mathsf{D}\mathsf{f}\mathsf{T}$ and the MCA sponsorship board does have oversight. 22
- 23 That said, anything that is done to serve the public
- 24 best, you know, is for the good -- is for the good. 25
 - Q. Yes. And because, as you have explained, this is an

61

- 1 organisation that wishes to learn lessons, would it not 2 be better to have -- for the organisation, to have in 3 place regular independent oversight and review as 4 opposed to crisis-driven one-off reporting such as we 5 have seen here? 6 A. It's probably not an area I can comment on in terms of 7 that would need to be looked at, at a senior level. 8 Q. Yes
- 9 A. Both within the MCA and within Department for Transport, 10 but I make the point that there are -- in, for example, 11 policing and fire, there are lots and lots of personnel 12 that have the experience that's requisite to be able to 13 provide an appropriate independent oversight. 14 I think within coastguarding, as I have said, there 15
- is a very, very small people that group of people that 16 have the requisite knowledge and skills to be able to
- 17 provide it and provide it in a way that would add value. 18 So I don't disagree that anything for the public
- 19
- interest is for good, I just have concern, I guess, 20 about the appropriateness of the individuals that may
- 21 look to do that. Hence, why we go to other states and
- 2.2 then the IMO have the IIIC process which provides
- 23 reassurance around us meeting our international coastal
- 24 state obligations around search and rescue.
- 25 Q. Thank you.

62

1		Now, as I acknowledged in my opening, it's clear to
2		the Inquiry that a significant number of actions have
3		already been taken by the MCA and other agencies
4		involved, with a view to preventing or reducing the risk
5		of an incident similar to this one from occurring in the
6		future. So what I would like to do now, please,
7		Mr Leat, is to ask you about some of those and consider
8		with you the question of whether there are additional
9		actions that should now be taken by the Coastguard or
10		the MCA and what I am going to do, if I may, is use the
11		same broad headings that ${\sf I}$ did with the seven themes in
12		my opening.
13		So the first heading is: resources and preparedness.
14		And within that, I would like to start, please with the
15		question of staffing which is where we really began this
16		exchange when looking at the August '21 reports and
17		again, just to establish the framework for this, you
18		remember them, we looked at them together, and certainly
19		they were expressing concerns, weren't they, that
20		staffing at Dover in particular, was a significant
21		problem?
22	Α.	Yes. So that was raised in that August period. I think
23		the concept of operations for His Majesty's Coastguard
24		is very much utilising the strengths of its national
25		network. We have the $$ sites that are located all

63

1		around the UK and that gives us a real benefit in able
2		to bring resource to an incident or a situation.
3		So resource availability within HM Coastguard is
4		today very, very good. In fact, there's very few
5		vacancies that are across the service.
6		And I think there's some elements that, in terms of
7		our network, and it is really important to understand,
8		in terms of if we look at the IAMSAR guidance, it takes
9		about SMCs and their teams being regularly replaced on
10		high complex incidents. Our national network enables us
11		to do that. We talk about SMCs, Search Mission
12		Coordinators. Over 50% of the work that's gone on with
13		small boats has been led by a remote Search Mission
14		Coordinator from 2018 to 2024.
15		So our national network gives us the ability to flex
16		resource to be able to respond to a challenge.
17		In terms of specifically Dover, the recruitment, as
18		we saw, started in August where we increased the
19		staffing throughout the autumn and into the spring in
20		anticipation for the busy 2022 that was forecast.
21	Q.	Can we look at that?
22	Α.	Yes, we can.
23	Q.	Because you deal with it in your statement.
24	•	N

- 24 A. Yes
- 25 Q. We will come back to the national network and remote

- 1 working etc, but if we look at the point you have just made, please. It is in your statement, $\{INQ010098/1\}$, 2 3 paragraph 1.24, page 9, {INQ010098/9}. During the 4 summer, you say, the Coastguard were notified by the Home Office of the predictions for crossings for 2022 5 could reach 60,000. We looked at this earlier . In 6 response to this prediction, you determine: 7 8 " ... that additional staffing was now required to 9 focus on and respond to small boat incidents in the 10 English Channel. This [is] in addition to the National 11 Network. Recruitment for the additional headcount based 12 at Dover ... commenced in August 2021." 13 Had the numbers of staff at Dover been increased to 14 reflect their work on small boat crossings before this? 15 A. I believe this was the period where the organisation was 16 looking at the risk that was coming in 2022. So 17 therefore, this was the point where a decision was made 18 by the chief Coastguard to increase the staffing at --19 Q. I see. 20 A. -- MRCC Dover. 21 Q. So it was really the warning from the Home Office that 2.2 things were going to get even worse the next year that 23 led to the recruitment drive, if I can put it that way?
- 24 A. Yes, that's correct.
- 25~ Q. Yes. But bearing in mind what was being observed

- 1 in August by your own people, without reference to the 2 Home Office prediction for 2022, isn't -- perhaps with 3 hindsight, isn't this something, increasing the staffing 4 at Dover in particular, that should have been undertaken 5 before August '21 or before the warning from the 6 Home Office? 7 A. So I think there is two parts there. One not being in 8 the senior leadership, shall I say, at the team, ie the 9 chief Coastguard, whilst I think the 60,000 was 10 a trigger, as we saw earlier when we looked at the data 11 for 2021, I think we had seen a steady increase. So 12 I suspect that -- and this is an assumption, not fact 13 that this was to be the plan in preparation, regardless of the 60,000. I think it was -- the numbers were 14 15 growing and therefore, action was to be taken. I think 16 the other thing was and we talked about the national 17 network, there is a significant amount of resource 18 available within the national network, as by its design, 19 to be able to support small boat operations. 20 So I --- I can't really --- you know, I don't think
- I think this was the appropriate time for that staffing
 increase to occur.
 Q. Okay. Well, we have seen it recognised in August, the

Q. Okay. Well, we have seen it recognised in August, the
 documents we saw, that, I quote: genuine concern for the
 welfare of those officers involved in the SAR response.

66

1		And you may remember one of the commanders,
2		David Jones, told the Inquiry that insufficient staff
3		resource was, by the time of the incident, impacting not
4		just at Dover, but across the national network,
5		including the JRCC.
6		So there was a general need, wasn't there, to
7		increase the number of people, the number of your
8		officers involved in this problem?
9	Α.	I think if we look at the night in question, I think
10		from memory, there were 35 staff on within the national
11		network and I believe the number required was just
12		over 20.
13	Q.	Yes.
14	Α.	From from memory.
15		And there was adequate resource within the national
16		network to be able to respond. Especially as, at
17		specifically in November, the rest of the work that $$
18		the Coastguard demand curve outside of small boats very
19		much focuses on a high level of activity in the summer
20		and reduces down over the autumn and winter, as people
21		don't go to the beach, don't take their $% \left({{\left[{{{\left[{{C_{i}} \right]}} \right]}_{i}}}_{i}} \right)$
22		sea. So I believe the resourcing was wholly appropriate
23		and adequate.
24	Q.	Well, of course that's actually what didn't happen,
25		unfortunately, in 2021, did it . I mean, the numbers, as
		67
		67
1		we saw, were large in August, September and then
2		obviously enormous in November. So that pattern wasn't
2		followed in Nevember was it?

2		obviously chormous in November. So that pattern wasn't
3		followed in November, was it?
4	Α.	Correct. They dropped off in October, as we would
5		expect, with the weather conditions that we would expect
6		in the English Channel. And as per Mr O'Mahoney's
7		evidence, the Home Office is very good at making
8		predictions on the crossings that were due to occur.
9		I think within a very, very small tolerance.
10		And for whatever reason, and you know, to this day
11		I don't know why, the November figures were
12		significantly different . So this didn't follow any
13		pattern, it wasn't something that, from the information
14		that I've seen, was predictable. But the organisation,
15		you know, as I say, on the night of the 23/24th, had far
16		more staff available within the national network than it
17		was required to.
18	Q.	But that, of course, involved using $$ drawing on the
19		strength of that involved using remote support and in
20		particular , from the JRCC. Whereas that, as we saw
21		earlier , was one of the challenges identified in terms
22		of effective response in August; in other words, the
23		remote working just wasn't working. There was too much
24		going on in the room in Dover for people working
25		remotely to actually contribute something useful?

1		
1	А.	So I $$ I would give challenge to that, if I may, in
2	~	terms of
3	-	Please.
4	Α.	I think there is a couple of things to consider when
5		teams are working remotely. The first, if we look at,
6		say, for example, a Search Mission Coordinator, being in
7		the room, there is $$ you are going to be very much
8		focused and involved. Being remote Search Mission
9		Coordinator you do have the ability to sit back,
10		observe, "take a helicopter view" is the term that's
11		used in training, stand back and oversee everything. So
12		there's actually benefits of not being in the room.
13		In terms of some of the situational awareness,
14		I think through evidence disclosed to the Inquiry, you
15		will see reference to iPads or Surface hubs. So these
16		are enabling virtual teams to be able to work, not only
17		through the systems that everybody has access to the
18		same, but by video conference. Effectively , putting
19		somebody in the room and being part of that team. And
20		working virtually, working with remote teams, I am sure
21		you would have noted the incident that occurred off of
22		the east coast of the UK, I think two weeks ago now,
23		where two cargo ships collided.
24		That was managed with a team in Aberdeen and a team
25		at Humber, showing strength in being able to come
		69

- together and deal with a very significant challenge. So
 the concept absolutely works. Some people don't have
 preference for it and it is very much preference. It's
 not a requirement.
 Q. Well, is this fair: that the three Coastguard officers
 who we have seen reporting about their concerns
 in August '21, didn't recognise the helicopter view
- 8 benefits that you have described and thought that it was
 9 itself creating problems with this particular
 10 high-pressure work on the small boats problem; is that
- 11 fair?
- A. Without hearing what they have said, it's very
 difficult , sir , to make a comment on that, I'm afraid.
 But as --
- 15~ Q. It was what was in the reports, the ones I showed you.
- 16 A. In terms of the August one, is this?
- 17 Q. Yes
- 18 $\,$ A. So I think that was, as one of the actions that you will
- 19 see was overcome, was by utilising the iPads/Surface
- 20 hubs about being able to virtually bring team members in
- $21 \qquad \mbox{ and effectively , remove that issue of a perceived lack }$
- 22 of shared situational awareness. The systems that
- 23 Coastguards use, our logging system ViSION, is where
- $24 \qquad \ \ \, \mbox{everything should be and everything should go.}$
- 25 Q. Yes.

1	Α.	And that is how the remote support element, the concept
2		of staff working at a different location, is utilised.
3		You will also hear reference, I think, to the term
4		TalkBox which is an open communications channel to
5		enable teams to be able to work remotely together.
6		So it's a concept that is fundamental to how we
7		deliver the national network. And if we consider in
8		2021 that, I think, the UK was coming towards the back
9		of Covid, if we hadn't of had the national network and
10		resource being able to work flexibly, with staff
11		potentially having to isolate following Government
12		guidance, if we didn't have the network, that would
13		create significant risk in terms of us being able to
14		deliver our state function.
15		So to me, remote working, staff being able to dial
16		in to support on increased complex incidents, is
17		absolutely vital to ensure that we can deliver the best
18		service to the public that we can.
19	Q.	Thank you.
20		Now, going back to your statement here. You say
21		recruitment for the additional headcount based at Dover
22		commenced in August '21. It looks, from the material
23		that the Inquiry has seen, that the recruitment
24		exercise, just sticking with that, had not in fact

25 yielded any helpful results by the time of the incident;

71

- 1 is that fair? We know various measures that had been 2 taken, but the recruitment exercise, I think, hadn't produced anything useful by the time of the incident; is 3 4 that fair? 5 A. So the recruitment had -- had started. 6 Q. Yes. 7 A. I am just trying to find reference into my statement 8 because I know it breaks down the numbers of staff for
- 9 each of the recruitment campaigns.
- 10 Q. We will look for that, thank you.
- 11 A. And it references those that were onboarding, but
- I think what's really to port to note is that, you know,
 a Coastguard can't walk through the door and be trained.
- 14 Q. Precisely.
- 15 A. It takes a period. Hence why the activity started
- in August in anticipation and preparation for 2022, thepeak season.
- 18 $\,$ Q. Yes, that is my point really, that this was driven by,
- 19 as we see, the warning about 2022 and so you were
- 20 recruiting in Dover in order to have sufficient , or more
- 21 people there, for the '22 increases that had been
- 22 predicted?
- 23 A. Correct
- 24 $\,$ Q. Thank you. In terms of what had been done by the time
- 25 of the incident, one point was the change in Dover's

- 1 responsibilities for zones, so that they were -- two of 2 their zones were, as it were, passed to other stations
- 3 leaving them just with zone 14; that's right, isn't it?
- 4 A. Yes, that's correct, that was a decision made by
- 5 leadership at the time so that staff could focus on
- 6 small boats in the response and the other zones,
- 7 utilising the concept of the national network, were
- $8 \qquad \ \ \, passed elsewhere, as well as some of the functions that$
- 9 MRCC Dover would routinely undertake.
- Q. Thank you. We have just found the passage in your
 statement on recruitment, so let's have a look at that
 if we may, it's page 93, this is {INQ010098/93}, yes
 thank you, there they are. We need the whole page,
- thank you, there they are. We need the whole page,
 please. Thank you.
 Commenced -- you see the recruitment for Down
- 15 Commenced you see the recruitment for Dover 16 commenced in 2020 resulted in nine officers and then
- 17 there was a second recruitment campaign, five, and the
- 18 third in November which resulted in eight.
- 19 But my understanding is that those officers came
- 20 onstream for the 2022 season, if I can put it that way?
- 21 A. Yes, correct. They would have been on-boarded and the
- 22 first recruitment campaign, some of those staff ---
- 23 through the training pathway of a maritime operations
- 24 officer, specific modules are undertaken and on
- 25 completion of the communications module, that means that

- 1that person is able to make up part of the team, they2are able to receive distress calls, answer 999 calls,3etc.
- 4 So whilst the officers would not have completed
- 5 their full training pathway for some nine months
- 7 been available much earlier. I don't have the full
- 8 detail of each of the individuals .
- 9 Q. No, no. Well, we will come back to one of them in
- 10a moment. Going back, then, to the question of the11zones and the focus, allowing Dover to focus on zone 14,
- 12 is it fair to say, in terms of what happened on the
- 13 night, that that of itself didn't appear to relieve the
- 14 pressure on Dover? You will remember the SMC on the
- 15 night saying that he felt overwhelmed?
- 16 A. So having not been on duty for that period --
- 17 Q. Indeed.
- 18 A. -- I can only take information that I've seen disclosed
- 19 to the Inquiry. There were two things though that were 20 available, the network commander.
- 21 Q. Yes.
- 22 A. Or the tactical commander, I think, as they are referred 23 to at the moment, they had the ability to move resource
- 23 to at the moment, they had the ability to move resource 24 and I talked about the 35 resource that was available
- and i tarked about the 55 resource that was availab
 within the national network.
 - 74

- 1 Q. Yes.
- A. The SMC also has the ability to reach out for support if 2 3 required as well. So there were mechanisms in place 4 that were available that evening should it be required. 5 Q. Well, we will come back to the commanders and the role they played. But just looking, if we may, at further 6 7 steps which the organisation took to deal with the 8 problem of staffing at Dover, we have heard about 9 requests being made for staff in the national network to 10 go to Dover to work and David Jones in his evidence, for 11 example, described that as a minor improvement. So 12 there was that. 13 But were you aware, for example, that some of the 14 staff at Dover were working an altered shift pattern, 15 six on, two off, rather than two days on -- two days, 16 two nights and four days off. In other words, reducing 17 the rest they were getting, by a third? Were you aware 18 of that? 19 A. So, through -- in preparation for the Inquiry, having 20 looked at information --21 Q. Yes. 22 A. -- there are occasions where staff carried out 23 additional shifts. But what I would say is that 24 two-thirds of those additional shifts , or the work, were
- 25 only for short periods. They were for, I believe, four

75

- and a half hours. Q. But ---A. And therefore, there was appropriate periods of rest between those shifts. Q. Well presumably the shift patterns, the normal shi
- 5 Q. Well, presumably, the shift patterns, the normal shift 6 patterns are set out for good reason and if people are
- working significantly longer periods, different shift
 patterns, that is likely to affect their performance,
- 9 isn't it?
- 10~ A. So, I believe from looking at information, there was
- 11 absolutely sufficient response. I think the other part
- 13 overtime, as it may be referred to, that's all
- 15 organisation.

1

2

3

4

- 16 So individuals would choose, for their own personal 17 reasons, to conduct overtime.
- 18 Q. So you don't think that, to take an example, Neal Gibson
- 19 was working this pattern just because he felt that
- 20 that's what the pressure of work required?
- A. I am unable to comment. I don't know the details of thepattern he was working, I'm afraid.
- 23 Q. Can we just look, on this topic, at a red days' meeting
- 24 minute and this is $\{INQ000206/1\}$, you will have seen
- 25 this the notes of the meeting on 22 November,

1	substantial attendance from your colleagues.
2	And if you remember, it was the $$ in terms of the
3	timing, this was when the projected red days at the
4	bottom of the page, do you see there, were from the
5	early morning of 24th, 3 o'clock, to 9 o'clock on the
6	25th. If we turn over, though, to page 4 on the
7	question of $\{INQ000206/4\}$ staffing, there is
8	a discussion of staffing at Dover.
9	And the Chief Coastguard, "PM", in the second
10	paragraph there, says $$ is recorded as saying, anyway.
11	"Two SMCs at Dover on nights isn't enough, if
12	overtime has been taken, it would be useful to have that
13	information for this meeting to appreciate the full
14	picture."
15	So there was obviously some discussion at the
16	meeting of the level of staffing, particularly at Dover.
17	You see above there "although numbers at Dover are low".
18	Now, in your statement you tell us $$ I don't think
19	we need to look at it, you will remember this $$ that
20	this minute is wrong and that what the chief Coastguard
21	in fact would have said is "two staff" not "two SMCs".
22	That's correct, isn't it?
23	A. Yes, that's correct. I believe that to be an error and
24	I cannot see any reason why he would have said two SMCs.
25	Q. So what he was saying then, on your account, is that two
	77
	11

1		staff at Dover on nights isn't enough?
2		Now we know, in fact, that there were only two
3		operational staff members on search and rescue at Dover
4		on the night in question, don't we?
5	Α.	Physically at Dover, yes.
6	Q.	Yes.
7	Α.	However, there were, I believe, 12 staff logged into
8		zone 14 across the national network which was able to
9		provide operational delivery.
10	Q.	Well, the part of the minute which you haven't corrected
11		is the part that says "at Dover" and he's saying your
12		Chief Coastguard, isn't he, on your interpretation, that
13		two staff at Dover on nights isn't enough and there
14		weren't two operational staff at Dover that night, were
15		there?
16	Α.	There were two operational staff at Dover that night.
17	Q.	But no more than that?
18	Α.	No.
19	Q.	Thank you.
20	Α.	There was one new trainee as well. So there were three
21		staff there.
22	Q.	Yes.
23	Α.	The SMC, there was a trainee maritime operations
24		officer , both of who you have heard evidence from during
25		this process, and then a third individual who was
		78

1		a trainee. And then there were an additional number of
2		staff logged in across the national network delivering
3		zone 14.
4	Q.	Thank you. Let's go to page 5 of the minutes,
5		${INQ000206/5}$ where again, the chief Coastguard is
6		making the point that amber days were very busy and
7		starting to look more like red days. And again, that's
8		a point that Mike Bill raised in his email to the chief
9		Coastguard in August.
10		Are you able to help with this: what was the
11		organisation's response to this understanding that amber
12		days, under the prediction system, were coming to look
13		more like red days?
14	Α.	So I think the organisation had made some specific $$ or
15		took some specific actions, one of those being around
16		aeronautical response or aerial surveillance. The chief
17		Coastguard gave direction around aeronautical assets
18		being either located or pre-located in the southeast.
19		And with any day, regardless of whether it being
20		red, amber, etc, the organisation reviewed its structure
21		and response to ensure that it could deliver the best it
22		could. As I say, on night in question, there were
23		35 staff available within the national network that
24		could be deployed by the network commander to search and
25		rescue incidents.

1	0	Yes. Well, let's $$ thank you. Let's look and see what
2	Q.	came out of this meeting. If we go back to page 4
3		{INQ000206/4}. Again, under the heading "Staffing",
4		lower down the page in red:
4 5		1.0
		"Action $-$ DL $-$ Send email to network asking for
6		volunteers for Wednesday night at MRCC Dover"
7		So it looks as though that was another $$
8		Correct.
9	Q.	 measure taken to try and increase the number of
10		people at Dover, doesn't it?
11	Α.	Yes, that $$ that's correct. There $$ the strategic
12		commander, as I recall with the initials there, they
13		have taken that action and we know that another witness
14		the Inquiry's seen was going $$ or did work from
15		MRCC Dover. And they, from what I recall, voluntarily
16		adjusted their hours to start at a time where crossings
17		had previously started. So I think the Inquiry's heard
18		not only from that individual, but also Mr Papadopoulos
19		around the general timing in that small boat activity
20		occurred. And usually small boats would be entering the
21		UK search and rescue region 6, 7, 8 o'clock in the
22		morning, much later. Hence, why Mr Cockerill had
23		volunteered to come in at that slightly early period, so
24		that the team were set for what was predicted to come as
25		the day progressed.

1	Q.	Yes. So in terms of the night shift on the night, 23rd
2		to 24th we know that there were the two operational
2		to 24th we know that there were the two operational
3		staff there at Dover and I think at 05:00,
4		Mr Cockerill ——
5	Α.	Correct.
6	Q.	—— joined them?
7	Α.	Correct.
8	Q.	And as we have heard, the SMC that night at Dover didn't
9		take a break all night and, as you will have heard in
10		his evidence, he felt overwhelmed. Now, wasn't all of
11		this foreseeable because your senior Coastguard, the
12		chief Coastguard, had said just a few days before that
13		two staff at Dover wasn't enough?
1 /	۸	Lable L

- 14 A. I think I -- reiterate the point around the staff
- 15 available in the national network. There were 35, there 16 were 12 staff from what Lunderstand dialled --
- 17 dialled in. And what I mean by that is actively
- 18 undertaking work within the zone 14.
- 19 So whilst there may not have been physical presence 2.0 there, there was presence across the national network to
- 21 be able to support operations. And we saw that occur on
- 22 the night. As an example, Mr Barnett, he acted as
- 23 an SMC early in the night and operators at the JRCC also
- 24 supported response. So whilst two, as reported there by
- 25 the chief Coastguard -- and I must add as well, actually

81

- at this point, the chief Coastguard is in this meeting 1 2 not in his capacity as the chief Coastguard. He is in 3 the meeting in his role as the duty operations director. 4 So that's an on-call function; he is not there as the 5 chief. Whilst he wears both hats, his purpose at this 6
- meeting was as the duty operations director. 7 Q. But what effect does that have on what he is saying?
- 8 A. It has no effect. But I just wanted to make it clear
- 9 that he was there in his on-call capacity and we see in
- 10 other meetings leading up to this, different personnel 11 in that senior leadership space. But ultimately, the
- 12 chief Coastguard has said it would be better if we could
- 13 have two more there, but ultimately, the national
- 14 network is healthy and can support and did provide
- 15 staffing to the response.
- 16 Q. Well, that's not something we get out of the minutes, is 17 it? It isn't said round the table, as it were: well, we 18 have only got two at Dover, that's fine, because we have 19
- got the national network. He is saying two SMCs at
- 20 Dover -- or two staff on Dover at night isn't enough,
- 21 it's as simple as that?
- 2.2 A. If we read above, it talks about JRCC numbers being healthy, it talks about network numbers are healthy. 23
- 24 And absolutely, as I have talked about this morning,
- 25 I have talked about our concept of operations and

82

1 utilising the national network. So staff -- additional staff in Dover, you know, that's something that the 2 3 chief Coastguard was trying to achieve, but ultimately, 4 our concept of operation has been, since the start of the national -- in 2014, and continues today, to be that 5 we will allocate staff from any of our RCCs to a search 6 7 and rescue mission. 8 So whilst it's not explicitly said there, that is 9 how our business runs and our concept of operation 10 occurs. So he wouldn't have needed to explicitly say 11 that. 12 Q. Okay. Let's go on to the other people at Dover and we 13 have already mentioned that there was a trainee MOO at 14 Dover that night. And Mr Gibson has explained to us 15 that she had only been with the Coastguard for, I think, 16 30 days of her nine months' training and was therefore 17 as we understand it, non-operational. She didn't have 18 your qualifications , she wasn't, sort of, fully 19 onstream 20 And in looking at this -- the role or the limits of 21 the roles of trainees, Mr Barnett, who you have

- 22 mentioned, in his evidence has explained that a trainee
- 23 was non-operational, essentially observing, learning, 24
- finding out how to undertake the work. Do you agree 25 with that?

83

1	Α.	Yes, the $$ the third member of staff that was on duty
2		that night, they had been with the organisation a short
3		time. And a very useful way to learn about the business
4		is to be involved in the business. So therefore, they
5		were there in a $$ an observational capacity. But the
6		SMC has a choice and has the empowerment to be able to
7		utilise a resource as they see fit under their
8		supervision .
9	Q.	And maybe that's why we know that the trainee at Dover
10		made calls with $$ or had calls with the French
11		Coastguard and operated the mobile phone, for example?
12	Α.	Yes, that $$ that would be a decision that the SMC would
13		take, ultimately, under their supervision. And if
14		someone has prerequisite training or skills and
15		experience before they join our organisation, then
16		absolutely, utilising that would be appropriate for
17		an SMC under their supervision.
18	Q.	And you think that's good practice, do you, that
19		a trainee in that position was making calls, receiving
20		information about small boats from the French during the
21		night?
22	Α.	So, I don't know the details specifically of the calls
23		that were made. That would have been a call that would
24		have been judgment by the SMC, deciding on whether that
25		was appropriate or not. And that's only something that

- 1 he, he could make. And I think that has to be done on an individual basis. Myself, being an SMC historically, 2 3 if I had a trainee that showed a high level of aptitude and I had seen them do things before, I would supervise 4 5 them and allow them to gain experience by doing. So it's a case-by-case basis. 6 7 Q. But it looks, doesn't it, given that she was making 8 those calls she was operating the mobile phone, etc, 9 that the trainee was taking a pretty full part in the 10 work of the Dover station that night? 11 A. From recollection, I think she made a call to the French 12 Coastguard and I believe some work with the mobile 13 phone. Utilising a mobile phone is something that 14 everybody does today so therefore would be competent in 15 doing that and a conversation with the French Coastguard 16 would have been undertaken before. I suspect. 17 You know, that would be seen as a routine call with 18 another professional organisation, not an emergency 19 distress call from a member of the public. So the SMC
- 2.0 made a choice that evening. I - - I can't comment on the
- 21 appropriateness of it because I don't know the
- 22 individual concerned, personally.
- 23 So I can't give any further comment on that,
- 24 I'm afraid
- 25 Q. So you are not able to assist on whether the involvement

- 1 that night of the trainee was simply because of the 2 resourcing situation at Dover?
- 3 A. I don't believe so. I don't believe so. I think if
- 4 the -- if the trainee had been there in the JRCC with,
- 5 you know, 30 staff, as an example, as you do in an
- apprenticeship, as an example, gaining experience --6
- 7 practical experience in something, is an appropriate way
- 8 of doing it under supervision.
- 9 Q. So far as the night shift went, we know -- and you have 10 already touched on this -- that Dover had remote support
- 11 from the JRCC throughout the night, first of all .
- 12 A. Correct.
- Q. And then between half past 10 and midnight, the JRCC 13
- 14 took control of Dover entirely when Mr Gibson was doing 15 his VTS work.
- 16 A. Correct?
- Q. Sorry, vessel traffic scheme service work. 17
- 18 A. Correct.
- 19 Q. And Stuart Downs was on a break. And then again, from 2.0 midnight when Stuart Downs returned until about.
- 21 I think, half past 1. Mr Barnett was, in effect, the
- 2.2 remote SMC from the JRCC. And the picture, which you
- 23 may also have gleaned from the material, is that the
- 24 JRCC continued to be involved after Mr Gibson's return,
- 25 receiving calls that were, as it were, that Dover

86

- 1 couldn't take because of too much activity, updating ViSION logs? 2
- 3 A. I think in terms of the point about Dover couldn't take,
- 4 the staff were locked into that zone. So it wasn't
- 5 because Dover couldn't take them, they were part of the
- operational team, but it was appropriate that they 6 7 answered those calls.
- $\mathsf{Q}.\;$ So they were not just dealing with the $\;$ overspill ? 8
- 9 A. No, the technology is set up is that if somebody is
- 10 logged into the appropriate zone, they will get the call
- 11 at the same time as the staff in Dover. So, therefore,
- 12 they were answering the calls as appropriate, you know,
- 13 during any operational response.
- Thank you. And they were also updating the ViSION $\ensuremath{\mathsf{logs}}$ 14 Q.
- 15 and making entries in the tracker, weren't they?
- 16 A. From what I've seen, ves.
- 17 Q. Yes. But all of this is from what you have seen?
- 18 A. Yes
- 19 Q. But again, going back -- and I think you have already
- 20 touched on this, but going back to the reports we read
- 21 in August from your colleagues, all of this remote
- 22 assistance, remote work, is no replacement, is it, for
- 23 being there in the room? Information exchange is much
- 24 easier and that is actually difficult to replicate when
 - people are working remotely in this way; isn't that

87

1 fair?

25

2	Α.	So I think that what the organisation has in place in
3		terms of utilising technology to be able to bridge that
4		situational awareness, what is going on in a room,
5		I think using the iPads, the Surface hubs, that bridges
6		that gap, it puts people in a room. So it's $$ it's
7		appropriate.
8	Q.	Thank you. Now, looking at the more senior people, the
9		commanders, who were present on the night. First, the
10		maritime tactical commander, again, the title may have
11		changed, but can we stick with that. He has explained
12		that he was unable to review small boat incidents and
13		conduct the RAG process which he should have done, under
14		the standard operating procedures because he was the
15		only maritime tactical commander on duty and it wasn't
16		practicable .
17		Which raises this question for you, speaking on
18		behalf of the organisation: why was there only one
19		maritime tactical commander on the night watch where
20		crossings were known to be either likely or very likely?
21	Α.	So, a couple of points on that, if I may.
22	Q.	Yes.
23	Α.	First of all , I $$ I believe the second tactical
24		commander was either on leave or sick.

2.5 Q. Yes.

1	Α.	So wasn't able to respond.
2	Q.	Yes.
3	Α.	Since this event, the team of maritime tactical
4		commanders has grown from two to three, so that now
5		gives a greater resource.
6	Q.	Is that a lesson learning from this incident?
7	Α.	I believe that that is something from this incident, but
8		other incidents as well.
9	Q.	Yes.
10	Α.	Again, showing the organisation's view it wants to
11		learn .
12	Q.	Yes.
13	Α.	I think, in terms of the maritime tactical commander
14		that evening, they $$ they had the requirement to make
15		those RAGs comments and review. They didn't and I can't
16		answer why they didn't. What I can say, I guess, is
17		early on in that evening, activity across the national
18		network was not significant. Outside small boats, there
19		was not huge amounts going on. So unfortunately,
20		I can't answer why he didn't do it, but I think what
21		${\sf I}$ can say is that there wasn't what ${\sf I}$ would class as
22		significant activity ongoing, having been in that role
23		myself.
24		So I have been a maritime tactical commander and
25		I don't see why it wasn't done.
		20

1	Q.	Well, I think we will have to $$ as you concede, I think
2		we will have to take the evidence from him as to what he
3		did on night and why he didn't do it? That must be
4		fair .
5	Α.	He's given his view, yes.
6	Q.	Now, so far as the RAG system is concerned, you deal
7		with that in your statement. So let's have that,
8		please, $\{INQ010098/1\}$ and can we go to paragraph 6.39,
9		please. Thank you. Page 109 $\{INQ010098/109\}$ yes.
10		"The rationale behind the 'RAGS' system is to
11		support the safe and controlled oversight of the [search
12		and rescuel response and is carried out by the Maritime

12	and rescuel response and is carried out by the Maritime
13	Tactical Commander in their role of maintaining tactical
14	oversight of accident."

- 15 So let's just look at the situation on the night.
- 16 As you say, we have had the evidence that it wasn't
- $17\,$ done, there wasn't a RAG review. Based on what you are
- 18 saying there, would that not have undermined the
- 19 tactical oversight of the incident?
- 20 $\,$ A. The tactical commander, if they followed the RAGS $\,$
- $21 \qquad \ \ \, \mbox{process, as is prescribed on the page before it, it goes }$
- 22 $% \left({{\left({{{{\rm{b}}}} \right)}_{\rm{c}}}} \right)$ through what that process is, it gives a level of
- 23 oversight to the incident. I --I don't know if that
- 24 occurred if --- if there would have been any guidance 25 given by the tactical commander to the incident
 - given by the tactical commander to the incident

90

1		specifically .
2		So I don't know what he will have done with that,
3		l'm afraid.
4	Q.	Okay, thank you. So far as that role is concerned,
5		maritime tactical commander, as it was then, you have
6		described it in your statement, I think it is slightly
7		lower down on this page, please 6.42, that the maritime
8		tactical commanders, do you see the third line:
9		" held leadership and/or decision-making roles
10		relating to Incident Charlie."
11		But in terms of the material the Inquiry has
12		received, he, the particular maritime tactical
13		commander, didn't exercise that role, did he, because he
14		didn't review it, as we have just been discussing, and
15		he wasn't told about it, as we know, by the SMC, by
16		Neal Gibson. So he didn't have a chance, did he, to
17		exercise leadership or decision-making?
18	Α.	So, I am unable to comment on the fact what he did and
19		didn't do.
20	Q.	Yes.
21	Α.	It didn't occur. But the point of the tactical
22		commander is to provide that oversight, provide that
23		review.
24	Q.	Yes.
25	Α.	Actions taken and guidance and that is the point of that
		91

- 1 team of individuals.
- 2 Q. Yes, and to take an obvious example based on what
- $3 \qquad % \left({{{\rm{Appened}}} \right) = 0} \right)$ happened on this incident, Mr Jones explained that he
- 4 would expect to be notified verbally if there were 5 reports of a vessel taking on water, or people had
- 6 potentially entered the water, or if there was a Mayday
- 7 Relay. And again, based on your experience, you would
- 8 expect, as maritime tactical commander, to have that
- 9 information drawn to your attention, wouldn't you?
- 10 A. So not for a Mayday Relay. Mayday Relays can occur
- 11 pretty regularly throughout -- throughout the year for,
- 12 for a variety of incidents. So I wouldn't expect for
- 13 that to be drawn to my attention.
- $14 \quad \ \ Q. \ \ What about the other two?$
- 15~ A. Potentially. But the role of the network commander is
- 16 sat back and observing and there to provide that
- $17 \qquad \mbox{ support, advice and guidance to the SMC. So they have }$
- $18 \qquad$ access to all of those incidents that are ongoing within
- 19the system available to them. They have the same20information.
- 21 So I can't comment why there wasn't a review done,
- 22 I'm afraid.
- 23 $\,$ Q. No. But based again on your experience, would you agree
- 24 that he should have been notified about this incident?
- 25~ A. I think that's a very difficult point to cover because

- 1 from what I understand, the SMC didn't believe that
- 2 there were persons in the water; to the SMC, the small
- 3 boats were crossing that evening, which was activity
- 4 that the network commander was aware of.
- So I --- I can't --- without knowing the information 5
- in realtime, I can't comment firmly on whether he should 6
- 7 or should not have. But from what the SMC knew. I don't
- 8 think that there was the triggers to escalate and the 9
- requirement would have been on that network commander 10 being -- sorry, the tactical commander being stood back
- 11 and having oversight of all incidents, to be able to
- 12 provide support. That's the purpose of the role.
- 13 Q. Thank you. We will come back to the question of Mayday
- 14 Relays later. Finally, in terms of the, as it were,
- 15 backup, more senior people, the small boat tactical
- 16 commander. We know that Mr Papadopoulos's role had been
- 17 created, in fact, in August, I think --
- 18 A Correct
- 19 Q. -- of the same year, to provide tactical support

20 specific to small boat activity. But he wasn't on duty

- 21 on the night shift. He came on, I think, the day shift,
- 22 the next day, is that right, isn't it?
- A. Yes, that's correct. I don't believe he was called and 23
- 24 he came in at 7 o'clock or 07:30, whatever it was in the
- 25 morning, in anticipation, following the usual trend of

93

- 1 crossings and small boats arriving in the UK search and 2 rescue region. 3 Q. Are you able to assist the Inquiry on why he wasn't on 4 shift on the night shift that night so there was only 5 one maritime tactical commander on duty? A. I am not able to. I know in his -- I guess, terms of 6 7 reference, he was -- he tried to be on duty for periods 8 of red activity and the evening of the 23rd into the 9 24th, that was amber. The period of red activity didn't 10 actually come into place until, I believe 18:00 on the 11 24th, which can be seen on the Deveran report. 12 But I am not -- not being involved in those 13 preparation meetings, I can't give you a further answer 14 to that. I'm afraid. 15 Q. Okay. Well, let's look at your statement on this 16 at 6.45 the next page, please, {INQ010098/110}, thank 17 you: 18 "The staffing arrangements on the night were as 19 follows. The Small Boats Tactical Commander ..." 20 That's Mr Papadopoulos we have just been talking 21 about
- 2.2 A. Correct
- Q. " ... and the on-call Strategic Commander were not called 23
- 24 on the night ... This was on the basis that none of the
- 25 requirements for duty calling were triggered."

94

1 Can you help us, what were the requirements for calling the small boat tactical commander? 2 3 A. They would be listed in the SOP guidance and it would be 4 around a significant incident, or persons in the water, etc. but I would -- if I was around. I would look for 5 6 reference to those criteria . 7 Q. Yes. 8 A. And I can't recall those, I'm afraid. 9 $\mathsf{Q}.\;\;\mathsf{But}$ as far as you are aware, were those criteria , 10 guidance, were they made available to the staff at 11 Dover? 12 A. I believe so. I believe so. 13 Q. Okay. And going back to the Mayday Relay, we have heard a lot of evidence about the fact that it was a very 14 15 unusual step for the SMC to take. Wasn't that precisely 16 the sort of thing that should have led him to get in 17 touch with the maritime tactical commander or the small 18 boat tactical commander? A. Not specifically . The SMC took the broadcast action to 19 20 elicit response. At that time, he didn't, from what 21 I can see through documents, have an understanding or an 22 awareness that there were persons in the water. It was 23 a small boat making its way within the UK search and 24 rescue region. The broadcast was to elicit a further 25 response.

95

- 1 It -- it wouldn't be a certain thing that he had to 2 inform the network commander. And in fact, I think 3 the -- the Mayday Relay was broadcast from the Joint 4 Rescue Co-ordination Centre where the network commander 5 was located 6 Q. Thank you. Looking, then, on the question of staffing 7 and those resources to the present day. If we can go to your statement, please, at page 121 $\{INQ010098/121\},$ and 8 9 paragraph 7.19. 10 You are talking there about mitigating actions and 11 do you remember, we have already looked at, for example, 12 some of these. Had -- has the plan for a migrant 13 operational cell involving an increase of 24 staff --14 sorry, that's on the next page -- at Dover, 15 {INQ010098/122} been put into effect? 16 A. Yes, absolutely. So the increase of staff at Dover has 17 been put into effect. 18 Q. When was that, please, do you know? 19 A. I -- I don't know off the top of my head, I'm afraid. 20 It would have been during -- it started, ultimately, 21 in August '21 and during 2022 that continued. And that 2.2 increase in staff is there today. 23 Q. And so if we are looking at the position today then, you
- 2.4 are saying that there is a migrant operational cell with 25
 - an increase of, is it 24 staff at Dover?

- 1 A. So there's additional 24 staff, or posts, that have been
- 2 placed at Dover to assist with small boat response, as
- $3 \qquad \mbox{ well as to provide additional resource to the national }$
- 4 network. My understanding, as of a short time ago, is
- 5 that out of the total headcount down there now,
- $\boldsymbol{6}$ I believe that there's six posts that are being
- 7 recruited

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

2.2

23

25

- But that is through natural turnover, retirement,
- 9 etc. So the majority of those posts have been recruitedand have staff in place.
- Q. And do you think that at that sort of level of staffing,
 the organisation, whether it's Dover or elsewhere, is
 now adequately staffed to respond appropriately to small
- 14 boat crossings?
- 15 A. I believe the additional staff that are at Dover, as 16 well as staff across the national network are able to
- 10 went as stall across the national network, are able to 17 respond to not only small boat crossings, but search and 18 rescue activity around the UK.
- 19 Q. Thank you. Now turning to the question of maritime
- assets, please, and obviously, I am talking about assets
- $21 \qquad \ \ \, \mbox{available}$ to you because, as we know, you don't have
- 22 your own maritime assets. You will have seen and read
- 23 evidence about the significant pressure on the RNLI
- 24 assets in the lead up to the incident and we also know
- 25 that by November '21, it was acknowledged that the

97

situation for Border Force Maritime was critical and

- non-sustainable without an increase in asset numbers. Can we look, please, with that in mind at {INQ009957/1}. So you can see what this is. It's in the context of Operation Deveran, joint activity review meeting If we go to the foot, please of page 2, $\{INQ009957/2\}$ to pick up this point under paragraph 5: "Operation Deveran Maritime and Land Assets: Requirements, Availability, Limitations, Deployment and Co-ordination "It was recognised that both Border Force Maritime and RNLI surface assets are functioning at the highest level of their capacity to respond to the increasing number of migrant incidents in 2021. For Border Force Maritime, this situation is at a critical level which will need to be resolved to ensure [going over the page {INQ009957/3}] they remain an effective responder in their main areas of responsibility (ie Law Enforcement And there are various options set out, or possible mitigations at that time. So that, as far as the Inquiry is concerned, is the situation with the majority
- $24 \qquad \ \ \, \text{of the maritime assets that you were being able to call}$
 - on. They were at a critical level?

98

- 1
 A. I think I would --- I can't remember the exact

 2
 terminology on the page before, but they were
- 3 functioning. They were at the higher level, but it was
- 4 delivering the service. I think that's on the page --
- 5 I can't see at the moment, but they were delivering, but
- 6 it was very, very busy.
- 7 Q. Yes.8 A. For st
- A. For sure.
- 9 Q. And so far as the interplay of these two factors is
- $10\,$ $\,$ concerned, ie the RNLI, the pressure they were under and
- 11 the Border Force, you will have seen and heard the
- 12 material about the incident on the 20th, where the RNLI
- 13 at Ramsgate declined a tasking request on the basis
- 14 that, in their view, Border Force should have been
- 15 available to attend. And again, I don't think we need 16 to go to that.
- 17 But can we take it that your organisation was fully
- aware that both sets of assets, Border Force on the one
- 19 hand, RNLI, were stretched to the limits before night in
- 20 question?
- 21 A. So I think that they were at the highest level of
- 22 capacity, as it says there. They were still able to
- 23 respond and I believe work was ongoing at that time,
- 24 \qquad both within the Home Office and within His Majesty's
- 25 Coastguard, looking at asset availability for 2022,

99

- $1 \qquad \mbox{that} \ --\ \mbox{that}$ significant increase in numbers that was
- predicted and we saw occur.
 Q. Yes.
- Q. Yes.
- 4 $\,$ A. And additional asset came in March, I believe, 2022.
- 5 Q. Yes, but after the incident, obviously
- $6 \qquad {\sf A}. \ \ {\sf After \ the \ incident}\,.$
- 7 Q. Yes.
- 8 A. But at the time, there was assets that were available
- 9 for response and whilst acknowledging that they were at
- 10 their highest level of capacity, they still were and
- 11 still did effectively respond.
- $12\,$ $\,$ Q. Yes. Well, you are reading the first bit of that, what
- 13 it then goes on to say is for Border Force Maritime,
- 14 this situation is a critical level which will need to be
- 15 resolved to ensure they remain an effective responder in
- 16 their area. So as far as they were concerned, something
- 17 needed to give something needed to change, didn't it?
- 18 A. Yes, correct.
- 19 Q. Thank you.
- 20 A. And that's what happened during 2022.
- 21 Q. Exactly. Thank you. If we can then turn to the events
- 22 of the night, please, and have {INQ000566/1}, now, this
- 23 is the list of Border Force assets available on the
- 24 night. You will have seen it before, I am sure. The
- 25 cutter, Valiant, berthed at Dover was the primary

March 24, 2025

1 responder. Hunter was on standby also at Dover and

- 2 Hurricane available from 6 o'clock.
- 3 "Primary responder" in this context means that the
- 4 Valiant would be tasked first, but it didn't mean that
- 5 it was the only vessel that was available to be tasked,
- 6 did it?

25

24

- 7 A. No, that's -- that's correct. So with -- with early information from the French Coastguard, the plan would 8 9 be to deploy the Valiant towards areas of crossings.
- 10 The UK, taking very proactive action ahead of a vessel
- 11 crossing into the UK search and rescue region, as they
- 12 did on the night when the French Coastguard notified us
- 13 of crossings, the Valiant was deployed. But there are
- 14 other assets available, such as the lifeboats provided
- 15 by the Royal National Lifeboat Institution, search and
- 16 rescue helicopters, fixed-wing assets, etc.
- 17 Q. Yes, but as far as maritime assets are concerned, and 18 just picking up the point you have made about the
- 19 response to information that boats were coming towards
- 2.0 the UK search and rescue region and the median line,
- 21 that all depended, didn't it, on information coming in
- 22 time -- in good time, to you from the French Coastguard:
- 23 this is what's going on, on our side?
- 24 A. Correct, whilst the vessel -- whilst the small boat is
 - within the French search and rescue region, the French

101

- 1 Coastguard are the co-ordinating authority, they have 2 responsibility . 3 Q. Yes. 4 A. But the French Coastguard have and continue to share the 5 tracker, as the Inquiry has heard about, and that 6 enabled HM Coastguard to take proactive action in being 7 able to deploy assets before it enters the UK search and 8 rescue region and there is any responsibility on 9 HM Coastguard, to ensure that asset is in the location 10 of crossings to be able to effect a swift rescue. 11 $\mathsf{Q}.\;\;\mathsf{But}\;\mathsf{as}\;\mathsf{I}\;\mathsf{say},\;\mathsf{that}\;\mathsf{simply}\;\mathsf{serves}\;\mathsf{to}\;\mathsf{underline}\;\mathsf{the}\;\;$
- 12 importance of getting early notice from the French of 13 what was happening and as we saw in the August reports, 14 that was a persistent problem and it turned out to be 15 a problem on the night?
- 16 A. Correct. And as you have seen through evidence, in 17 liaison meetings with the French Coastguard, we
- 18 continued to press for that information to be shared and
- 19 in fact the Mancheplan, which is the regional SAR
- 20 agreement between His Majesty's Coastguard and the
- 21 French Coastguard, places mandate responsibility -- I am
- 2.2 not sure of the appropriate word to use -- on the French
- 23 authorities for sharing information with the UK.
 - Q. But would this be fair: it may have been in the
- 25 Mancheplan, but it was something that wasn't happening

102

- in the months before and on the night? 2 A. So I think in the evidence we saw from August -- and 3 that's a snapshot of a couple of days.
- 4 Q. Yes

1

- 5 A. I can't tell you throughout that period when information
- was received or not. What I can say is that 6
- 7 HM Coastguard, through its liaison with the French
- 8 Coastguard, reinforced the importance of that
- 9 information being shared with HM Coastguard in a timely
- 10 manner so we could take proactive actions in terms of
- 11 asset deployment.
- 12 Q Yes. Now going back to the question of assets, we know
- 13 that the Valiant was the only maritime asset which was
- 14 actually tasked on the night and you will have seen the
- 15 transcript of the call between Neal Gibson and
- 16 Mr Willows of Border Force discussing Valiant's tasking,
- 17 this, I think, was at 11 minutes past 3, and deciding
- 18 not to tasking another vessel.
- 19 Now during that call, again, you will have seen
- 2.0 this, they agreed that it was, and I quote, a dream --
- 21 "the dream" not to get more than one asset out.
- 22 Is that a view that His Majesty's Coastguard would 23 endorse?
- 24 So the view from His Majesty's Coastguard is very much Α
- 25 that an SMC tasks resource that they, through review of

103

- 1 incidents, seems appropriate, or is appropriate, and 2 they are empowered to do -- do that through their role 3 as an SMC. So no, they -- they task appropriate 4 resource as it's required for a search and rescue 5 mission 6 Q. Yes. Now, again, we know from that same call that they 7 calculated there were potentially 110 people on board 8 four small boats in the same area, around the Sandettie 9 Lightvessel and we know that the Valiant's safe capacity 10 was 100. 11 And as it was put by Neal Gibson, I think, in that 12 call, they were pushing their luck for Valiant. Again, 13 standing back from this and drawing on your experience, 14 shouldn't another Border Force vessel, the Hunter, which 15 was on standby, or an RNLI lifeboat, have been tasked in 16 those circumstances? 17 A. Well, I think the SMC was making a dynamic decision at 18 the time with the information available to them. 19 Q. Yes 2.0 A. And I think there was experience that the information 21 that was received by HM Coastguard was not always 2.2 accurate. So post-rescue, we would understand that the 23 number of persons on board was very different to what 2.4
 - actually may have been reported. So the SMC deployed an asset which was an

25

- 1 appropriate asset. It had a large capacity, it had
- 2 a large number of crew on board to provide lookouts, it
- 3 was well experienced, having not only been in the
- 4 Aegean, as we heard from Mr Toy and having a great
- 5 amount of experience there, but also working in the
- Channel since 2018. So a dynamic decision was made and 6
- 7 the vessel was deployed. If --
- Q. The question was whether another vessel should have been 8 9 deployed?
- 10 A. That -- that's a decision for the SMC.
- 11 Q. Yes.
- A. I think though, in terms of the SMC's thinking, he may 12
- 13 have considered -- and I think Mr Toy talked about
- this -- that 100 is a figure that is -- that is placed 14
- 15 on paper, but actually dynamic decisions will be made by
- the commander of a vessel. The Valiant also has its 16
- 17 RHIB, it also has its lifesaving equipment. So
- 18 whilst 100 is written on paper, I think even in Mr Toy's
- 19 evidence he even talked about that number could be
- 20 exceeded and that's a dynamic decision for him.
- 21 If he came across more than that number, then
- 22 additional assets would be requested and the SMC would 23 deploy it.
- 24 Q. Thank you. So far as the time it took the Valiant to 25
 - get to -- from its initial tasking, to get to the scene

- 1 of the Mayday Relay location, remember it was slightly 2 later? 3 A. Yes 4 Q. We know it's about two hours, and you will have heard Mr Ling from the RNLI giving evidence about the speed it 5 takes lifeboats to deploy to a similar position and 6 7 I think he's now, at our request, provided a second 8 statement which I think you have had a chance to look 9 at. Can we have a look at that, please. It is
- 10 {INQ010739/1}, I hope.
- 11 Do you have a copy of it?
- 12 A. Do I have a copy.
- 13
- $\mathsf{Q}.\;$ We are going to be very old–fashioned about this. 14
- I've got a copy, you have got a copy and everybody else will just have to do their best. This, as you see, is 15
- 16 the second statement of Mr Ling.
- 17 And he deals, at paragraph 6, with an estimate of
- 18 the time it would take the lifeboat from Dover to the
- 19 Lightvessel. And his estimate, you see it is
- 20 paragraph 9, the table is there, you have got that,
- Mr Leat? 21
- 2.2 A. Yes
- 23 Q. Thank you. Is 73 minutes, one hour 13 minutes, from
- 24 alert to arrival on the scene at the Mayday Relay
- 25 location. Do you see that?

106

- 1 A. Yes. I do.
- Q. And in your statement -- and we will have this, so you 2
- 3 can look at the screen again, $\{INQ010098/90\}$, at
- 4 page 90, thank you, you provide your own equivalent time
- estimate for the Valiant, this is 5.53, do you see 5
- 6 there?
- 7 A. Yes
- $\mathsf{Q}.\;$ And you say that it would have taken 1 hour and 8
- 9 22 minutes. Do you see?
- 10 A Yes I see
- 11 Q. Does your estimate include time -- the time it would
- 12 take the Valiant to clear the port at Dover? I don't
- 13 think it does
- 14 A. So, these are from, I believe, the entrance to the port of Dover
- 15
- 16 Q Yes
- 17 A. And I also make the point that these are straight line
- 18 calculations, as it may be.
- 19 Q. Quite
- 20 A. And I think Mr Toy went to great lengths to explain to
- 21 the Inquiry that there is a number of navigational
- 22 hazards, it is the busiest shipping lane in the world,
- 23 etc.
- 24 Q Yes
- 25 A. And through reading the statement from Mr Ling, I --

107

- 1 I don't -- these, I imagine, are theoretical times --2 calculated times, sorry. Not theoretical, calculated 3 times and would not take into account actual traffic or 4 navigation on the evening. That would be very difficult to do in hindsight. 5 6 Q. Well, I think if you look at his statement, and again, 7 apologies that it's not on the screen, we will see there 8 the factors that have been taken into account and you 9 remember, he mentioned in his evidence that he had 10 consulted the coxswains about all of this? 11 A. Yes 12 Q. So I think there is a good deal of experience behind the 13 estimates, but can I just ask you to answer the question I posed that -- if we can have it back, please, 14 15 {INQ010098/90}, thank you. The question I posed to you 16 was: don't we have to add on to your estimate time for the Valiant to clear the port at Dover? 17 18 A. From what I'm reading there, yes.
- 19 Q. Yes. And let's say 10 minutes or so. I mean, in other
- 2.0 words, hoping for the best. I think in practice it took 21 considerably longer on the night, so that would take us
- 2.2 up to an hour and 32 minutes therefore, is that fair?
- 23 Α.
- 2.4 Q. Whereas, I think Mr Ling's analysis -- and again,
- 25 I'm afraid everybody else will just have to rely on you

- 1 and me for this -- does take that into account, you will 2 see.
- 3 However, what we do know is that all of this is
- 4 theoretical and hypothetical and there are all of the
- variables that you were mentioning.
- 6 A. Yes

- Q. Quite right. What actually happened, again, we also
 know, is that it took the Valiant about two hours to get
 there?
- 10~ A. I think it was about an hour and 50, from memory.
- 11 Q. I think it was about an hour and 58. So let's not quibble about the two minutes. Was that an acceptal
- 12 quibble about the two minutes. Was that an acceptable 13 response full – time for a search and rescue operation?
- A. So I think the time that the Valiant was deployed, the
 incident was still under the co-ordination the French
 Coastguard, the vessel was underway and the Valiant was
- 17 an appropriate asset to be deployed.
- 18 Q. So that was a response consistent with the test we see
- in the search and rescue material of immediate response,two hours?
- 21 A. So immediate response is about delivering a response.
- 1t doesn't mean the response will be there immediately.
 The same could. I guess, be said in terms of someone
- 24 in cardiac arrest requires an immediate response. There
- is not always an ambulance at every corner, they have to

109

- 1 travel.
- 2 Q. May be --
- 3 A. So the SMC made a judgment, from what I can understand,4 on deploying the Valiant because of its capacity, the
- 5 number of crew on board, its height of eye, its
- 6 experience, etc, but his choice of asset is only
- 7 something the SMC can answer.
- 8 Q. Right. Thank you. But just in terms of the RNLI that
- 9 night, turning from Border Force back to them, we know
- 10 that none of the stations or assets serving the
- 11 Dover Strait that they had, were off service that night 12 were they?
- 13 A. No, that's correct. They were all available.
- Q. So to your knowledge, there was no reason why theycouldn't have been tasked?
- 16 A. That's correct.
- 7 O Thank your Cafewath
- 17 Q. Thank you. So far then as the situation after the 18 incident and bringing this up to date is concerned w
- 18 incident, and bringing this up to date, is concerned, we
- 19know, from other evidence, that the Border Force now20has, I think, a total of five crew transfer vessels.
- 21 One came in, in the summer of '21 and then four more
- 22 were added the following year as part of Operation
- 23 Isotrope.
- 24 We know that there were going to be three fast
- 25 reconnaissance vehicles due to be operational in the

110

- 1 third quarter of last year. Has that come into effect,
- do you know?
 A. So the crew t
- 5 The fast craft that you refer to, I am unsure.
- 6~ Q. Okay. Thank you. But so far as the maritime assets
- that you are now able to call on, do you believe thatyou are now able to call on sufficient maritime assets
- 9 to respond to small boat incidents?
- 10~ A. The asset available to HM Coastguard through
- 11 Border Force Maritime --
- 12 Q. Yes.

25

- 13~ A. -- the RNLI, etc, is appropriate with the risk, the
- 14 challenge that we see at this time.
- 15 Q. Yes.
- 16 A And is -- and will be under constant review
- 17 Q. Now, in the evidence -- and you have touched on this
- 18 already I think -- we heard not least from
- 19 Border Force's own witnesses, including very senior
- 20 people, that their vessels available to you for tasking
- in November '21 were not designed for search and rescue.
- 22 Does that still remain the case in terms of the
- 23 vessels currently being made available to you?
- 24 A. So, the vessels made available by Border Force Maritime
 - that their design was for crew transfer vessels as has

111

1 been explained to the Inquiry. 2 Q. Yes. 3 A. And they have great capability, in terms of a large deck 4 space, the ability to embark a large number of persons. 5 So those -- those vessels have also been modified and 6 are a suitable asset. But I think all responders in the 7 Channel are having to continually review their response 8 and we -- we see from the RNLI, they are continually 9 evolving tools to support their purpose built rescue 10 craft. 11 So as it stands today, the vessels are continuing, 12 on a near daily basis, to rescue hundreds if not 13 thousands of people, but it's something that I think all 14 of us need to continually review and as tactics, small 15 boat sizes, etc. change, we will need to review and 16 adapt as the challenge adapts. 17 Q. Are there -- looking at the current situation, the 18 current vessels available to you, are there still 19 limitations on their use? For example, restrictions on 2.0 their safe deployment, as the wave height approaches or 21 exceeds a metre? 2.2 So, the crew transfer vessels and the over 1 metre wave Α. 23 height is actually something during my time in post in 2.4 Dover was something that worked closely with the RNLI 25 on.

1	In 95% of occasions, the sea conditions are $$	1	
2	consistent with small boat crossings are less than	2	
3	a metre. So therefore they are absolutely appropriate.	3	
4	There are occasions where that isn't the case, but the	4	
5	RNLI will be deployed either to perform the rescue	5	
6	alongside a crew transfer vessel, or act in the capacity	6	
7	as a $$ a supporting asset in the event that something	7	
8	was to go wrong.	8	
9	But the occasions where people make the crossing in	9	
10	significant wave height above a metre is $$ is very low.	10	
11	And the plan that is in place is, in my view,	11	
12	appropriate with staff knowing and being made aware that	12	Q
13	when they do happen in the significant wave height, not	13	
14	only is the CTV deployed, but also a request to the RNLI	14	
15	to launch as well.	15	Α.
16	Q. But would that be an example of something, that	16	
17	limitation, which you have mentioned, that you, as	17	
18	an organisation, would expect to carry on working on to	18	
19	produce ever more improved resources for your search and	19	
20	rescue work?	20	
21	A. Yes, I think as I said, there's a $$ there's a constant	21	
22	review that needs to be undertaken around all of this	22	Q
23	and will be something that whilst small boat crossings	23	
24	occur, all organisations will work together to modify	24	
25	and adapt resource that's available, to support the	25	

1		rescue mission.
2	Q.	Thank you. Can we now turn to the question of aerial
3		assets and go back to your statement, please,
4		{INQ010098/101} and page 101.
5		Now, in paragraph 6.12.3 there, you say in relation
6		to the night:
7		"The MCA had plans in place such that, in the event
8		a fixed—wing aircraft was unable to fly, other
9		alternative aerial options were available to it "
10		And then you explain what they were.
11		Now, in terms of, there, of the rotary wing part of
12		the assets, the Coastguard aviation tactical commander
13		has expressed concerns to us about the use of that asset
14		as a plan B, where, as happened, the fixed—wing flight
15		doesn't fly.
16		The way he put it was that the helicopter was, as it
17		were, the Crown jewel of search and rescue aerial assets
18		because it could get involved in rescues as well as
19		searching, so if the tasking $$ the relevant tasking was
20		merely conducting a search or a patrol, he would prefer
21		to hold back on the helicopter for, as it were, a more
22		appropriate use.
23		Let me ask you then, was it appropriate to rely on
24		the SAR helicopter for surveillance?
0 5		

25~ A. Yes. So it very much -- you might call it the plan B,

114

1		it was another option available. So whilst the
2		$fixed\!-\!wing$ asset would be the primary because of its
3		endurance on scene, the search and rescue helicopter,
4		able to operate at low altitudes with appropriate
5		technology on board, was another consideration.
6		And as we saw on the night, the aviation tactical
7		commander, when finding out that the fixed-wing was
8		unable to fly due to weather and safety concerns with
9		diversion airfields , then deployed the search and rescue
10		helicopter to enable HM Coastguard to have a maritime
11		domain awareness picture.
12	Q.	Yes. Would you agree with his view that apart from the
13		helicopter, R 163 in this case, that there was no other
14		contingency plan in place for when 2Excel can fly?
15	Α.	I think there is 163. There is also nine other
16		helicopter locations across the UK where asset could be
17		moved from. There's also, under the Mancheplan, for
18		example, arrangements where asset from the French
19		Coastguard as well as reciprocal agreements with the
20		Belgians, the Dutch. So there was arrangements in place
21		for alternative asset if required.
22	Q.	But this was the very point, and I think you are getting
23		at this by your reference just a while ago to plan B,
24		that the MAIB was making about the air assets, wasn't
25		it?

115

1		If we go to their report, $\{INQ010445/93\}$ and
2		page 93, paragraph 13 within that, this is the
3		conclusions of MAIB, the third line $$ fourth line.
4		"Although JRCC tactical commanders understood that
5		the absence of a fixed-wing flight would negatively
6		affect their ability to understand what migrant traffic
7		was crossing, there was no predetermined contingency
8		plan for achieving surveillance during poor visibility
9		or other situations where fixed—wing aircraft were
10		unavailable "
11		And if you then go to $$ sorry, just to complete
12		that:
13		" and they were left to try and engineer
14		a surveillance solution. Although the lack of aerial
15		surveillance was a foreseeable occurrence the
16		detrimental effects of its absence had not been fully
17		recognised and no backup procedure was in place."
18		Do you agree?
19	Α.	No, I don't agree and as we saw on the evening, the
20		search and rescue helicopter was deployed to perform
21		that task. And I also $$ and I don't fully $$ I am not
22		sure if the context is how ${\sf I}$ am reading it in terms of
23		foreseeable, but as we know on that night, up until
24		quite late in the evening, the fixed-wing capability
25		was $$ it was tasked, it was going to be proceeding and

-	
1	it was quite late in the evening/early in the morning
2	that actually due to safety concerns that didn't occur.
3	So I believe that there was the rotary capability
4	available as was deployed.
5	${\sf Q}. \ \ {\sf Do}$ you agree that there was no predetermined contingency
6	plan for achieving surveillance during poor visibility
7	or other situations where fixed-wing aircraft were
8	unavailable?
9	A. No, because we deployed the search and rescue
10	helicopter .
11	Q. So are you saying there was a predetermined contingency
12	plan?
13	A. I $$ in my opinion, yes. It's a tool that the
14	commanders have available to them and they will utilise
15	those tools. So was there a set documented plan?
16	I can't say for certain. But was there a plan and did
17	it actually come to fruition on the night? Yes, it did.
18	MR PHILLIPS: Thank you very much.
19	Sir, would that be a convenient moment?
20	SIR ROSS CRANSTON: Yes, let's come back at 2 o'clock.
21	Thank you.
22	(1.02 pm)
23	(The Lunch Break)
24	(2.00 pm)

(2.00 pm)

25	SIR ROSS	CRANSTON:	Yes,	Mr	Phillips.
----	----------	-----------	------	----	-----------

117

1	MF	R PHILLIPS: Mr Leat, we were talking about aerial assets
2		and what I would like to do now please is to look
3		forward to the situation today. So can we go back to
4		your statement, please, $\{INQ010098/31\}$ and page 31,
5		please.
6		Because here, and you have mentioned it actually
7		a couple of times already, Project CAESAR, here, you
8		explain $$ I will just summarise because it is quite
9		detailed that additional aerial asset capability was
10		achieved in 2022 through this Project CAESAR. And you
11		give the details there, the $$ I think they are called
12		Schiebel drones and the DA62 fixed-wing aircraft
13		providing an increased flying time of, I think, a total
14		of up to 16 hours a day. And, of course as you point
15		out, live video imagery to you at Dover?
16	Α.	Yes, that's correct.
17	Q.	Thank you. Can you tell the Inquiry whether there have
18		been any other increases or changes in the aerial asset
19		capability ?
20	Α.	For His Majesty's Coastguard — pardon me — no.
21	Q.	Yes.
22	Α.	CAESAR continues to run and will continue into the
23		future. I think as the Inquiry heard from Mr O'Mahoney,
24		Home Office have also enhanced aeronautical capability
0 5		

25 both through unmanned vehicles and drones and also

118

1		a fixed—wing capability as well.
2	Q.	Thank you, but just sticking to the Coastguard for the
3		moment. Do you, as an organisation, consider that these
4		aerial assets are sufficient to give you a reliable
5		maritime picture?
6	Α.	Yes. I $$ I do. The assets have been invaluable to the
7		work that we do in the Channel. Since first coming in,
8		in March, they have really aided search and rescue
9		mission co-ordinators. Having a live video feed has
10		assisted in the ability to review those on board small
11		boats and understand the level of distress that's
12		ongoing, as well as being able to get a more accurate
13		picture in terms of how many persons or casualties there
14		are on board.
15	Q.	Thank you. Just for the transcript, when you
16		mention March you mean March '22, don't you?
17	Α.	Yes, that's correct, March 2022.
18	Q.	Which you set out there in 2.22. Yes, thank you. And
19		in terms of the adequacy of the assets, the aerial
20		assets which you have now got, does that apply, is it
21		still the case, in all weather conditions?
22	Α.	So with any aviation asset, the weather is always going
23		to be a factor, but I believe what we have now both
24		between His Majesty's Coastguard as well as the
25		Home Office, there's a suite of aeronautical assets
		119
1		available that are able to respond in pretty much any
2		weather condition.
2	\cap	And nicking up the point about the night that we were

- Q. And picking up the point about the night that we were
- 4 discussing before lunch, do these assets now provide 5 adequate mitigation, a plan B point, in circumstances
- 6 where the fixed-wing can't operate?
- 7 A. I believe they do. And I believe this is also 8 complemented or supported by technology that colleagues
- 9 within the Home Office -- they described in
- 10 Mr O'Mahoney's evidence. So actually it's having
- 11 a layered effect of different tools to be able to
- 12 provide the domain awareness.
- 13 $\mathsf{Q}.\;$ Thank you and following on from that, can you confirm
- 14 that the Coastguard gets access to, if I can put it this 15 way, the product of the Home Office, the Border Force's
- 16 aerial assets? 17 A. Yes, I can confirm that. There is a very good working
- 18 relationship between Home Office and the HM Coastguard
- 19 and information is shared from them.
- Q. And are those Home Office Border Force assets available 20
- 21 to the ARCC for tasking or re-tasking if required for 22 search and rescue or SOLAS purposes?
- 23 A. The aviation, the assets that are there -- without
- 24 trying to go too technical, the drones, for example,
- 25 have to stay within a specific area, that's due to

- $1 \qquad$ airspace regulations. And if the team that's
- 2 responsible for delivering search and rescue for
- 3 HM Coastguard, be that in Dover or elsewhere in the
- 4 national network, then they are able to engage directly
- 5 with Home Office personnel to have that asset support
- 6 the search and rescue mission. 7 Q Thank you just again looking at problems
- Q. Thank you. Just, again, looking at problems on night.
 If you remember, one of the difficulties faced by 2Excel
- 9 was the lack of suitable diversion airfields and the
- 10 Inquiry has had evidence about the category A problem,
- 11 the category B tasking, etc. And in the circumstances
- 12 which then pertained, airfields were not compelled to
- 13 accept a diversion
- 14 Now, the evidence we have received from 2Excel is
- $15\,$ $\,$ that ad hoc arrangements have now been made by them with
- 16 individual airfields to enable their use as diversion
- $17\,$ airfields in those circumstances. Have His Majesty's
- 18 Coastguard been involved in that process?
- A. Only to be the -- His Majesty's Coastguard have been given assurances by 2Excel that they have undertaken
 plans -- sorry, engagement to facilitate those, those airfields .
- 23 Q. Yes. And as far as aware, based on your knowledge of
- 24 current operations, are there still continued issues in
- 25 relation to this question of diversion airfields ?

- 1 A. Not that I am aware of. But I am not an expert in 2 aviation.
- Q. Of course, thank you. Are you able to comment on this
 question, though; would it in your view and again based
 on your experience, be desirable or necessary for UK
 airfields that are open, to be compelled to accept both
 category A and category B aircraft diversion?
- 8 A. I think it -- on the face of it, it sounds wholly
- 9 logical . However, not being an aviation subject matter
- 10expert, I am not sure I am best placed to comment, but11the principle sounds appropriate.
- 12 Q. Thank you very much. So moving, then, from the question13 which took up a good deal of time before luncheon,
- 14 resourcing and preparedness.
- 15 A. Yes.
- 16 Q. The next big theme is co-operation with the other
- 17 stakeholders involved in search and rescue. Just first
- 18 of all, looking at the situation before the incident,
- 19 and again, we have been over this, but the situation in 20 terms of the involvement of Border Force is this, isn't
- 21 it : that until sometimes in 2018 they had no. or
- 22 minimal, role in that process, is that correct?
- 23 A. To the best of my understanding, yes.
- 24 $\,$ Q. Thank you, but we also know that by the time of the
- 25 incident and indeed, today, that they are heavily

122

- 1 involved in the search and rescue of small boats?
- $2 \quad \text{A. Yes, that's correct.}$
- 3~ Q. In terms of then of the relationship between
- 4 Border Force and the Coastguard, the evidence we have
- $\boldsymbol{6}$ \qquad no written agreement or memorandum of understanding in
- 7 place between Border Force and the Coastguard, is that
- 8 correct?
- 9 A. Yes, that's correct.
- 10 Q. Do you know why that was?
- 11 $\,$ A. I do not know why that was. But I am certain that that
- 12 has no -- or had no impact in the working relationship
- 13 or how Border Force made their assets available as
- 14 additional facilities to HM Coastguard. And it's still
- 15 the case today. There is a very, very good working
- 16 relationship between His Majesty's Coastguard and UK
- 17 Border Force and wider Home Office colleagues.
- 18 Q. So that, as far as you are concerned, the work -- the
- 19 working relationship is a very good one?
- 20 A. Correct.
- 21~ Q. But is it also right, please confirm, that it remains
- 22 the case that there is no written agreement or
- 23 memorandum between the two organisations?
- A. Yes, to my understanding, there's no memorandum of
 understanding between His Majesty's Coastguard and UK

123

1 Border Force, but that doesn't stop the response, as we 2 see daily at the moment. 3 Q. So would you not accept that a written agreement setting 4 out the respective roles and responsibilities would have 5 been desirable then and would be desirable now? 6 A. I am not sure what -- it wouldn't add anything, in terms 7 of our response. 8 Organisationally, we work together, we plan 9 together, as the Inquiry's seen through disclosure. 10 Regular meetings and liaison occur and assets are made 11 available as additional facilities for search and 12 rescue. So it would only be a form of governance and 13 that's not taking anything away from governance, it is 14 an important thing. However, it wouldn't change the 15 events that happened on the 24th of November, nor would 16 it change how we operate today continuing to provide 17 a search and rescue service. 18 Q. But those points you have made would, presumably, also 19 apply to your relationship with the RNLI, but we know 20 that there was an agreement from 2010 and then 21 a memorandum of understanding from 2020. What's the 2.2 difference? 23 So, I think the 2020 -- sorry, 2010 agreement, as it's 2.4 labelled, isn't actually a memorandum of understanding. 25 Q. No.

- 1 A. It is a specific agreement on terminology for broader
- 2 search and rescue and specific search patterns. The
- 3 document in 2020, the memorandum of understanding, that
- 4 sets out a relationship -- because the RNLI is a
- 5 declared asset to His Majesty's Coastguard and sets out
- 6 how we will work together, not only in the English
- 7 Channel but across -- more importantly, it is across the
- 8 whole of the UK within the UK search and rescue region. 9 So there is an MOLI there but I don't see -- it it
- 9 So there is an MOU there, but I don't see -- it, it 10 may be post this you know Inquiry that an MOU may be
- 10 may be post this, you know, Inquiry that an MOU may be 11 produced between HM Coastguard and UK Border Force, but
- 12 I think it's important for the Induiry's awareness is
- 13 that that won't change the operational working
- 14 relationship or the response that happens on a daily
- 15 basis.
- 16~ Q. That's a different point. The question is whether,
- $17\,$ given that there is one, in 2020, a memorandum of
- $18 \qquad$ understanding, for what were obviously thought to be
- 19 good reasons, why there isn't one with Border Force and
- $2\,0\,$ $\,$ if there isn't one now, why there shouldn't be one in
- 21 the future? For all of the good reasons you have given 22 about the RNLI?
- 23 A. So I am unable to answer why there hasn't historically
- 24 been one. I think looking forward, it will be something
- that our leadership, including myself, will be able to

- 1 consider moving forward.
- 2 Q. Thank you. So far as the RNLI is concerned, as we have
- 3 discussed at the time of the incident in November '21,
- $4 \qquad \qquad \text{they were under enormous pressure and in that context,} \\$
- 5 can I just ask you about a specific point of liaison6 between the two organisations.
 - This relates, Mr Leat, to your policy to classify
- 8 all small boats within the UK search and rescue region
- 9 in the Dover Strait as being in distress.
- 10 A. Correct.

7

- 11 Q. Do you recall, as a matter of interest, when that policy 12 was implemented?
- A. I do not recall when that was implemented, but what I do
 know is that that information was shared with the
 regional manager of the RNLI in October 2021.
- 15 regional manager of the KNLT in October 2021.16 Q. Thank you. And going back to the policy decision, are
- you able to help us, as the corporate witness, as to whythat policy was implemented?
- A. I believe at the start of my evidence we talked aboutthe challenges with small boats and if we look
- 21 specifically in terms of the -- the very unsuitable
- 22 craft, the construct of them, they are not built to any
- 23 specific standard, those persons that embark don't have
- 24 the appropriate lifesaving equipment, they are not
- 25 provided with the appropriate training, they have no

126

- 1 mechanism for being at sea and able to call for help. 2 So it's for those reasons and in my statement I go 3 into much further detail around that. That is why the 4 organisation viewed that these vessels are to be categorised in the distress phase. 5 Q. Right. Well, the specific thing I wanted to raise with 6 7 you and you have anticipated it in the evidence you have 8 just given, is that Mr Ling explained that he had not 9 fully understood until, I think, he said December that 10 year, '21, that the Coastguard considered a vessel was 11 in distress once it passed the median line. 12 I mean, that's a very important point, isn't it? 13 It's something that should have been communicated, or 14 communicated better or more effectively, to the RNLI? 15 A. What I do know is that was shared with the regional 16 manager ---17 Q. Yes, you said. 18 -- of the RNLI. Why that was not in Mr Ling's Α 19 awareness, I can't comment on. 20 Q. No. 21 A. I think though what can be shown is that the very swift 22 action and engagement that took place in -- after that 23 event, where RNLI managers engaged with HM Coastguard 24 and then consulted or engaged with the crew at the said
- 25 \$ lifeboat station, shows that there was an awareness, it

127

- 1 wasn't new information to that regional team. Whether 2 it was in the sphere of Mr Ling's awareness, I can't 3 comment on. 4 Q. Okay. Going back to this question of MOUs and you have 5 explained your position on that. I think I should also 6 show you, in the post-incident phase, the MOU which came 7 into being as a result of Operation Isotrope. Can we 8 look, please, at {INQ008944/1}. This is, as you see, 9 a revised version, version 2 of a memorandum of 10 understanding between the Ministry of Defence, the 11 Home Office and the Department of Transport, which we 12 know, from the evidence, that was put in place for 13 Operation Isotrope when, as you explained earlier, the 14 Ministry of Defence had primacy, subject to the 15 qualification you gave, for responding to small boat 16 crossings. 17 And at this time, in 2022, you, I think, had taken 18 up your new role as Assistant Chief Coastguard Migrant 19 and Security Operations? 20 A. Yes, that's correct. 21 Q. So presumably, you were very well aware of this document 2.2 and the work that went into it? 23 Α. Yes, that's correct
- 24~ Q. Thank you. And I don't want to take you through it.
- 25 You will have seen it before, you must be very well

- 1 aware of it. But it defined, didn't it, the respective
- 2 roles of the organisations involved in small boat search
- 3 and rescue during Operation Isotrope?
- 4 A Yes that's correct
- 5 $\mathsf{Q}.\;$ Then going back to the questions I was asking you 6 before. Isn't there a strong case for putting in place 7 MOU of this kind to clarify respective roles and
- responsibilities between Coastguard and Border Force?
- 8 9 A. I think this MOU was put in place because of the change
- 10 of primacy and the lead agency, as such. But in terms
- 11 of an arrangement with the Home Office and MOU between
- 12 HM Coastguard and the Home Office. I can see how --
- 13 where you are view is coming from and I am sure that's
- 14 something that, organisationally, we can take away and look at. 15
- Q. Right. So far as the RNLI MCA agreement is concerned, 16
- 17 again, we touched on this, the agreement and the MOU. 18 A Yes
- Q. We were told, I think by Mr Ling, that the agreement has 19 20 been under review for I think he said some years and he
- 21 was hoping, perhaps against the weight of history, that
- 22 it would be finalised in May this year.
- 23 Does that accord with your own understanding?
- 24 A. Yes. it does. ves.
 - Q. What about the situation with the MOU, is that under

- 1 review and is that also going to be finalised?
- 2 A. So the MOU is the document that Mr Ling refers to in 3 terms of May, to be --
- 4 Q. Oh. I see.

25

- 5 A. -- looked at
- Q. Thank you. 6
- 7 A. And then after that, once that's been completed as the 8 strategic document, any underlying documentation would
- 9 they be appropriately be updated, modified, etc.
- 10 Q. Thank you. On the question of joint working and joint
- 11 exercises between the various stakeholders, again,
- 12 Mr Ling's evidence to us was that there had been, to
- 13 date, no formal joint exercise between Coastguard,
- Border Force and the RNLI and that, in effect, there 14 15
- should be more of that kind, joint training involving 16 all stakeholders.
- 17 Would you agree?
- 18 A. Yes, I would agree and I think since the event in 2021,
- 19 there's been various exercises, both in a table-top
- 2.0 fashion and a practical fashion, at differing levels.
- 21 But I would agree that it's really important that all
- 2.2 organisations involved in the continued response to the
- 23 small boat crossings continue to engage and exercise as 24 we move forward.
- 25 Q. Well, there is an obvious case, isn't there, for all of

130

- 1 those involved to undertake joint training exercises?
- 2 You are working together
- 3 A. Correct, we are working together. We are working
- 4 together on a daily basis, delivering live operations.
- 5 Q. Yes
- A. So that is a good way for training. But that doesn't --6
- 7 that -- sorry, but it also means that we can take time 8 out with those live operations to then look forward and
- 9 plan exercises for future.
- 10 Q. Yes. And do you think that those joint training
- 11 exercises should also involve the French?
- 12 A. I think exercising with colleagues in France has some 13 potential.
- 14 Well, we are told the relationship is very much better
- 15 and things are working well.
- 16 A Yes

25

- 17 Q. So, why not?
- 18 A. It's very good. I think the challenge that -- that all
- 19 organisations actually have is the days when a practical
- 20 exercise would be best to be undertaken are the days
- 21 when it's likely that crossings may occur. So there is
- 22 a challenge in co-ordinating when an exercise could be
- 23 undertaken in a practical sense.
- 24 But absolutely, engagement and exercising across all
 - stakeholders, as well as exercising with colleagues in

131

- 1 France is an appropriate thing to do.
- 2 Q. Indeed.
- 3 A. And I --
- 4 Q. Sorry.
- 5 A. Apologies, yes.
- 6 Q. No, please continue.
- 7 A. The final thing I would say is that exercising doesn't
- need to occur with everybody at the same time. 8
- 9 Depending on the objective of the exercise. it may be.
- 10 for example, that an exercise happens between the RNLI
- 11 and UK Border Force and HM Coastguard may not need to be
- 12 involved. Likewise, there's an exercise where
- 13 HM Coastguard is leading co-ordinating. So different
- exercises will achieve different outcomes. 14
- 15 Q. Yes. Focusing on the question of joint exercise
- 16 including the French Coastguard, are you aware of any 17 arrangements in place at the moment for that?
- 18 A. So I do know that in the regular meetings that occur,
- 19 conversations occur around new themes, tactics, etc and
- 2.0 therefore, they are deemed in my mind as a table-top
- 21 exercise. It may not be a practical exercise, but
- 2.2 there's continued engagement and learning amongst
- 23 parties
- 2.4 Q But in terms of my question about whether there are
- 25 plans in place for future joint training with the

March 24, 2025

- 1 French, is the answer no?
- 2 A. I believe that there are exercises planned. Within
- 3 Coastguard we have got a board that specifically looks
- 4 at training and exercising and I know that our lead that
- 5 is in the role that I was during 2022, he's
- 6 co-ordinating with partners to look at an exercise
- 7 programme for the future.
- 8 Q. Okay. Can you give us any idea of when they might take9 place?
- 10 A. Unfortunately, I don't have that detail.
- 11 Q. Thank you. Then on the RNLI's triage protocol, Multiple
- 12 Persons in the Water, let's just have it up on the
- 13 screen, the card, please. It is $\{INQ009006/1\}$, and you
- 14 have heard the evidence about it.
- 15 A. (Nods).

25

- 16 Q. Has this protocol been adopted and incorporated into17 your policies, procedures and guidance?
- 18 A. Yes, in short. The work and actually the flowchart we
- 19 can see here, was work that was commissioned by
- 20 HM Coastguard through its medical director. The RNLI
- 21 then -- then worked alongside and -- and created
- a different flowchart, but it achieved the same outcome.Q. Yes.
- 24 A. This is now in trial, effectively, in the southeast. So
 - it's available, it's written in policy, there is

133

- 1 guidance to support that. And I think, as Mr Ling said
- 2 in his evidence, this is now about gaining useful
- 3 insights from live events as well as then taking this
- 4 Multiple Casualty in the Water triage tool to events
- 5 like the IMRF, where Dr Paddy Morgan, our medical
- 6 director, spoke and then looking to see how this can be7 incorporated internationally.
- 8 Q. So just to be clear, it is still in trial.
- 9 A. (Nods).
- 10 Q. Do you know what the programme is for getting it fully 11 in force?
- 14 they don't occur on a regular basis. So we are
- 15 \qquad continually reviewing it and at an appropriate point, it
- $16 \qquad \mbox{will} \mbox{ be transitioned into not a trial}$. But the tool is
- 17 available to both RNLI staff and HM Coastguard staff are
- 18 aware on the Coastguard information portal.
- 19 Q. Yes, well, I think he told us that it actually been
- followed and worked successfully in practice. So as far
 as they are concerned, it has had, as it were, a real
 life trial.
- 23 Are you able to give us a timeline for when you
- think it will stop being in trial for Coastguard and be
- 25 fully in practice?

134

- 1 A. Unfortunately, I am not able to give a timeline on that.
- $2\,$ $\,$ Q. Thank you. Is there anything else that you think needs
- $3 \qquad \ \ \, to \ be \ done \ in \ order \ to \ give \ this \ wide \ currency \ and \ make$
- 4 it more universally adopted? Is it something that ought
- 5 to be taken up, for example, with the IMO?
- A. So, I think we are on that journey now in terms of
 Dr Morgan briefed the IMRF. That is about sharing this
 with international partners.
- 9 Q. Yes.
- 10 A. I believe Mr Ling has actually spoken on this as well in
- 11 the international forum and it is now about getting
- 12 feedback and views from across the global search and 13 rescue community, for this then to be considered to be
- 14 taken into international guidance or legislation .
- 15~ Q. Does the Coastguard have a role in that? Is there
- 16 something that you can do to assist that process?
- 17 A. I think we are doing that. We have started the ball
- 18 rolling in terms of raising it at the IMRF and it is 19 something that, as we learn and understand this tool, we
- 20 will continue to push forward.21 Q. When did you first start using it on a trial basis?
- 22 Q. When du you hist start using it on a trial basis 22 I should have asked you that Do you know?
- 22 I should have asked you that. Do you know?23 A. I am unable to recall that date.
- 24 Q. Right. Some years ago?
- 25 A. Yes. But I am uncertain in terms of the date. It would

135

- 1 be listed in the Coastguard information portal. 2 Q. Yes, I am just trying to get an idea of how long it's 3 been in trial, you see. 4 A. I suspect it's been in trial for perhaps 18 months and 5 these are me making educated views on a date. 6 Q. Yes. 7 A. But I think what's important to note is that thankfully, 8 whilst there have been a few cases that Mr Ling 9 referenced, this isn't something used on a daily basis. 10 which to me is a positive. So therefore, the trial will 11 be in place as long as the trial needs to be in place, 12 so that we can assure ourselves that the tool is 13 suitable 14 Q. Thank you. So the next theme or topic is situational 15 awareness and I want to start. if I may, with this 16 question of the French tracker and the delays in 17 receiving it which we saw, in the earlier material, 18 in August that year. 19 And I don't want to take you back to all of those, 20 but the two August reports, Mike Bill's email, show that 21 it was a persistent and, by the look of it. 2.2 long-standing problem that was having an impact on 23 Dover's ability to respond. Otherwise, it wouldn't have
- 24 been mentioned and recommendations. All of that,
- 2.5 I think we have seen.

2 Coastguard in meetings with your French counterparts 3 for -- how can I put it -- improvements in, I think, late 2020 and the summer of 2021. 4 5 But given what happened on the night, when it came very late with a lot of information, including the boat, 6 7 the one we are concerned with, nearly at the median 8 line , it looks as though by then there hadn't been 9 a material improvement in the French's performance, is 10 that fair? 11 A. I think from evidence that I've seen and what we have 12 talked about today. I think that the tracker did not 13 always arrive as early as we would want so that we could take proactive action as early as possible to deploy 14 15 resource to the median line. 16 $\mathsf{Q}.\;$ The system that was in place on night depended on the 17 French Coastguard, them sending it over. Can you help 18 us with this question: was consideration given at the 19 time, to sharing, ie in the same way that you share the live tracker with Border Force, and proceeding in that 20 21 wav?

And you have explained how requests were made by the

- 22 A. So at the time, I am unable to comment, but what I can 23 say is that now there is a live document --
- 24 Q. Yes.
- 25~ A. -- that enables near realtime sharing of information.

137

- 1 So that challenge should no longer occur. 2 Q. No and I was going to ask you about that in a moment, 3 but I mean, yes, the evidence we have received is that 4 the precise problem we are talking about was addressed 5 by a live internet-based tracking and identification 6 system accessible to you. 7 A. Correct, yes, ourselves and the French Coastguard. Q. Exactly. Now, that wasn't in place at this time, 8 9 in November '21. Are you able to help with this: was 10 consideration given to regular chasing of the French 11 during a shift? In other words, rather than waiting and 12 waiting and waiting, for some hours in the case of the 13 shift we are concerned with, putting in place, as it 14 were, a diary, a reminder, to keep pressing them, 15 I don't know, every hour during evening? 16 Had any consideration been given to that, as far as 17 you know? 18 A. I'm unable to -- to comment as such in terms of that. 19 Q. Thank you. 20 A. But I do think it's really important to stress that it's 21 a requirement for that information to be shared with us. 2.2 Q. Yes. And as far as you are aware now, based on your 23 reading of the material etc, were any other processes or
- 24 procedures put in place at Dover to mitigate the impact
- 25 of this to the effects of these delays?

138

- 1 A. Not that I can recall, but there's so much information 2 I've had to read, like yourself, I am sure.
- 3~ Q. Of course. Then turning to the night itself and again,
- $4 \qquad \mbox{ we discussed this, but we know that that in the early }$
- 5 part of the evening in a call between Mr Gibson on the
- 6 one hand and Mr Barnett at the JRCC, Mr Gibson referred 7 to the French. and I quote "not plaving ball" by not
- 7 to the French, and I quote "not playing ball" by not
- 8 sending their tracker until hours after they were aware9 of the activity . And we know, of course, more
- 10 importantly, that on the night, the tracker from the
- 11 French didn't appear for the first time until, I think,
- 12 just before 1.00 am?
- 13 A. Correct
- 14 Q. Yes. Can we look at your witness statement on this
- 15 point, please, and this is {INQ010098/110}, at page 110.
- 16 It's paragraph 6.48, I think. Yes. Now, in dealing
- 17 with this, do you see, you begin the paragraph by
- 18 saving
- 19 "The delay in this information [the one we have just
- 20 talked about] being shared had an impact on
- 21 HM Coastguard's SAR response. The primary impact was
- that, had notification been received sooner ...
- 23 Coastguard would have been able to task the ...
- 24 (Valiant) sooner and it would have been positioned
- 25 closer to the median line to rescue the small boats ... "

139

1 A. Yes, that's correct. I -- I think I have explained that 2 in -- in today's session. 3 Q. Exactly. Now, against that, we have also received 4 evidence from Mr Gibson himself, the man who was, as it 5 were, in charge on night, that if they had received the 6 tracker earlier , it's unlikely -- if he had received it 7 earlier, it's unlikely he would have done anything 8 differently because Border Force would not, in fact, 9 have sent out their surface assets until it was known 10 for certain what boats were going to be in English 11 waters, and where they were. 12 Do you remember the Border Force approach of, as far 13 as I could understand it anyway, basically waiting and 14 meeting them in the middle? 15 A. (Nods). 16 Q. In practice, would receipt of the French tracker earlier 17 have made little difference if -- if Border Force were 18 not willing to send assets earlier? 19 A. So I think that that may have been misunderstood or 2.0 maybe not explained clearly. 21 So if His Maiesty's Coastguard had the information 2.2 earlier , they would have -- staff would, as I referenced 23 there in 6.49, would have looked to create some 2.4 predictions on when vessels would enter the UK search 25 and rescue region. Through those calculations, at that

1 point, that's where the tasking of the appropriate asset

- 2 would be sent out.
- 3 Q. Yes
- A. So I believe that earlier information would have seen 4 5
- the earlier deployment of an asset.
- Q. Exactly. I mean, that, if I may say so, is just common 6 7 sense.
- 8 A. Yes
- 9 Q. If you have a little more time to plan and decide how to 10 deploy your resources, it is always helpful?
- 11 A. Absolutely and I think at this point HM Coastguard has 12 no responsibility for any search and rescue activity, we 13
- are not the co-ordinating authority. 14 But it does, and always does, take proactive action 15 to try and reduce a risk.
- Q. Yes, but in this -- on this night, as far as we can see, 16 17 there was no proactive action in terms of chasing the 18 French: where's the tracker, where's the tracker?
- 19 A. Not that I can see.
- 20 $\mathsf{Q}.\;\;\mathsf{No.}\;\;\mathsf{Now,\;the\;other\;problem,\;as\;we again have discussed,}$
- 21 in terms of situational awareness was the absence of the
- 22 fixed-wing cover and 2Excel's failure to fly. If we can
- 23 bring up, please, $\{INQ000235/1\}$ and can we have up on
- 24 the screen pages 2 and 3 $\{INQ000235/2-3\}$ of that 25 document, please.
 - 141

1		This is the migrant admin log and if we look at the
2		bottom of the page now on the left, do you see the entry
14:30	5:27	3 for the 24th, "00:41:35"?
3	Α.	Yes?
4	Q.	"D Jones" and then on the top of the next page
5		{INQ000235/3}, the second paragraph, you will see that
6		the maritime tactical commander and the aviation
7		tactical commander had significant concerns about the
8		dangers of the night. Do you see:
9		" allowing ourselves [to] be drawn into relaxing
10		and expecting a normal migrant crossing night
11		whereas this has the potential to be very dangerous."
12		That's in $$ because of poor visibility and:
13		" our surveillance aircraft being limited to
14		conduct mission we [are] [misspelt] effectively blind."
15	Α.	Correct.
16	Q.	Now, Mr Gibson has told us that he does not recall
17		seeing this information on the night and he's also added
18		that if he had, it would have made no difference. Would
19		you not agree that this was important information for
20		the SMC at Dover to see?
21	Α.	Yes, I think it's information that is appropriate for
22		the SMC to $$ to know and to be aware that the asset
23		providing its $$ the maritime domain awareness was, at

- 24 that time, the fixed-wing wasn't going to fly. It was
 - 142

- 1 only later that the rotary is put in to provide the 2 task 3 Q. Yes, yes. And was there -- just dealing with the thing
- 4 in terms of generalities , was there a process in place
- 5 at the time, the Coastguard, I mean, for sharing this
- sort of information, or drawing it to the attention of 6 7 people who ought to know?
- A. That, that would be something for the tactical commander 8
- 9 to -- to do. So they were aware of the information.
- 10 It's been entered into this log. This log would have
- 11 been visible to everybody within the Coastguard network.
- 12 But it would have been appropriate for it to be made
- 13 aware
- 14 Yes. You think the tactical commander should have drawn Q. 15 it to the attention of the SMC?
- 16 A I think that's reasonable
- 17 ${\sf Q}. {\sf \ Yes.} {\sf \ Thank you.} {\sf \ Now looking at the situation after the}$
- 18 incident, so coming up to date -- we can take this
- 19 document off the screen, please -- you have already
- 20 addressed the question of the live tracker, where the
- 21 French Coastguard and you have access to what they have 22 done
- 23 Just to confirm, is that system, in your view now,
- 24 effective? Is it doing the job it needs to do?
- 25 A. Yes, it -- it does -- it does the job that it needs to

143

- 1 do. It does the job well. And I think it's constantly 2 under review. 3 Q. Well, on that, I suppose being a little bit more 4 specific and remembering the problem we had in 2021, as 5 far as you are aware, is information now being promptly 6 entered onto this system by the French so that you have, 7 in effect, immediate information of small boat 8 incidents? 9 A. To the best of my knowledge, yes. 10 Q. Thank you and is there any guidance that you are aware 11 of which -- because it's now effectively, a joint 12 tracker -- which addresses the question of who should 13 input into that system? 14 A. Can you clarify the question? Apologies. 15 Q. Is there any guidance in place dealing with the question 16 of who, between the French and you, should input into 17 that system? 18 A. I think so, but I can't recall the document. 19 Q. And are you able to help with this; do the UK and France 20 jointly now seek to reconcile incidents? 21 A. I believe so, ves. 2.2 Q. And are there, now, consistent alphanumeric references 23 used by France, you and the Border Force?
- 24 A. I believe that the alphanumerics are still on the UK
- 25 side used and the French still use a numbering system.

- 1 I believe.
- 2 Q. So the answer to that one would be "no"?
- 3 A. Yes.
- 4 Q. Thank you. So, the next topic is communication between
- HM Coastguard and small boats. And again, as we saw 5
- from the August '21 material and other material, the 6
- 7 Coastguard was aware -- the organisation was aware in
- 8 2021 of the numerous problems we discussed right at the
- 9 start of your evidence, about communication with small 10
- boats, language, bad network connectivity, unreliable 11 information, etc.
- 12 A. (Nods).
- 13 Q. Taking those in turn. Language first. The evidence is
- 14 that the Coastguard had a contract in place from,
- 15 I think, the summer of '21 with a service called 16
- Language Line. An interpretation service; that's right, 17 isn't it?
- 18 A. I believe before '21, but yes, there was a service
- 19 available .
- 20 Q. Thank you. Yes, so it was in place at the time of the 21 incident?
- 22 A. In place but I think, as the Inquiry has already heard, 23 and you've alluded to there, the challenges with using
- 24 Language Line are that you need to sustain a call for
- 25 a long period whilst a translator is sourced. And the

1		organisation has gone on, since this incident, to
2		develop a tool which utilises messaging, but enables
3		translation near realtime so that that can be utilised .
4	Q.	Yes, we will come to that. Thank you.
5		Let's look at your statement, at ${INQ010098/52}$,
6		page 52 now and this is paragraph 3.28. What you say
7		there, having confirmed that the service is available:
8		"This is not typically utilised in the English
9		Channel due to the challenges [the point you have just
10		made] to obtain reliable mobile phone signals and the
11		inability on occasions to call back the casualty."
12		And is it correct, as far as you are aware, that the
13		organisation knew, at the time of the incident, about
14		these limitations on Language Line?
15	Α.	The organisation was aware of how Language Line operated
16		and staff were trained in Language Line use and it was
17		a tool available to staff.
18	Q.	But not typically utilised in the Channel, as you say?
19	Α.	Not that I am aware and as we talk about here, mobile
20		signal is $$ is very patchy. It's designed for
21		land-based operations and I think the latter part of
22		that section talks about the inability to call
23		a casualty back.
24		On the night in question, specifically, actually,
25		not many calls came via the 999 system. Therefore, with

146

1		a caller line identity, effectively, it gives
2		HM Coastguard a phone number. So that was lacking. The
3		other part being that if a phone is from $$ its home
4		network is, say, a French SIM, it will roam onto the UK
5		emergency network, but there will be no $$ there won't
6		necessarily be a phone number for us to be able to go
7		back. So there's a number of challenges that occur.
8	Q.	Yes. In the light of those difficulties , particularly
9		in the context of this small boat rescue work, are you
10		aware of any attempts by the Coastguard, before the
11		incident, to put in place other options?
12	Α.	Not that I am aware of. I know of the work that has
13		happened since
14	Q.	Since, yes.
15	Α.	around translation of text.
16	Q.	Okay. Can we go up to the top of this page, please, to
17		3.26, because one of the obviously key pieces of
18		information to be obtained from callers from small
19		boats, if possible, is location and that's where you
20		address that issue. And the training given to your
21		officers to ask callers to hang up and dial $$ do you
22		see the fourth line $$ 999, so that Coastguard can get
23		a position.
24		Now, just to be clear. I think there you are
25		referring to the function whereby if a phone is

147

1		connected to a UK network, emergency services can get
2		location information and a telephone number from the
3		999 call. Is that what you are $$ what's behind that?
4	Α.	Yes, absolutely. So what I am trying to say there is
5		an officer, regardless of how the call comes in, will
6		try and ascertain as much information as they can about
7		a call and actually, the ISIK information, which
8		effectively gives a location, can only be achieved
9		through the 999 system. So, at an appropriate point,
10		an officer may ask a caller to call back on 999 for
11		a chance to get a location. So they gather as much
12		information as they can at that point $$ and this is
13		something that we may do if a member of the public
14		walking the coastal path rings on a non-emergency
15		number, doesn't know where they are, the questions would
16		be asked and then it would be a case of actually: now,
17		can you call us on 999? So it's part of the toolkit
18		that a Coastguard officer has.
19	Q.	Yes, but even in that context, is it right to say that
20		this particular functionality was less useful in the
21		Channel since $$ because the phones might still be on
22		the French network whilst being in UK waters? Was that
23		a problem?
24	Α.	I $$ I think there's no $$ mobile phone coverage is
25		an interesting thing and it will go into the Channel as

March 24, 2025

1

2

3

4

5

6

7

8

9

10

11

12

13

14

15

16

17

18

19

2.0

21

2.2

23

24

25

1

2

3

4

5

6 7

8

9

2

3

4

5

6

7

8

9

11

12

13

15

17

23

So to me, it's totally appropriate after the questioning has happened, this is another option for someone to be able to try and gain the location of somebody who is in difficulty. Q. But were there, as far as you know, efforts made to address this $\,--\,$ this potential problem anyway between the two -- or other networks for people making these calls, was that something which was on the radar, do you think, as it were? A. It's not something that -- that we have control of. Q. No. A. But what does happen, and I think as we see throughout the incident in question, is emergency calls, whether it's 999 or 112, they will go to an emergency authority. So they will either come to the UK emergency services or in the case of the English Channel, likely go to the French emergency services, depending on the position and what the strongest phone network -- sorry, strongest phone signal is . Q. Yes, thank you. And again, just in broad terms, were there any other systems or processes that you were aware of at the time of the incident which were used in this 149 location attempt? The Coastguard mobile phone, for example, was that used? A. So as the Inquiry has heard around the Coastguard's use of the mobile phone, that was a locally adopted tool. It came from --Q. Do you mean in Dover? A. In Dover. Sorry, yes. Apologies, yes. Q. Thank you. A. That came through learning through engagement with the French Coastguard. They had found that the use of

it decides. It's physics. There is no physical line

that stops. And a mobile phone will connect to the

strongest phone network it can see.

- 10 11 WhatsApp was a good way in trying to gather location.
- 12 That was shared in the operational liaison meetings that
- 13 occurred between Dover Coastguard and MRCC Gris-Nez.
- And that mobile phone, you know, was set up locally 14
- 15 and then used to send requests for a location.
- 16 Q. Yes
- A. We have now taken that product as the concept and 17
- 18 evolved it into something far greater that's available
- 19 across the whole of the Coastguard.
- 20 Q. Right.
- 21 A. With the appropriate SOPs etc.
- 2.2 Q. Again, we will come to that.
- 23 But at the time, it's right isn't it, that the
- 24 mobile phone, the Dover one we have been talking about,
- 25 wasn't integrated into your system, is that right?

150

1 A. That's correct. Q. Why not, do you know? A. So I think firstly , it was -- it was set up locally. So that's why in the documentation, I think the use of WhatsApp disclosed to the Inquiry, it is a very different format to all of the other SOPs for Coastguard. It was done on a local basis. In my view, the team were trying to do the right thing and ultimately, that mobile phone in its time of service 10 I have no doubt saved thousands of lives by its use. It wasn't integrated because it was -- it was a situation evolving at pace, learning was happening at pace and it couldn't actually be integrated. And we'll 14 talk later, I am sure, about the evolution of the product now. 16 Q. Yes. But the risk of not integrating the mobile phone is that information might get lost, isn't it? Because 18 it 's not going into your system as a whole? 19 A. That --20 Q. It is a standalone system. 21 A. That's correct. 22 Q. That's a risk and that's, presumably, one of the things

you have since addressed?

- 24 Absolutely, ves. Α
- 25 Q. Thank you. Are you aware -- because you have made the

151

- 1 point that this was a local solution, so was there any 2 Coastguard guidance or policy about its use, for 3 example, on the question of whether it should be 4 answered or not? A. So the only documentation that I've seen with regard to 5 6 the use of the phone was actually how to use WhatsApp 7 and ask for a location. There was no, from what ${\sf I}$ am 8 aware, any information around not answering the phone, 9 etc. 10 Q. No. And that -- you have now touched on another way 11 that I think was used at the time to get callers from 12 small boats to send their location. One of them was 13 WhatsApp, wasn't it? 14 A. That's correct. 15 Q. And I think Google Maps as well at some point? 16 A. I believe that might have been something that -- that 17 people shared, or tried to share a GPS position from. 18 Q. Yes. Well, the final challenge I wanted to talk about. 19 And again, as I said, we have picked all of these up 2.0 earlier, is something, again, you deal with in your 21 statement. And can we go now please to {INQ010098/64}. 2.2 page 64 and your paragraph 3.81. This challenge is an 23 awareness of exaggeration in terms of the level of
- 2.4 distress with small boats, exaggeration by callers . And
- 25 again, based on the preparation you have done, the

March 24, 2025

- 1 material you have looked at, was this problem
- a long-standing feature of the small boat work by the 2
- 3 time of the incident?
- A. Yes. HM Coastguard was -- was having information passed 4
- to it that once an incident had been concluded, it was 5
- found to be not correct. I had personal experience of 6
- 7 that, not in November, but during 2022, my time in
- the -- when I was leading the response for 8
- 9 HM Coastguard, I operated as a call-taker, effectively,
- 10 as a Coastguard officer, as a Maritime Operations
- 11 Officer and I had examples of this occurring.

12 Q. Yes

- 13 A. And I think that may occur because, you know, one
- 14 person's view of distress is very different to another,
- 15 but I think what's clear -- and I've seen through all of
- 16 the evidence that's been disclosed and my time in the
- 17 Channel and leading our national network -- is it
- 18 doesn't really matter.
- 19 We will take, at face value, what is -- what is said
- 20 and then a response will be deployed. And IAMSAR
- 21 actually supports that view. Everything should be taken 22 on face value and the organisation makes the appropriate
- 23 response
- 24 Q. Yes. Well, that's what you say at 3.84, do you see

there, the information is taken at face value.

153

1 A Correct

25

- Q. But from the material we have seen, it looks as though 2 3 there was a pretty widespread belief within the 4 Coastguard that callers did exaggerate. Did that not, 5 in practice, lead to a different approach on the part of Coastguard for these kinds of search and rescue 6 7 operation? A. No, not at all. An appropriate response was dispatched 8 9 and I think the view around exaggeration I don't think 10 was just amongst Coastguard. I think it was amongst all 11 responders because often the situation was very 12 different as search and rescue units arrived on scene. 13 But I can wholeheartedly say that every call was treated 14 on face value and the appropriate response given. 15 Q. Now, is that actually right? You remember giving some 16 evidence this morning when you were talking about 17 Neal Gibson's response and his response, in particular, 18 to being told there were people in the water and you 19 appeared to suggest there that his response was 20 conditioned by the fact that he didn't believe them. 21 That's a very good example of what we are talking about, isn't it? 2.2
- 23 A. I -- through look at the transcripts, actually, I am not 24 sure whether it is in the water or on the water, so
- 25 I think --

154

- 1 Q. But what about the question of whether he took that
- 2 information at face value, which is what you are saying 3 in your statement?
- 4 A. Mr Gibson, from what I understand, didn't, by listening 5 or understanding, did not believe there were persons in 6 the water.
- 7 Q. No. Well, that's not what you are telling us was the approach of Coastguard, is it? 8
- 9 A. Sorry, I am --
- 10 Q. The information gathered is taken at face value --
- 11 A. Correct.
- 12 Q. -- that's completely inconsistent with what you have 13 iust described
- 14 A. I -- I don't agree. Mr Gibson tasked resource. There 15 was a maritime asset, an aeronautical asset, to search 16
- the area for that event. So a response was given. Q. Thank you. But you tell us that there was no specific
- 17
- 18 training or guidance to deal with this particular 19
- feature of small boat rescues. Why do you think it was
- 2.0 that no training was required for this? 21
- A. So all small boat search and rescue is search and rescue 22 and all Coastguards are taught from day 1 that you take
- 23 all information on face value. And that's -- that's
- 24 instilled in all Coastguards throughout training, all
- 25 throughout our career.

155

- 1 ${\sf Q}. \;$ Thank you. Did the Coastguard not consider the impact
- 2 of continued exposure to what were thought to be
- 3 exaggerated distress calls on the staff and factor that 4 into risk analysis at the time?
- 5 A. At the time -- pardon me -- I am unable to answer that 6 question.
- 7 Q. Well, you are here as a corporate witness, you have
- 8 given a lot of evidence based on what you have read and 9
- are you able to give me an answer to my question? 10
- A. In terms of that specific question, no.
- 11 Q. Thank you. As far as you are aware, was any
- 12 consideration given to the risk that Coastguard staff 13 would consider that small boats were generally in less
- 14 severe danger than they claimed?
- 15 A. No.
- 16 Q. Did the organisation consider the risk that, whether
- 17 deliberately or not, calls from small boats would in
- 18 fact be treated by those on the frontline at Coastguard
- 19 in a different way to other calls from people in
- 20 distress in the Channel?
- 21 A. I am uncertain on that point, but I do know that
- 2.2 response was delivered.
- 23 Q Well, Mr Golden who was involved on the night told the
- 2.4 Inquiry that whilst, as he put it, the staff answer to
- 25 the question of whether potential exaggeration would be

- 1 relevant to his decision as to whether to task an asset 2 or which asset to task was "no", at the back of his 3 mind, the idea that it could be a false alarm or a cry 4 of wolf, could potentially have some impact. 5 Do you think that was true of others as well? A. I think people hearing reports which don't turn out to 6 7 be true, for whatever reason, may be something that sits 8 in the back of someone's mind. But as Mr Golden did 9 himself, asset was tasked and others continued to task 10 resource to any call treating it as they heard. 11 Q. It's just common sense, this, Mr Leat, isn't it? 12 If you begin to think that a lot of the calls you 13 are getting are -- the descriptions are exaggerated, in 14 the end, it will have some impact on your behaviour? 15 A. I am not sure I -- I agree with that statement. Q. So you don't agree, therefore, that a widespread belief 16 17 that callers from small boats exaggerated levels of 18 distress could have an impact on decision-making?
- 19 A. No.
- Q. Thank you. On the night in question, looking at the
 various topics we have now covered, we know that the
 Language Line service was not used and given what you
 said in your statement, you can't be surprised by that
- 24 because it wasn't effective in the Channel, as you said.
- 25 But without an interpretation service, that presumably

- left the language difficulty that we discussed right at 1 2 the outset still very much in play? 3 A. It made things very, very difficult . 4 Q. Yes 5 A. And staff did and do the best that they could to glean as much information from those on emergency calls. 6 7 Q. Yes. In terms of the Coastguard mobile phone number --8 mobile phone, we know that there were two positions sent 9 to that phone at 02:20 and 02:21 which were missed and 10 calls were not taken, save for one which was answered 11 but was not recorded because the system wasn't 12 integrated How can I put this? Is it a fair comment to make 13 14 that the Coastguard mobile phone at Dover that night 15 wasn't properly monitored, first of all? 16 A. I -- I think the fact that some positions, as you say, 17 were missed. 18 Q. Yes. 19 A. They weren't received. So I don't know how the SMC of 2.0 the night tasked that out, but they were not received. 21 Q. No and that's important information, location, as we 2.2 have agreed, and they were simply missed? 23 A. They -- they were missed, but I think, as the Inquiry's
- 24 aware, that those positions and then the relative drift
- 25 from those positions was well within the search area

158

- 1 that rescue helicopter 163 undertook its search of the 2 area, tragically, not finding small boat Charlie, but it
- 3 did identify three other small boats in that vicinity .
- 4 Q. Well, we will come back to the helicopter search in
- 5 a moment, if we may. On the question of calls from the
- 6 boat, we have had evidence from Stuart Downs telling
- $7\,$ $\,$ a caller that if they weren't connecting to UK 999 calls
- 8 then they were still in French waters.
- 9 And he explained that this was a standard practice
- 10 \qquad at Dover, despite it not being in any standard operating
- 11 procedure. Were you aware of that approach being taken 12 at Dover in November '21?
- 12 at 13 A. No
- 14 Q. Does the Coastguard have a -- or did the Coastguard then
- 15 have a view on the reliability of connection to the UK
- 16 999 network from the middle of the Channel as an
- 17 indicator of whether the boat was in UK or French SAR --
- 18 search and rescue region, sorry?
- 19 A. No.
- 20 Q. No. Were Coastguard, as far as you are aware -- did
- 21 Coastguard know of these practices at Dover that weren't 22 part of the standard operating procedures?
- 23 A. To the best of my knowledge, no.
- 24 Q. No. Was it appropriate for Dover to have its own
- 25 practices potentially not recognised elsewhere in the

159

- 1 Coastguard network?
- 2 A. Are you talking about, for example, what you were
- 3 talking there around 999?
- 4 Q. Yes.

7

- 5 A. Or are you talking about the WhatsApp phone?
- 6 Q. Well, either, but we started with the 999. Was it
 - appropriate for a station to have its own practices?
- 8 A. All staff and all stations should follow SOPs as
 9 located -- or produced on the Coastguard information
 10 portal.
- 11 Q. Yes, thank you. Now looking then forward to the
- 12 situation today. Dealing with the mobile phone, first
- 13 of all, and this is the point you have mentioned on
- 14 a couple of occasions. There is one still in use, as
- 15 I understand it; is that right?
- A. It's not a mobile phone. There's a product that has
 been developed through bespoke development, that has -
- 18 it 's available to all Coastguard staff. There's
- 19 appropriate SOP governance, etc, and training behind it.
- 20 It utilises a number of elements. The product is called
- 21 ICU. And it has the ability to gain a geolocation. It
- has the ability to do a text translation into different
- 23 languages and it has the ability for video streaming as24 well.
- 25 $\,$ Q. And my understanding, tell me if this is right, is that

6 7

- 1 this system, the ICU system, enables text messages sent
 - in English from the Coastguard to be automatically
- 3 translated to the relevant language; is that correct?
- 4 A. Yes, that's correct.
- 5~ Q. And it also has the further benefit of providing
 - positional data automatically for the mobile phone being used, is that right?
- 8 A. The user still has to interact, but it provides the
 9 information and -- yes.
- $10\,$ $\,$ Q. Now, with hindsight, this would have been an excellent
- 11 $\,$ system to have in November 2021. As far as you are
- 12 aware, was any consideration of trying to upgrade to
- 13 achieve something like this undertaken before the time
- 14 of the incident? 15 A Not that Lam awa
- 15 A. Not that I am aware.
- 16 Q. No. And has the operation of the new system alleviated,17 in your view, the difficulties we have been discussing
- 18 about communicating with small boats?
- 19~ A. I think it hugely assisted . I don't think it 's
- 20 alleviated because, as we talked about, using a mobile
- phone to cross the English Channel is not a recognisedmaritime tool to be able to call for distress.
- 23 But in terms of the situation we see today, it's
- 24 hugely been advantageous and assisted us.
- 25 Q. Right. The other point on this that we have heard
 - 161
- 1 evidence about, or had evidence about, is the planned
- 2 roll out of the Artemis mobile phone system to search
- 3 \qquad and rescue aircraft operating in the Channel and, again,
- 4 perhaps you can help on this. The Inquiry understands
- 5 that this will enable communications between Coastguard
- $\ensuremath{\mathsf{6}}$ and small boats in your SAR region even where there is
- 7 no mobile phone signal.
- 8 Is that correct?9 A. That is an element of the system.
- 10 **Q. Yes**.
- 11 A. It has the ability to provide, effectively, a temporary 12 phone network.
- 13 Q. Yes. Has that system, the Artemis system, been 14 implemented?
- A. Work is ongoing to implement that system and that's
 mainly around legislation in terms of working with Ofcom
 and also policing colleagues around legal aspects of its
- 18 use.
- 19 Q. Are you able to assist on when that's likely to come 20 into force, as it were?
- A. I am unable to assist, but as soon as we -- we know, we
 will absolutely let the Inquiry know.
- 23 Q. Thank you. And the next theme or topic is the adequacy
- $24 \qquad \mbox{ of the search and rescue operation itself}$. And going
- 25 $% 10^{-1}$ into the detail of points on the night, first of all,

162

- 1 the Mayday Relay. You mentioned this in your evidence
- 2 \$ this morning, but it's right, isn't it, that this relay,
- 3 the Mayday Relay on the night, was the first ever
- 4 broadcast for a small boat incident?
- 5 A. Extremely rare. Whether it's the first -- small boats
- 6 have been running since 2018.
- 7 Q. Yes.
- 8 A. But extremely rare.
- 9 Q. Yes. Can you think of one that had occurred before the
- 10 incident?
- 11 A. Not to my knowledge occurred. 12 Now, Mr Gibson has told us that part of the reason for Q 13 his decision to issue a Mayday Relay was to get the 14 French naval vessel, the Flamant, to respond given that 15 it was the closest vessel to the boat, the last known 16 position of Incident Charlie You remember that? 17 A. Yes 18 Q. And in his evidence he has accepted that he didn't 19 expressly request Gris-Nez, the French, to task the 20 Flamant to the incident. So that's the sort of 21 background to these questions.
- 22 First , the -- His Majesty's Coastguard could have
- 23 directly requested the French Coastguard to task
- 24 an asset in a search and rescue mission in UK waters;
- 25 that's correct, isn't it?

163

1 A. Yes, through -- through Gris-Nez, through the 2 co-ordinating authority that -- that is something that 3 can be done. 4 Q. Yes, and --5 A. No, carry on. 6 Q. You deal with this in your statement, I was going to 7 say. You have written it down so we can see it at page 72, {INQ010098/72}, where you are setting out 8 9 articles of the Mancheplan which is something you 10 mentioned earlier. Do you see 4.17, Article 35, 11 I think -12 A. Yes. 13 Q. -- states that: "All and any assets belonging to a State Party may 14 15 be requested by the other State Party." 16 And then you explain, having set out two more 17 articles : 18 "Requests for the assistance of the French 19 Coastguard by HM Coastguard have been made in relation 2.0 to previous small boat incidents in the past. 21 HM Coastguard has also assisted the French 2.2 Coastguard ...' 23 Well, an example of that is, of course, what 2.4 happened later on the 24th, isn't it, where the French 25 came to you and said: can you help? And you did?

- 1 A. That's correct.
- Q. Thank you. And that I think leads -- so we know, 2
- 3 therefore under the Mancheplan, that this could have
 - been done. Are you able to assist with this question:
- if a direct request had been made in this way, do you 5
- think it would have made a difference? 6 7
- A. I --- I don't know. Reading the transcripts, I think, 8 whilst the specific language was not, you know, used "we
- 9 request", I think you can clearly read the conversation
- 10 that goes on and take that as a request being made.
- 11 That said. I don't know the outcome.
- 12 Q. Well, I mean, you will have to take it from me that
- 13 Mr Gibson has expressly accepted that he didn't
- 14 expressly request the tasking. So that would have been
- 15 him, as it were, expecting the French to interpret what 16 he said: that's fair. isn't it?
- A. I mean, I believe he -- he made it very clear what was 17 18 going on. But he did not, from reading it, specifically 19 sav: I request.
- 20 Q. No, perhaps not clear enough?
- 21 A. Perhaps.

25

- 2.2 Q. Yes. Now, in terms of the Mayday which was issued, we 23 know that the incorrect alert was used, it was an
- 24 urgency alert, not a distress alert. Again, do you
 - think that would have had any impact, if he had got the

165

- 1 right level of alert?
- 2 A. No. So the voice alert that went out was wholly
- 3 appropriate. The error that occurred was in the digital
- 4 selective calling. That went out in the urgency phase.
- 5 But actually, a ship's radio would still switch to
- channel 16 and therefore, the alert would be heard. And 6
- 7 I believe there is reference in the MAIB report to
- 8 a number of ships that did hear, or record hearing, that 9 alert .
- 10 Q. Yes. Well, there is and that's my next question.
- 11 Should information about the responses of various
- 12 vessels have been recorded and if so, where?
- A. So if a vessel had responded --13
- 14 Q. Yes.
- 15 A. -- they would have been entered into the communications 16 log, or the radio log as it may have been heard, or the
- 17 specific incident that the response was being -- the
- 18 Mayday Relay was against.
- 19 Q. Yes.
- 20 A. So --
- 21 Q. Well, we've heard in particular about a vessel called
- 2.2 the Concerto, I think just after 03:00 on the night or
- 23 the early morning that vessel, it seems, contacted Dover
- 24 on VHF channel 16. And it looks as though Dover
- 25 responded to tell them to go to another channel,

166

- 1 channel 67, and await a call. Are you familiar with
- 2 that?
- 3 A. Yes, I am.
- 4 Q And the Concerto was the vessel which is identified in
- 5 the MAIB report to have also contacted the French
- Coastguard with information that she, the Concerto, had 6
- 7 sighted a vessel in difficulties , but was told by the
- 8 French, I think, that she could continue on her way. Is
- 9 that also your understanding?
- 10 A. Yes, that's my understanding. And my understanding also
- 11 is that the conversation that took place between the
- 12 Concerto and the French Coastguard was never relaved to
- 13 Dover Coastguard or His Majesty's Coastguard.
- 14 Q. In terms of communications on channel 67, with the
- 15 Concerto, as far as you are aware there is no continuing 16 material on that, there is no evidence of what was said.
- 17 is that correct?
- 18 A. Yes, as far as I am aware, I - - I don't know what
- 19 occurred.
- 20 Q. No.
- 21 A. The vessel was sent, told to go to channel 67.
- 2.2 Q. Yes.
- 23 There's nothing after that, I'm afraid. Α.
- 24 There is simply no record of what happened thereafter on Q
- 25 channel 67?

167

- 1 A. No, I would -- I would imagine, and this is me making 2 a professional judgment, is that potentially that the 3 Concerto was too far away from a radio mast perhaps, or 4 the signal was not strong and that's why they then 5 contacted the French Coastguard and had the engagement with MRCC Gris-Nez. 6 7 MR PHILLIPS: Sir, would that be a convenient moment? SIR ROSS CRANSTON: Yes. So, we will come back about 8 9 24 past. Thank you very much. 10 (3.15 pm) 11 (A short break) 12 (3.24 pm) SIR ROSS CRANSTON: Mr Phillips. 13 MR PHILLIPS: Now looking at further questions about the 14 15 search on the night, Mr Leat, and first of all, dealing 16 with Valiant. She arrived, as we know, about 03:24 at 17 the Mayday Relay position and found nothing and then 18 followed the drift, as Commander Toy explained to us. 19 A. Yes 2.0 Q. And there, found two small boats, one underway and one 21 stopped and she went to the one that was stopped, do you
- 2.2 remember that?
- 23 A. Yes
- 2.4 Q. So the Valiant found what became the first of the small
- 25 boats, but from that point on, it's right, isn't it,

- 1 that it was the helicopter R 163 airborne at about,
- 2 I think, 4 o'clock that did the rest of the searching
- 3 and was the reason why Valiant went first -- or rather,
- 4 after the first boat to the second boat and then on to
- 5 the third boat in Southwest Goodwin?
- 6 A. Yes, that's correct.
- Q. And so in terms of Valiant's own role in searching, in
 fact, once she had found the first boat, actually that
 stopped because from there on, the helicopter was, in
- 10 effect directing?
- 11 A. Correct.
- 12 Q. Thank you. Now, that takes us to the helicopter and
- 13 what we have heard in the evidence is that R 163 was
- 14 never specifically tasked to Incident Charlie. The
- $15\,$ tasking given to the helicopter was to search for small
- $16\,$ boats generally and also that the SMC at Dover didn't
- $17\,$ tell the helicopter that a small boat was possibly
- 18 sinking, there might be people in the water, that there 19 was a Mavday Relay. etc.
- 20 Now, can -- with that in mind, can we please look at
- 21 {INQ003795/1}. This is a Coastguard document, and the
- first question I wanted to ask you about is -- it is, of
- 23 course full of acronyms, can you help us, for the
- 24 transcript, please, first of all, what is an SAC?
- 25 A. Search area coverage.

- 1 $\mathsf{Q}.\;$ Sorry, rather unhelpfully, the top of the document 2 hasn't been displayed. Can we go to the very top? Can 3 you see SAC? 4 A. Yes, search area coverage. 5 Q. Thank you, and SRU? A. Search rescue unit. 6 7 Q. Thank you very much. And on that page 1, you see under the heading "TAPSIC", which I think is a pneumonic to be 8 9 used in giving search instructions: target. area. 10 pattern, search, information, communications. 11 Then below that under the heading "Target", it says. 12 "The SRU must be given as much information as 13 possible on the target or targets $\ \dots$ " And then it includes those bullet points $--\ {\rm seven}$ 14 15 bullet points below it. Including, as you can see, the 16 third point: 17 "Condition – e.g. semi-submerged, overturned, 18 sinking ... etc." 19 Now, from the material you have seen, it looks as 20 though this SAC was not followed in terms of the search 21 instructions given to the helicopter, was it? 2.2 A. To the best of my recollection, no. 23 Q. Thank you. And that meant, didn't it, looking at the 24 way target is addressed here and -- that the captain,

170

- 1 he needed to perform an effective search for a sinking 2 small boat, or for persons in the water, did he? 3 A. I -- I believe he did. He was -- he was tasked to do an 4 expanding square search for a small boat. And I think 5 what's also important to note is that whilst searching for a target of that size, if there were a large number 6 7 of persons in the water, people, when they go into the 8 water, they do spread and, therefore, actually their 9 size would be larger than, potentially, a small boat in 10 terms of the surface area that they would cover. 11 Q. I see. Well, let's look at what, as far as we can tell, 12 happened. Mr Gibson gave the helicopter a choice of two 13 search patterns. He didn't provide any specific 14 request, did he, about track spacing or sweep width? 15 And again, without knowing about the condition, the 16 point about whether it was taking on water, people in 17 the water, etc. without knowing about the condition of 18 the incident, would you agree that it would be difficult 19 for the helicopter captain to make an informed decision 20
- as to which of those to use?
 A No. As I referred to a moment a

25

- 21 A. No. As I referred to a moment ago, in terms of the size 22 of a small boat versus a large number of persons in the
- 23 water, the geographical footprint of people in the water
- 24 would actually be larger than a small boat, so they
 - would be utilising their search tools on board that

171

- 1 state of the art helicopter --Q. Yes 2 3 A. -- to locate any objects. They would be looking for 4 debris, they would be looking for persons, they would be 5 looking for vessels. So it wouldn't impact -- or have 6 impacted, sorry -- the search that was undertaken. 7 ${\sf Q}.\;$ Well, you may not be aware that the captain himself, 8 Mr Trubshaw, told us that determining the best sweep 9 width was: not down to us in the aircraft to do it. In 10 other words, he regarded it as the job of Coastguard. 11 Do you agree with him? 12 A. I think the crew on the aircraft are trained to perform 13 that as part of their training. However, it's also appropriate for an SMC to pass that information. 14 15 Q. Yes, well, that's whether this SAC is all about, isn't 16 it? 17 A. It's -- TAPSIC is about passing of the searching 18 instructions. 19 Q. And he didn't? 20 A. That was not done, to the best of my knowledge. 21 Q No 2.2 Α. However, much like helicopter crews, lifeboat crews, 23 they have the training and the understanding, through 2.4 the IAMSAR manual, to be able to perform this function
- if it's not allocated by the co-ordinating authority.
 - If it's not anotated by the co-ordinating aution

- 1 Q. All right. Well, let's -- on the same subject of the
- 2 helicopter search, let's turn to what the MAIB had to
- 3 say about this and this is at $\{INQ010445/1\}$, please, and
- 4 page 58, {INQ010445/58}.
- 5 Under the heading "Sweep width and track spacing" it
- 6 gives, as you see there, 1.13.6, recommended sweep width
- 7 and track spacing based on the IAMSAR manual, taking
- 8 account of the environment conditions on night; that's
- 9 right, isn't it?
- 10 A. Correct.
- 11 Q. And the helicopter used a sweep width of 0.7 on the
- 12 night, which, as is shown there, is for searching for 13 small boats of over 5 metres.
- 14 So the recommended small boat search sweep width
- 15 was, I think I am right in saying, 0.0; is that right?
- 16 A. That is what's said in the tables.
- 17 Q. Yes
- 18 A. Or is said here.
- 19 Q. Yes.
- 20 A. But if that was the case, the helicopter effectively
- 21 would be hovering, it wouldn't be moving?
- 22 Q. Yes.

- 23 $\,$ A. So that's not appropriate. And as I talk about -- or
- 24 spoke about a moment ago, if there were several persons
 - in the water, the area that they would cover would be

173

- 1 that of the size of at least a 6-metre boat. 2 Q. Yes 3 A. Being spread out in a geographical area. So the sweep 4 width of 0.7, I believe is appropriate. 5 Q. Okay. Well, let's go on to where this goes in the MAIB 6 report and see whether you agree with that. It's 7 page 78 {INQ010445/78}, paragraph 2.4.5 because there 8 you see, and you will have seen this before, of course, 9 the report concludes that the effectiveness of the 10 search for Charlie may have been affected by the track 11 spacing and the sweep width. And if you look at the 12 middle of the second paragraph there, five lines down: 13 " $\ldots \,$ the occupants of the swamped \ldots [do you see 14 that] were not detected until many hours later when the 15 victims were found by a French fishing vessel. This may 16 have been because the search pattern's track spacing 17 of 0.7 ... aligned with the IAMSAR recommendations for 18 searching for boats, not people in the water, and the 19 likelihood of the victims being detected by the 2.0 helicopter was therefore much reduced. Effective
- 20 neucopter was therefore much reduced. Effective 21 detection of people in the water required a lower track
- 22 spacing than that required to detect small boats and the
- 23 IAMSAR manual recommendation given the visibility on the
- night was for a sweep width of 0.0 ... This effectively
- 25 meant that the chance of detecting those in the water

174

- 1 was negligible unless the helicopter flew almost 2 directly over them." 3 This is what you were saying about the hovering. 4 Whereas IAMSAR guidance was 0.0. And again, can I ask 5 you this question: do you agree with the MAIB's conclusion? 6 7 A. So, I think 0.7 was an appropriate search and 0.0 8 wouldn't have been appropriate. 9 Q. Wouldn't have been? 10 A. No, because the aircraft would not have moved. It would 11 have stayed static. 12 Q. No. so you don't agree with the MAIB on this? 13 A. No 14 Q. Thank you. Now, in his oral evidence, you may remember, 15 Mr Trubshaw suggested that the helicopter could not fly 16 an expanding square search using track spaces under 0.7, 17 but as you also know, he has since corrected that in 18 a second statement, I think we have got it on the 19 system. I am a little nervous after this morning, but 2.0 {INQ010743/1} please. Bingo. 21 And there it is in the paragraph 2.2, stating there 22 that the helicopter could fly any search pattern at 23 a track spacing of 0.2. 24 Do you agree with this then; that that track 25 spacing, 0.2, would have been more effective at
 - spacing, 0.2, would have been more effective

175

- 1
 searching for people in the water or a sinking small

 2
 boat?
- A. I think the track spacing would have meant the aircraftwouldn't have covered as big a search area as it did.
- 5 It had the appropriate technology on board to be able to
- 6 complete that search and from reading this statement as
- 7 well, this is around what the aircraft could do, not
- 8 what Mr Trubshaw thought was appropriate to do.
- 9~ Q. Thank you. Well, we know about the conditions on the
- 10 night. We know about low light, we know about poor 11 visibility . And they may well have contributed to the
- visibility . And they may well have contributed to the
 helicopter's failure to find Incident Charlie. But do
- 13 you accept, today, that the effectiveness of its search
- 14 was hampered by the failure to give the full search
- 15 instructions which the SAC suggested?
- 16 A. No
- 17 Q. And search parameters?
- 18 A. No, I do not.
- 19 Q. You don't, thank you. Now looking at the position now,
- 20 and the actions that have been taken on this front,
- 21 since the incident, in relation to Mayday Relay first,
- the Inquiry has understood that the Coastguard has
- 23 accepted and implemented the recommendation of the US
- 24 Coastguard, in the review we saw, by reminding staff to
- 25 use the appropriate distress alert when making a Mayday

1 broadcast through a hot topic notification of existing

- 2 procedure
- 3 Is that right?
- 4 A. Yes, that's correct.
- 5~ Q. And in relation to the failures as the MAIB saw them in
- 6~ relation to the R-163 search on the night -- and perhaps
- 7 I know what the answer is going to be given your
- 8 responses thus far -- has any action been taken to 9 address this?
- 10 A No
- 11 Q. Can I ask you this guestion about the MAIB report and
- 12 quite generally. We have seen together a number of
- 13 criticisms in the report which you have not accepted and
- 14 they are criticisms which did not, then, go on to take
- $15\,$ their place at the end of the MAIB report as formal
- 16 recommendations. Is it a fair characterisation of the
- 17 Coastguard's response to the MAIB report that it has 18 accepted and acted upon the formal recommendations but
- 19 nothing else?
- 20 A. I believe -- so, first of all, yes, we accepted the
- 21 formal recommendations from the MAIB report.
- 22 Q. Yes.

25

- 23 A. And as we talked about earlier, they have all been
- 24 actioned and dealt with and acknowledged by MAIB as
 - appropriate. And those actions have been dealt with.

177

- Q. Yes, but you have described the organisation as a lesson
 learning organisation. What lesson learning process has
 the Coastguard instituted in the light of the other
 criticisms made by MAIB in its report?
 A. So the expertise from, for example, the US Coastguard
- who are SAR professionals, that's where lesson learning
 has occurred.
- 8 Q. So, in answer to my question, have you instituted any 9 lesson learning in relation to criticisms made by the
- 10 MAIB in their report?
- 11 A. Those search and rescue recommendations or observations 12 will have come from either the US Coastguard or the
- 13 MCA's internal report due to the expertise of both the
- 14 United States Coastguard and HM Coastguard internally as
- 15 SAR practitioners. Colleagues at the MAIB are extremely
- 16 well versed in reviewing accidents that occur at sea,
- 17 but search and rescue expertise is not something,
- 18 I believe, that they fully hold.
- 19 Q. So the answer is no, you haven't?
- 20 A. Correct.
- 21~ Q. Thank you. Next topic is information management and
- 22 recordkeeping. There are two key systems here, aren't
- 23 $% 1000\ 100$
- 24 $\,$ A. Yes, so the ViSION incident management system is
- 25 HM Coastguard's primary tool for incident management and

178

- recordkeeping.
- 2 Q. Yes
- 3 A. With the tracker, and I am guessing we are alluding to
- 4 the UK tracker --
- 5 Q. Yes.
- 6~ A. -- here. That is for information, information sharing
- 7 purposes with colleagues within Home Office.
- 8 Q. Yes. But it's nonetheless, a system used for recording9 and capturing information?
- 10 A. Yes, noting ViSION is a primary system.
- 11 Q. Yes, well indeed, Mr Gibson described ViSION as the
- 12 Coastguard's single source of truth, would you accept
- 13 that?

25

- 14 A. Yes, that is as the system is designed to be.
- 15~ Q. Right. Well, we know from the August material we looked
- 16 at earlier and in material disclosed to the Inquiry,
- $17 \qquad \mbox{that there were concerns expressed about the way records}$
- 18 were kept, the way information was inputted into ViSION, 19 so that at the time of the incident this. along with the
- 20 other points we saw in that sum of material, was
- 21 an issue that Coastguard were aware of; that's right,
- 22 isn't it?
- 23 A. Pardon me. Yes, that's correct. I think in any busy
- 24 period on any review that's conducted into any incident,
 - recordkeeping is always a challenge that emergency

179

1 service personnel face and there's a balance that has to 2 be struck between taking appropriate action in a timely 3 manner versus recordkeeping. 4 And it's absolutely something that I think all 5 emergency service personnel are aware of, but my 6 preference would always be that action is taken to 7 rescue a person. That doesn't take away from the fact 8 that appropriate records are required for events such as 9 this. And HM Coastguard will be, in the near future. 10 looking at future technology around its systems and part of the things that I will be looking at, as it sits 11 12 within my -- my sort of business area, is how we can 13 support staff in recording information, be that through 14 artificial intelligence or other means. 15 So continually evolving our platforms as new 16 technology becomes available. 17 Q. Well, thank you. Again, we will come back to that. But 18 looking at the period just before the incident, and 19 bearing in mind the concerns or criticisms we have 2.0 looked at together, do you know what, if anything, had 21 been done to address those concerns before the incident? 2.2 I believe that -- I think it's in my statement, but Α. 23 information was cascaded and shared to staff around the 2.4 importance of appropriate information being logged 25 within the incident management system, via the

- 1 Coastguard information portal.
- 2 Q. So a reminder of the rules, as it were?
- 3 A. Yes.
- 4 Q. Okay. At the time of the incident, our understanding is
- 5 that the maritime and aviation teams were using
- $\boldsymbol{6}$ incompatible versions of the ViSION system, is that
- 7 right?
- 8 A. They were two separate systems.
- 9~ Q. Yes, and so they couldn't see each other's incident
- 10 logs, for example?
- 11 A. Yes, that's correct.
- 12~ Q. And that incompatibility lasted for several years, is 13~ that right?
- 14
 A. I don't recall the exact timeframe. The system that the

 15
 ARCC were utilising, ViSION 5, that was effectively
- 16 developed as HM Coastguard took on the role of the
- 17 Aeronautical Rescue Co-ordination Centre, the aviation
- 18 tasking authority. And then the rest of HM Coastguard
- 19 was planned to move on to that platform, but it was
- 20 vital that ViSION 5 had the appropriate tool-sets and 21 was set up to work for maritime operations and that's
- was set up to work for maritime operations and that'swhy it took a period of time.
- I think it's also worth knowing that the ARCC being
- 24 on a different system, this is exactly how it works with
- 25 other emergency services who would contact the

- 1 Aeronautical Rescue Co-ordination Centre. For example,
- 2 the police, ambulance services and fire services. The
- 3 ARCC were a tasking authority and therefore, it had no
- 4 direct impact on how they operated.
- Q. I think we have been told, just on the history of this,
 that the problem -- or the two systems, was in place
 from as early as 2019. Do you know when it was
- 8 resolved, when the two systems were merged?
- 9 A. I am not sure if I reference it in the statement
- I believe -- I believe it may be late '21 or early '22.
 Q. Okay, thank you. Now just, then, looking at the
- 12 question of trackers and the interrelationship between 13 Coastguard and Border Force. We saw in Mr Bill's email
- 14 his reference to -- do you remember, there was a heading
- 15 "The absence of a single version of the truth" because
- 16 of all the different organisations' trackers. And we
- 17 know that some action was taken to address this shortly
- 18 before the night when Border Force were given access to
- 19 the Coastguard tracker.
- 20 As far as you are concerned, is it right that by the
- 21 time of the incident, Border Force personnel were able
- $22 \qquad \ \ \,$ to make their own input onto what became the shared
- 23 tracker?
- 24 $\,$ A. To the best of my knowledge, yes.
- 25 $\,$ Q. Yes, thank you very much. Now, looking at the night in

182

- 1 question and starting with the ViSION system, there are various points where it's clear that there were problems 2 3 in the recordkeeping. First of all, on the Incident Charlie ViSION log, information about all three 4 5 of the small boats the Valiant embarked was recorded. but without actually any of them being identified as 6 7 Charlie. And the Inquiry's understanding is that this 8 happened automatically because where an asset was tasked 9 to a particular incident, the system would record, as it 10 were, everything located by the asset for the incident 11 to which it had been tasked, is that correct? 12 Α Yes, that's correct. That, that's how staff utilised 13 the system. 14 Q. Yes 15 A. Since the event, staff have been reminded in terms of the use of how to create -- the terminology used in 16 17 ViSION is a spawn, but effectively it's a -- it's 18 another resource that can be applied to multiple
- incidents which then tackles the problem that you aredescribing.
- 21 Q. Because you can see immediately how -- the way it was
- actually being done is more or less a recipe forconfusion?
- A. I think that it didn't make things as clear as it couldand that's whilst during training, staff are taught

183

- 1 about the process to spawn an asset to overcome that 2 problem 3 Q. And it made it difficult not just during the night watch 4 but also for the incoming day watch, didn't it, to try 5 and untangle all of these entries on the same log? 6 A. I -- I would suspect so. 7 Q. Yes, it seems logical. The next point is that there was 8 no decision recorded to terminate the search and rescue 9 operation in relation to Incident Charlie, or reasoning 10 set out in the incident log. That's correct, isn't it? 11 To the best of my knowledge, yes. 12 Q. Yes. If we go to your statement, please, 13 $\{INQ010098/68\},$ and page 68, paragraph 3.99, and you set 14 out there what should happen to achieve this: 15 "The SMC from the originating station must firstly 16 make sure that the mission statement for the incident is 17 fully up to date and that all fields have sufficient 18 detail within them so as to provide no room for 19 ambiguity to the reader." 2.0 And this is the -- as it were, the handover moment: 21 "They are then to brief the receiving SMC ..." 2.2 Etc. etc. 23 And so this is something that should have been 2.4 recorded, is it not, but wasn't?
- 25 A. Sorry, I think I am slightly lost because you were

March 24, 2025

1		talking about termination $$	1		wrong way round, isn't it?
2	Q.	Yes.	2	Α.	So that's obviously information that Mr Close has taken
3	Α.	a short moment ago and this is specifically around	3		from the tracker added to this narrative, but I think at
4		handover. So they are slightly different issues.	4		this point, the SMC had made a view that this incident
5	Q.	But it means, doesn't it $$ if there is no detail as to	5		was resolved.
6		why decisions were made to terminate, it means the	6	Q.	Yes.
7		incoming shift is starting at a disadvantage. It is as	7	Α.	The incident was not handed over. There was no further
8		simple as that, isn't it?	8		asset actively searching and, therefore, yes. But what
9	Α.	Yes, I $$ I agree with that.	9		you say there is that $$ that is what this looks like on
10	Q.	Thank you. And one of the Coastguard officers on duty	10		this occasion.
11		the next day, Mr Papadopoulos, has told us that a record	11	Q.	And the day watch SMC had told us that Incident Charlie
12		that a vessel is clear from an event, which is what was	12		was closed directly as a result of this entry on the
13		entered, clear from Incident Charlie, would not be	13		ViSION log by the maritime tactical commander.
14		sufficient to tell him that accident had been resolved.	14		So it looks as though the tracker here played a key
15		And he would have expected the SMC to confirm within the	15		role in the formal process of closing Incident Charlie?
16		log, in a formal entry, that the incident has been	16	Α.	I think it $$ I acknowledge it plays a part, but I think
17		concluded. And it sounds as though that would have been	17		that the key part is that, for example, as we know, the
18		your expectation too?	18		search and rescue helicopter completed its search and
19	Α.	Yes.	19		was not redeployed to the incident because the SMC had
20	Q.	Thank you. Now, the next aspect of all this is on the	20		believed that all persons were rescued.
21		material the Inquiry has had, it seems as though the	21	Q.	Thank you. And the next aspect on recordkeeping is that
22		tracker was used to update the ViSION log rather than	22		calls which were taken by the Dover office, as it were
23		the other way round. So for example, when the maritime	23		during the night, 03:06, 03:12, for example, which
24		tactical commander on the day watch reviewed	24		contained information consistent with information from
25		Incident Charlie at about 10 o'clock on the day, the	25		Incident Charlie: they were sinking, they were finished,
		195			197
		185			187
1		185 next day, the entry said and I quote:	1		187 their bodies were in the water, etc, were never
1 2			1 2		
		next day, the entry said and I quote:			their bodies were in the water, etc, were never
2		next day, the entry said and I quote: "Note from tracker this incident shows as	2		their bodies were in the water, etc, were never allocated to specific incidents but were always closed
2 3	A.	next day, the entry said and I quote: "Note from tracker —— this incident shows as resolved."	2 3	А.	their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log.
2 3 4		next day, the entry said and I quote: "Note from tracker —— this incident shows as resolved." Are you aware of that? I can show it to you.	2 3 4		their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it?
2 3 4 5	Q.	next day, the entry said and I quote: "Note from tracker —— this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure ——	2 3 4 5		their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes.
2 3 4 5 6	Q. A.	next day, the entry said and I quote: "Note from tracker —— this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure —— Let's have a look.	2 3 4 5 6		 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant,
2 3 4 5 6 7	Q. A.	next day, the entry said and I quote: "Note from tracker —— this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure —— Let's have a look. Yes.	2 3 4 5 6 7	Q.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken
2 3 4 5 6 7 8	Q. A.	next day, the entry said and I quote: "Note from tracker —— this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure —— Let's have a look. Yes. It 's {INQ000237/1}, please. Page 13 is the one we want.	2 3 4 5 6 7 8	Q.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents?
2 3 4 5 7 8 9	Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar</pre>	2 3 4 5 6 7 8 9	Q.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat
2 3 4 5 6 7 8 9	Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It 's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course.</pre>	2 3 6 7 8 9 10	Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but
2 3 4 5 6 7 8 9 10 11	Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It 's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes.</pre>	2 3 4 5 6 7 8 9 10 11	Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but but that's what I perceive to have happened.
2 3 4 5 6 7 8 9 10 11 12	Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It 's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on</pre>	2 3 4 5 6 7 8 9 10 11 12	Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but —— but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant
2 3 4 5 6 7 8 9 10 11 12 12	Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page:</pre>	2 3 4 5 6 7 8 9 10 11 12 13	Q. A. Q.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but —— but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way,
2 3 4 5 6 7 8 9 10 11 12 13 14	Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It 's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14	Q. A. Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described?
2 3 4 5 6 7 8 9 10 11 12 13 14 15	Q. A. Q. A.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It 's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident."</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14	Q. A. Q. A.	their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but —— but that's what I perceive to have happened. Well, do you agree with this at least : that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Q. A. Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident." And that's Incident Charlie.</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	Q. A. Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but —— but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes. Thank you. And finally on this, the aviation tactical
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Q. A. Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident." And that's Incident Charlie. (Nods).</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17	Q. A. Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes. Thank you. And finally on this, the aviation tactical commander said that whereas he had been able to track
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Q. A. Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident." And that's Incident Charlie. (Nods). And then just after 10 o'clock, you see George Close</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	Q. A. Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call. Not being there, I can't comment on that, but but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes. Thank you. And finally on this, the aviation tactical commander said that whereas he had been able to track check, I'm sorry, the ViSION logs when he first joined
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Q. A. Q. Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident." And that's Incident Charlie. (Nods). And then just after 10 o'clock, you see George Close makes an entry, the "Commander message", do you see</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19	Q. A. Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes. Thank you. And finally on this, the aviation tactical commander said that whereas he had been able to track check, I'm sorry, the VISION logs when he first joined the Coastguard, on the night in question, he was unable
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Q. A. Q. Q. A. Q.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident." And that's Incident Charlie. (Nods). And then just after 10 o'clock, you see George Close makes an entry, the "Commander message", do you see that? Yes.</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Q. A. Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes. Thank you. And finally on this, the aviation tactical commander said that whereas he had been able to track check, I'm sorry, the VISION logs when he first joined the Coastguard, on the night in question, he was unable to see any entries from the maritime team. This is the
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Q. A. Q. A. Q. A.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident." And that's Incident Charlie. (Nods). And then just after 10 o'clock, you see George Close makes an entry, the "Commander message", do you see that? Yes.</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21	Q. A. Q. A.	their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call. Not being there, I can't comment on that, but —— but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes. Thank you. And finally on this, the aviation tactical commander said that whereas he had been able to track —— check, I'm sorry, the VISION logs when he first joined the Coastguard, on the night in question, he was unable to see any entries from the maritime team. This is the point about incompatibility. And for example, he was
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. A. Q. A. Q. A.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident." And that's Incident Charlie. (Nods). And then just after 10 o'clock, you see George Close makes an entry, the "Commander message", do you see that? Yes. "Note from tracker, this incident shows as resolved "</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22	Q. A. Q. A.	their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call. Not being there, I can't comment on that, but —— but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes. Thank you. And finally on this, the aviation tactical commander said that whereas he had been able to track —— check, I'm sorry, the VISION logs when he first joined the Coastguard, on the night in question, he was unable to see any entries from the maritime team. This is the point about incompatibility. And for example, he was unaware of the Mayday Relay.
2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Q. A. Q. A. Q. A.	<pre>next day, the entry said and I quote: "Note from tracker this incident shows as resolved." Are you aware of that? I can show it to you. I am not aware of it, but I am sure Let's have a look. Yes. It's {INQ000237/1}, please. Page 13 is the one we want. {INQ000237/13} you can see you will be very familiar with the way this document works, of course. Yes, yes. Page 13. Do you see the third line third entry on this page: "Stuart Downs, 06.46:15: Valiant. Clear from incident." And that's Incident Charlie. (Nods). And then just after 10 o'clock, you see George Close makes an entry, the "Commander message", do you see that? Yes. "Note from tracker, this incident shows as resolved " Etc. So it looks as though the thing is operating</pre>	2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23	Q. A. Q. A.	 their bodies were in the water, etc, were never allocated to specific incidents but were always closed as repeats in the migrant administration log. That's right, isn't it? To the best of my knowledge, yes. Yes. And by closing the incidents as repeats, it meant, didn't it, that no further action would have been taken on those individual incidents? An assessment was obviously made that they were repeat call . Not being there, I can't comment on that, but but that's what I perceive to have happened. Well, do you agree with this at least: that the migrant immigration logs shouldn't have been used in that way, the way I have just described? Yes. Thank you. And finally on this, the aviation tactical commander said that whereas he had been able to track check, I'm sorry, the ViSION logs when he first joined the Coastguard, on the night in question, he was unable to see any entries from the maritime team. This is the point about incompatibility. And for example, he was unaware of the Mayday Relay.

186

188

- to access the ViSION log, the maritime ViSION log? 1
- A. I don't think it would have made a difference because 2
- 3 ultimately, the aviation commander provides a search and
- 4 rescue helicopter to the task. It's then the search
- mission co-ordinator that then decides on that tasking. 5 6
- I also recall that they were -- the aeronautical 7 commander and the maritime commander were co-located in
- 8 the same room, I believe, and therefore, sharing of
- 9 information would have been able to occur verbally.
- 10 Q. Well, going back to my question, would you agree that
- 11 his situational awareness would have been improved had 12 he been able to access the maritime ViSION log?
- 13 A. I - - I think it's obvious it would have been improved. but it has no sort of outcome or impact on his role. 14
- 15 Q. Right. Now then, in terms of recordkeeping, we know
- 16 that the wrong M numbers were added on two occasions. 17 The first is that M957 was added to Incident Charlie at
- 18 03:57 by the JRCC SMC, using information on the Charlie
- incident log but before the SMC at Dover had actually 19
- 20 identified that 957 was Incident Lima; that's right,
- 21 isn't it?
- 2.2 A. I believe so, yes.
- $\mathsf{Q}.$ Yes, and of course, is this fair , going back to the 23
- 24 discussion we had earlier; that if Mr Barnett had been 25
 - in the operations room at Dover, he would have been

- 1 privy to Mr Gibson's belief that M957 was, in fact, 2 Lima? 3 A. I can't pass comment on that. 4 Q. It would have made it much more likely, surely? 5 A. Potentially, but I think as we heard through evidence from Mr Downs, he recalled he didn't hear the mobile 6 7 phone, I think he talked about. So whilst being in the same room if people are carrying out tasks, it doesn't 8 9 mean that information is necessarily shared and 10 therefore information from the single source of the 11 truth, as Mr Gibson put it, ViSION, that's the place 12 where information should be. 13 Q. Yes. Well, anyway, the error went uncorrected 14 throughout the night watch and the oncoming day watch; 15 it was missed by the SMC at Dover when he added 16 information about Incident Lima to the tracker. 17 Then the second error was during the day watch, at 18 08:35, when a non-operational member of staff added the 19 M number allocated to the second small boat, M958, to 20 Incident Lima. Were Coastguard, at this stage, as far 21 as you know, aware that non-operational staff were 2.2 entering information on the tracker?
- 23 I am unable to comment. I - -I don't know. I wasn't in 24 the team there
- 25 Q. It sounds like common sense that that is something that

190

- 1 would have been more likely to lead to errors? 2 A. Potentially
- 3 Q. Yes. Now, so far as the Border Force tracker or log is
- 4 concerned, did you understand, as far as you know, at
- 5 the time, that Border Force were entering information on their log, they call it, not tracker, independently of 6
- 7 the Coastguard?
- A. I --- I don't know, I'm afraid. Apologies. 8
- 9 Q. Okay, thank you. Now, so far as the current position is 10
- concerned the situation as it is now, I think you began 11 to explain to me about the changes that have been made
- 12 since the incident. This is your chance.
- 13 What has changed in terms of ViSION, the trackers, 14 your recording systems?
- 15
- A. So I think lots has changed. So obviously, ViSION 4 is 16 no longer. We are now all utilising ViSION 5.
- 17 The tracker is now a joint tracker accessed by all
- 18 parties involved. And then, I think you can look at
- 19 a whole raft of other changes that have occurred which
- 2.0 come out the back of the recommendations, from both the
- 21 internal report, the US report, which are all in the
- 22 statement that I have provided to the Inquiry.
- 23 So lots of work has gone on, lots of changes have 24
- been made. Additional staffing has now come to 25 fruition . Project CAESAR is live, additional technology

191

1 is in place. And the organisation is continually reviewing its position to make sure that we can deliver 2 3 the best search and rescue service that we can. 4 Q. Thank you. So now we move on to the last of these 5 themes, which is -- which concerns the procedures for 6 suspension or termination of search and rescue 7 operations and the attendant recordkeeping. 8 Now, we have seen together that well 9 before November '21 the Coastguard was aware of multiple 10 small boat crossings occurring and of the difficulties 11 in trying to identify and reconcile identifications of 12 them and it -- that particular problem created an 13 obvious risk, didn't it, that boats would become 14 confused, to put it simply, particularly on a busy 15 night? 16 A. I think the amount of calls being received, often from the same vessel, different people, made it very 17 18 challenging for Coastguard staff. 19 $\mathsf{Q}.\;$ Yes, and we know that there were various standard 2.0 operating procedures in place at the time dealing with 21 this question of suspension or termination of search and 2.2 rescue operations. I would like to look at them very 23 quickly, if I may. 24 The first, please, $\{INQ000450/1\}$. This is a copy, 25 as I say, of the search suspension termination SOP which

1	was in place at the time.	You can see the date there,

- 2 13 October.
- 3 A. Yes
- 4 ${\sf Q}.~$ It continues over a couple of pages only. The question 5 I wanted to put to you: do you accept -- and let's have
- both pages on the screen, please, for Mr Leat to see, 6
- 7 {INQ000450/1-2}, that it doesn't address the process
- 8 which should be followed where it is not believed that
- 9 a search is being terminated, rather, that duplicate 10
- incidents have been created? It doesn't deal with that.
- 11 does it?
- 12 A. No. it does not.
- 13 Q. No. And it doesn't provide any process to assist your
- 14 staff in reconciling or closing, if appropriate, such
- 15 incidents, the very problem that we discussed just
- 16 a moment ago, where you have a whole series of boats and 17 information is patchy or unreliable?
- 18 A. So this -- this -- this SOP would be utilised when the 19 SMC was looking to suspend or terminate a search.
- 20 Q. Yes
- 21 A. It wouldn't be used if they believed that they had 2.2
- successfully rescued individuals.
- 23 Q. Thank you. That's very helpful. Now, if we can go on
- 24 to $\{INQ000428/1\}$, this is another standard operating 25
 - procedure. Again, it's the one, as far as we can see,

1		which was in place at the time.
2		Here it's a broader policy, incidents involving
3		migrants. If you look at page 2 $\{INQ000428/2\}$ under the
4		heading "Information Gathering", there is information $$
5		there is guidance there on what information should be
6		sought from callers. Do you see a little higher, under
7		"Distress Phase", last bullet:
8		"Log multiple reports as separate incidents."
9		That's the point we touched on earlier:
10		"Merge once details across multiple incidents
11		match."
12		And, again, we can look at the document together,
13		but will you take from me that this document deals with
14		what should be done when details do match, but it
15		doesn't provide any guidance on what details should be
16		checked or processed or procedure followed to ensure
17		that there was enough confidence in that decision before
18		merging the details?
19	Α.	I think this has to be seen in line with $$ or alongside
20		training as well for staff.
21	Q.	Yes.
22	Α.	And staff training would look at all of that information
23		gathering and trying to come up with a consolidated
24		picture. So I think in terms of your question, this

- o I think in terms of your question, this 25
- doesn't, in an SOP form, but it lends -- it adds value

194

- 1 and supports alongside that decision-making that an SMC 2 would undertake. 3 Q. Okay well, let's go to page 5, please, of this document, 4 $\{INQ000428/5\}$ under the heading "Coordination". There is a reference there, the second bullet point, to the 5 potential termination of SAR. Do you see, in the last 6 7 bullet point: 8 $"\mathsf{Vessel}[\mathsf{s}]$ and $\mathsf{Persons}$ on Board are not in need of 9 SAR assistance/SAR is terminated." 10 Which again, doesn't address this particular problem 11 of duplicate incidents, does it? 12 A. No. it does not. 13 Q. And turning the page to page 6, "Termination", 14 {INQ000428/6} which relates to the question of 15 determining if the distress incident should be 16 downgraded, so from distress downwards, and again, no 17 attempt to deal with duplicate incidents here? 18 A. No -- pardon me -- in terms of reference in that 19 termination --20 Q. Yes 21 A. -- if you look slightly below the hyperlink, that 2.2 provides a flowchart and that was specifically in use 23 around Operation Sommen. 24 Q Yes 25 A. Where you have heard evidence on that before. 195 1 Q Yes A. So this element in the SOP is very much around 2 3 termination of search and rescue around 4 Operation Sommen. ${\sf Q}.\;$ Well, actually, the next document is the one 5 6 specifically about that. So if we could look at that 7 now please, $\{INQ007381/1\}$. Protocol for Coastguard 8 termination of search and rescue. September that year: 9 "This Op Detail provides background information on
 - 10 the protocol for terminating a SAR response."
 - 11 Then:

12

- "This page is marked ... OFFICIAL SENSITIVE ..."
- 13 And one gets a sense already that this is a slightly 14 different type of document.
- 15 And it does address the potential termination of
- 16 search and rescue incidents, doesn't it, but it is in
- 17 the context, I think, of Operation Sommen; is that
- 18 right?
- 19 A. Yes, that's correct.
- Q. Thank you. So we can see that at page 5, $\{INQ007381/5\}$ 20
- 21 under "Distress - Coordinated Response Required", there
- 2.2 is a reference there to tactics, second line, to
- 23 physically stop vessels at sea. That's
- 2.4 Operation Sommen, isn't it? 25
 - A. Yes, that's correct.

1	Q.	And the second	paragraph from	the bottom,	there is
---	----	----------------	----------------	-------------	----------

- 2 a reference to potential Border Force or MoD enforcement
- 3 operations against small boats. So again, we are in
- 4 rather different territory .
- 5 And overall, it looks as though this was a policy
- created to deal with Coastguard termination of search 6
- 7 and rescue before the potential use of the turnaround
- tactics by Border Force or Ministry of Defence? 8
- 9 A. Yes, that's correct.
- 10 Q. Again, it doesn't provide any relevant guidance or
- 11 assistance on this question of the reconciliation of 12 duplicate incidents?
- 13 Α. Correct.
- Q. No. Now, in this context, can we look at {INQ003287/1}, 14 15 please, this is a Border Force document, "Combined SOP for preventing small boats progressing through $\mathsf{U}\mathsf{K}$ 16 Territorial Waters". Do you see the date, 22 July? 17 18 If we go on to page 3, please, {INQ003287/3}, and 19 down at the bottom, the second paragraph from the
- 2.0 bottom, this explains that Operation Sommen involves
- 21 a migrant vessel, MV not in distress or alert which may
- 22 be, and I quote:
- "... de-escalated from SAR using an agreed protocol 23
- 24 with HMCG, allowing [Border Force] to conduct ... 25

tactics [and I quote] to coerce the MV to

197

- 1 turnaround " And that then leads us to page 8, please, 2 3 {INQ003287/8} which, under the numbered paragraph 4 states, do you see in the middle of the page, 5 a sentence: "Information required to consider the termination of 6 7 an SAR is contained within the agreed MCGA Protocol." 8 A. Yes Q. And that, I think, again, just so we have understood 9 10 this, is a reference to the document we looked at a little while ago, the protocol for HMCG termination of 11 12 SAR 13 A. Yes 14 Q. Is that right? 15 A. Yes, that's correct we wanted to ensure within HMCG -very much putting the lives of those at sea first , we 16 17 wanted to ensure that it was done when there were no 18 obligations still placed on HM Coastguard and that there 19 was no longer a distress, a very long checklist for us 20 to work through. Yes. 21 Q. Do you accept that the Coastguard didn't provide any 2.2 training to its staff before the incident in relation to 23 the reconciliation and closure of apparently duplicate 24 small boat incidents?
- 25 A. No. I -- I believe that training occurred through basic

198

1 training through the SMC pathway. And there was also training that was delivered in the summer, I believe, 2 3 around -- there were a couple of presentations, I think, 4 the -- the Inquiry has seen, around CPD and training, 5 where that topic was discussed. Q. So you are saying that there was specific training in 6 7 the context of small boat search and rescue which 8 covered this topic of reconciliation and closure of 9 apparently duplicate incidents, is that what you are 10 saying? 11 A. In terms of Coastguard incidents, yes. 12 Q. Yes. Well, given the problem that we have seen occur --13 which occurred as a result of this, there certainly 14 should have been training dealing with that before the 15 time of the incident, shouldn't there? 16 A. Yes, and I think in the -- the training that occurred in 17 the summer of '21, that topic was covered with staff. 18 More through CPD, continued professional development, 19 but that was covered. 20 Q. Yes. Okay. And do you not also agree that this 21 specific problem of duplication should have been dealt 22 with in one of your operating procedures or policies and 23 we have seen that it wasn't? 24 Α I think that there was -- there is reference. I think. 25 in wider Coastguard information portal about how

199

- 1 incidents are closed a repeats, when they are closed as 2 repeats as a separate SOP, when that should occur. 3 Q. Yes, I see. But what we do know you did was to create 4 a specific policy on the termination of search and 5 rescue in relation to the -- in order to enable the 6 potential use of enforcement tactics by Border Force: we 7 have seen that. 8 A. Yes, you have seen that and, I think, as the Inquiry 9 will have seen through disclosure. HM Coastguard had 10 quite a strong view on that. 11 Q. Yes 12 A. And I think Mr O'Mahoney in his evidence talked about 13 that whilst we have a great working relationship, we may 14 not have always had the same views on things. And --15 and Sommen was very much one of those. And we wanted to 16 ensure that anybody that was crossing, you know, they 17 weren't in distress. So there was a procedure that was 18 put in place which, when you look at the criteria, was 19 very, very difficult to be able to effectively terminate 20 search and rescue. 21 Yes 0 2.2 A. Under that guidance. 23 Q. Well, you have referred to the material. I was going to 2.4 ask you about this. But rather, from this perspective,
- 25 we have seen -- how can I put it tactfully -- a lot of

- 1 engagement by you on the proposed turnaround tactics.
- 2 Looking back on it now, did Home Office,
- 3 Border Force's plan to introduce the turnaround tactics
- 4 require a great deal by way of Coastguard input,
- 5 resources, focus, which frankly, might otherwise have
- 6 been better spent dealing with the known risks of small 7 boat crossings?
- 8 A. So, I think the -- the resource that was put on to this 9 was actually quite small at a very strategic level, but
- 10 it didn't impact any day-to-day operations.
- 11 Q. It was small, but it was paciferous?
- 12 A. Yes. I think that's fair to say, sir,
- 13 Q. Yes, but as far as you are concerned then, there was no
- 14 distraction from your main responsibility, your
- 15 statutory responsibility , for SOLAS search and rescue by the pressure of Border Force's new plans? 16
- 17 A. No. not that I am aware.
- 18 Q. Thank you. Looking then with all this in mind, to the
- events of the night, and can we start with your 19
- 20 statement $\{INQ010098/58-59\}$ and pages 58 and 59, if we
- 21 could have them up, please. And it's paragraph 3.54 on
- 22 suspension of termination. You say there:
- 23 "[The] Coastguard's suspension and termination
- 24 policy is underpinned by IAMSAR."
- 25 A. Mm-hm.

201

1	Q.	And you set out what IAMSAR provides in Chapter 9:
2		" operations enter the conclusion stage when:"
3		Then: 1, information is received that the relevant
4		vessel is no longer in distress; 2, the vessel, for whom
5		SAR facilities are searching, has been located and the
6		survivors rescued; or, 3, during the distress phase the
7		SMC, or other proper authority, determines that further
8		search would be to no avail. In effect , because the
9		chances of finding anybody are no longer reasonable.
10		And in the case of Incident Charlie, bearing in mind
11		that this was the foundation for your suspension and
12		termination policy, are you able to help us with which
13		of these applied?
14	Α.	So $$ pardon me $$ through reviewing information,
15		I believe the SMC in his view believed that persons had
16		been rescued.
17	Q.	2, therefore?
18	Α.	Correct.
19	Q.	Yes. Now, in the SOPs in place at the time which we
20		have just looked at, we saw that a search and rescue
21		operation could not be terminated unless there was $$
22		and I am quoting $$ "reliable or credible information
23		that an emergency no longer existed".
24		And is that your understanding that the view was
25		taken that the emergency for Incident Charlie no longer

202

- existed?
- 1 A. Yes, from what I've seen, that is $\,--\,$ and that I think 2 3 that is made from a number of elements in terms of 4 information received on the ground, but also supported by the best asset. And I think the Inquiry has heard 5 lots about the capability and how good aeronautical 6 7 surveillance or search is. So that, in my personal 8 opinion, and it is my personal opinion, would have 9 supported the SMC's thought process around the recovery 10 of persons linking to 3.54.2. 11 Q. And was any part of it, the reasoning, do you think, the fact that the helicopter didn't find a sinking small 12 13 boat? 14 A. I -- I think that that logically supports a decision. 15 The helicopter reported no -- no vessels, noting that it had spotted other vessels. So therefore, the search 16 17 conditions were good. It reported no debris, no persons 18 in the water. So that would support rationale on that 19 there were no persons in distress at that time. 20 $\mathsf{Q}.\;$ And again, looking at this perhaps in a more general 21 way, if an initial search doesn't locate a sinking 22 vessel, what would need to be considered in order for 23 a search and rescue operation to be safely terminated? 24 Would it include, for example, speaking to, in this 25 case, the helicopter pilot about the effectiveness of

203

1		its search?
2	А.	
3		Yes, and would you also agree that there would need to
4	۹.	be consideration of survivability when deciding how long
5		to continue searching or whether it could safely be
6		terminated?
7	٨	That is a factor, yes.
8	Q.	Yes. Do you agree with me that there is no evidence in
9		the written material that the effectiveness of the
10		helicopter search or the question of survivability were
11		factored into the decision to terminate search and
12		rescue at about 06:45 the next morning?
13	Α.	From the evidence that I've seen, I cannot see anything
14		written. That ultimately would be a question for the
15		SMC.
16	Q.	But it should have been written down, should it not?
17	Α.	Correct.
18	Q.	Thank you. Looking at, then, the situation after the
19		incident. Can we go back, please, to the internal
20		review which we looked at this morning. That's
21		$\{INQ008905/58\}$ and at page 58. Thank you very much.
22		Here, your internal reviewer and her team make
23		comments about the conclusion of SAR incidents. You can
24		see them. I am not going to read them all out for

25 everybody's benefit. But the conclusion they reach is

1		the process used for the termination was inconsistent
2		with some small boat incidents having a clear
3		conclusion, others remaining open until the end of the
4		day and others being closed with no rationale recorded.
5		That's the point we have just been talking about.
6		And again, do you see in the middle of the next
7		paragraph:
8		"During the review a number of small boat incidents
9		were identified as being closed by an operator, which
10		when questioned the SMC was unaware of. Since 2021
11		HM Coastguard has introduced a process to ensure
12		improvements on how small boat incidents are
13		suspended/terminated."
14		So the internal reviewer's conclusion was, wasn't
15		it , that there was an unsatisfactory response here to
16		terminating the search and rescue response?
17	Α.	The reviewer has said that we could improve the process
18		and in my statement and it talks $$ we talk $$ I talk
19		about how those $$ how they were made, in terms of
20		oversight and additional SOPs.
21	Q.	And this is an area where you have accepted the
22		recommendation made by the reviewer, is that right?
23	Α.	Yes, that's correct.

- 24 $\,$ Q. Yes, thank you. Then, if we can go on, please, to
 - page 77 {INQ008905/77} still in the same report, the

- 1 relevant SOP is at the penultimate box, do you see,
- 2 "Termination and cessation" and it looks as though the
- 3 first version of that is in July 2022?
- 4 A. (Nods).

25

- G. So it looks as though this is part of what you have justbeen talking about, namely, an improved procedure?
- 7 A. Yes, that's correct.
- Q. Thank you very much. Are there any other steps that the
 Goastguard intends to take to improve the situation in
- 10 relation to terminating search and rescue operations?
- 11 A. I think other than continually reviewing the SOPs that12 we have taking feedback from staff, reviewing incidents.
- 13 Q. Yes.
- 14 A. -- not that I am aware of.
- Q. No, and are you aware of any continuing difficulties in
 this business of reconciling and closing duplicate
 incidents?
- 18~ A. I think duplicate incidents as such is a problem today,
- $19 \qquad \ \ \text{in terms of multiple calls coming from a single vessel}.$
- $2\,0\,$ \qquad One of the things that HM Coastguard is doing at the
- 21 moment, in terms of bidding for future funding, is
- 22 looking for other technology which may be able to
- 23 support HM Coastguard. I talked about artificial
- 24 intelligence earlier .
- 25 Q. Yes.

206

Α.	So through technology upgrades, if funding is approved,
	we will look to see how we can take any of the
	challenges that we face with small boats and bring that
	into the platforms that we have, as the situation
	continues to evolve.
Q.	Thank you very much. Now, reading on in this report $$
	and moving from the themes to a more general question.
	This is page 106 please, in this same document,
	${INQ008905/106}$. Here, "Observations and
	recommendations", I think we have looked at the page
	before.
	But the paragraph I want to focus on now is 7.1.2.
	We looked earlier at the last sentence:
	"These were the recommendations provided"
	What I want to look at now is the second sentence:
	"Nothing suggested"
	So that's recommendations/observations:
	" \dots would have materially changed the impact to the
	SAR response on the morning of the 24 November \ldots "
	Can I ask you first , what do you understand that
	sentence to mean? Is she saying, for example, that none
	of the recommendations she's making $$ there were 21, as
	you know $$ would have materially changed what happened
	on the morning of the incident?
Α.	Yes, that's how I read that.
	Q.

207

- $\mathsf{Q}.\;$ So even if this is what the internal reviewer is saying; 1 that even if all 21 changes, improvements had been put 2 3 in place, neither any of them individually, or the whole 4 lot collectively , would have made any difference? 5 A. That is how I understand that. 6 Q. Is that a view that you share? 7 A. I believe so. I think -- I have spoken on a number of 8 occasions today about the fact that the search and 9 rescue helicopter, which everybody has spoken about, the 10 aviation capability being the best asset, was tasked and 11 tragically, did not locate any persons. That occurred. 12 So any of the SOP changes or recommendations would not 13 have changed that. And therefore, I believe the situation would still be, sadly, the same. 14 Q. So in short, your belief today is that the loss of life 15 16 on 24 November could not have been prevented by the
- 17 changes that you, as an organisation, made in response
- 18 to this review?
- 19 A. That's correct.

25

- 20
 Q. And does the same apply to the other changes you have

 21
 made in response to the US Coastguard report and the
- 22 MAIB report?
- 23 A. Yes, I would agree so
- 24 $\,$ Q. So that nothing recommended by any of these reviews or
 - reports would have prevented the loss of life in the

1	inci	dent?
2	A. I –	- I think, in terms of recommendations $$ and there's
3	lots	s of them, as you know $$ but I think the biggest
4	thir	ng that may have assisted would have been the early
5	info	rmation sharing so that assets could have been
6	dep	loyed earlier proactively.
7	Q. And	d are you saying that that would have made
8	a d	ifference on the night?
9	A.Ia	m unable to say if it would have made a difference to
10	the	very sad outcome. But, for example, Valiant would
11	hav	e been deployed much sooner.
12	MR PH	IILLIPS: Thank you very much, Mr Leat. Is there
13	any	thing else you would like to say to the Inquiry this
14	afte	ernoon?
15	A. Ith	nink personally, and on behalf of HM Coastguard,
16	Ιp	ass on condolences to the family of those who sadly
17	hav	e lost their lives and the trauma that has been
18	cau	sed to them. It's tragic and I hope that through my
19	evic	lence, I have tried to show that everybody that
20	wor	ked within HM Coastguard comes to work, day in day
21	out	, to save life . And that's what we do. We are very
22	pas	sionate and proud about that. And that takes nothing
23	awa	y from the loss of life that's occurred, but I think
24	it 's	s also important to note that the work that goes on
25	day	in day out, not only by staff within His Majesty's
		209

1	Coastguard, staff at the Home Office and staff within
2	RNLI and other organisations, we continue to respond to
3	the small boat challenge, but we will continue to
4	respond to those in distress . And I $$ I acknowledge
5	the great work they do, but I do recognise that that's
6	nothing on the tragedy that occurred on the day itself.
7	MR PHILLIPS: Thank you.
8	Sir, do you have any questions?
9	SIR ROSS CRANSTON: No, I don't. Well, Mr Leat, thank you
10	very much for your statement and also for the evidence
11	today. It's been very helpful. So, thank you.
12	So, tomorrow morning at 10 o'clock.
13	MR PHILLIPS: Yes, sir.
14	SIR ROSS CRANSTON: Yes.
15	(4.28 pm)
16	(the Inquiry adjourned until 10 o'clock,
17	on Tuesday, 25 March 2025)
18	
19	
20	
21	
22	
23	
24	
25	
	010

1	INDEX
2	MR MATTHEW LEAT (affirmed)

2	MR MATTHEW LEAT (affirmed)1
	Questions by MR PHILLIPS KC1
3	

- ∠∠

134-18 138-22 139-8

145:7.7 146:12 15 19

142:22 143:9.13 144:5.10

actions (15) 22:2 23:11,22 49:14 54:20 56:19 63:2,9 aberdeen (1) 69:24 70:18 79:15 91:25 96:10 ability (17) 29:23 37:11 39:8 103:10 176:20 177:25 51:15 59:17 64:15 69:9 actively (2) 81:17 187:8 74:23 75:2 112:4 116:6 activity (22) 3:19 5:11 15:23 119:10 136:23 23:5 26:5 27:8 31:2 42:18 160:21.22.23 162:11 67:19 72:15 80:19 87:1 able (82) 7:9.11 11:11 13:21 89:17.22 93:3.20 94:8.9 14:10,13 25:4 26:17 27:20 97:18 98:5 139:9 141:12 29:8,24 32:15 38:19 40:9 actual (1) 108:3 48:1 53:22 55:5 57:24 actually (46) 6:8 12:6 14:22 60:1.17 62:12.16 64:1.16 21:18 39:21 48:13,16 57:7 66:19 67:16 69:16,25 67:24 68:25 69:12 74:6 70:20 71:5,10,13,15 74:1,2 81:25 87:24 94:10 103:14 78:8 79:10 81:21 84:6 104:24 105:15 109:7 85-25 88-3 89-1 93-11 112:23 117:2.17 118:6 94:3.6 97:16 98:24 99:22 120.10 124.24 131.19 102:7,10 111:7,8 115:4 133:18 134:19 135:10 205:6 119:12 120:1,11 121:4 146:24 148:7,16 151:13 122:3 125:25 126:17 127:1 152:6 153:21 154:15,23 134:23 135:1 138:9 139:23 166:5 169:8 171:8.24 144:19 147:6 149:6 156:9 183:6,22 189:19 196:5 63:3 161:22 162:19 165:4 201:9 172:24 176:5 182:21 ad (1) 121:15 188:17.25 189:9.12 200:19 adapt (5) 28:10 29:1,3 202:12 206:22 112.16 113.25 above (3) 77:17 82:22 113:10 adapted (1) 47:1 198:11 abroad (1) 58:20 adapts (1) 112:16 add (4) 62:17 81:25 108:16 absence (4) 116:5,16 141:21 124:6 182:15 added (9) 12:10 30:24 absolutely (21) 11:6,22 110:22 142:17 187:3 13:20 18:10 46:10 51:9 189.16 17 190.15 18 52:13.13 70:2 71:17 76:11 addition (1) 65:10 82:24 84:16 96:16 113:3 additional (26) 32:6 36:4 131:24 141:11 148:4 37:11 39:23 41:14 55:6 151:24 162:22 180:4 63:8 65:8.11 71:21 accept (10) 39:9 49:13 60:5 75:23,24 76:12 79:1 83:1 121:13 122:6 124:3 176:13 97:1,3,15 100:4 105:22 179:12 193:5 198:21 118:9 123:14 124:11 acceptable (2) 46:1 109:12 191:24,25 205:20 accepted (13) 49:11.24 address (10) 5:15 30:13 50:19 56:22 57:1,20 147:20 149:9 177:9 180:21 aid (1) 41:7 163:18 165:13 176:23 182:17 193:7 195:10 aided (1) 119:8 177:13,18,20 205:21 196:15 access (10) 21:9,12 54:18 addressed (5) 45:13 138:4 69:17 92:18 120:14 143:21 143:20 151:23 170:24 182:18 189:1.12 addresses (1) 144:12 accessed (1) 191:17 adds (1) 194:25 accessible (1) 138:6 adequacy (2) 119:19 162:23 accident (4) 47:16 52:10 adequate (5) 20:23 27:2 90:14 185:14 67:15,23 120:5 accidents (1) 178:16 adequately (2) 20:15 97:13 122:6 accord (1) 129:23 adjourned (1) 210:16 account (7) 7:19 42:20 adjusted (1) 80:16 77:25 108:3,8 109:1 173:8 albeit (1) 7:23 admin (1) 142:1 accuracy (1) 7:10 administration (1) 188:3 accurate (3) 13:5 104:22 adopted (3) 133:16 135:4 119:12 achieve (4) 83:3 132:14 150:4 advantageous (1) 161:24 161:13 184:14 advertise (2) 27:17 38:16 achieved (3) 118:10 133:22 advice (1) 92:17 148:8 aegean (2) 44:19 105:4 achieving (2) 116:8 117:6 aerial (13) 16:21 32:11 79:16 acknowledge (2) 187:16 114:2,9,17 116:14 190:19 210:4 118:1,9,18 119:4,19 allow (1) 85:5 acknowledged (4) 56:3 63:1 120:16 97:25 177:24 aeronautical (11) 32:14 45:1 197:24 acknowledges (1) 34:3 79:16,17 118:24 119:25 acknowledging (1) 100:9 155:15 181:17 182:1 189:6 acronyms (1) 169:23 203:6 145:23 across (20) 10:5 12:15 53:20 affect (2) 76:8 116:6 54:15 58:21 64:5 67:4 78:8 affected (1) 174:10 79:2 81:20 89:17 97:16 affirmation (1) 1:7 105:21 115:16 125:7,7 affirmed (2) 1:9 211:2 131:24 135:12 150:19 afraid (12) 19:21 70:13 194:10 76:22 85:24 91:3 92:22 acted (2) 81:22 177:18 94:14 95:8 96:19 108:25 action (26) 9:16 19:10 21:9 167:23 191:8 26:16 32:4 45:21 46:14 20 after (22) 15:2,4 29:1 42:12 47:7 49:13 56:25 66:15 47:11 49:4 57:20 86:24 80:5,13 95:19 101:10 100:5.6 110:17 127:22 102:6 127:22 137:14 130:7 139:8 143:17 149:4 196:13 141:14.17 177:8 180:2.6 166:22 167:23 169:4 also (72) 2:16 4:21 12:7 182:17 188:7

actioned (1) 177:24

175-19 186-18 204-18 afternoon (1) 209:14 again (71) 6:3 9:21 10:13 21:22 22:5.25 23:23 24:11,13,14,16 26:9 27:12 35:18 40:18 43:19 45:4,11 48:21 49:5 50:12 52:17 56:15 57:19 58:1 61:7 63:17 79:5,7 80:3 86:19 87:19 88:10 89:10 92:7.23 99:15 103:19 104:6.12 107:3 108:6.24 109:7 121:7 122:4 19 129:17 130:11 139:3 141:20 145:5 149:23 150:22 152:19,20,25 162:3 165:24 171:15 175:4 180:17 193:25 194:12 195:10.16 197:3.10 198:9 203:20 against (5) 43:1 129:21 140:3 166:18 197:3 agencies (3) 27:19 38:18 agency (2) 1:14 129:10 ago (11) 17:1 34:7 69:22 97.4 115.23 135.24 171.21 173-24 185-3 193-16 agree (34) 21:23 22:1 28:7,13,19,20 40:24 83:24 92:23 115:12 116:18.19 117:5 130:17,18,21 142:19 155:14 157:15,16 171:18 172.11 174.6 175.5 12 24 185:9 188:12.23 189:10 199:20 204:3,8 208:23 agreed (4) 103:20 158:22 197:23 198:7 agreement (10) 102:20 123:6,22 124:3,20,23 125:1 129:16,17,19 agreements (1) 115:19 ahead (3) 32:5.16 101:10 air (2) 37:12 115:24 airborne (1) 169:1 aircraft (14) 32:13 44:22 114:8 116:9 117:7 118:12 122:7 142:13 162:3 172:9.12 175:10 176:3.7 airfields (8) 115:9 121:9,12,16,17,22,25 airspace (1) 121:1 alarm (3) 28:23 35:1 157:3 alert (11) 12:1 106:24 165:23,24,24 166:1,2,6,9 176:25 197:21 alerted (1) 5:18 aligned (1) 174:17 alleviated (2) 161:16,20 allocate (1) 83:6 allocated (3) 172:25 188:2 allowing (3) 74:11 142:9 allude (1) 60:15 alluded (3) 59:15 60:21 alluding (1) 179:3 almost (1) 175:1 along (1) 179:19 alongside (5) 14:20 113:6 133:21 194:19 195:1 alphanumeric (1) 144:22 alphanumerics (1) 144:24 already (14) 19:4 36:10 49:15 61:20 63:3 83:13 86:10 87:19 96:11 111:18 118:7 143:19 145:22

13:24 24:5 27:18 38:17 44:12.18.20 45:2 47:3 53:11 54:12 13 56:1 58:19.24 59:2.16.22 60:3.23 71:3 75:2 80:18 81:23 86:23 87:14 97:24 101:1 105:5.16.17 107:17 109:7 112:5 113:14 115:15,17 116:21 118:24.25 120:7 122:24 123:21 124:18 128:5 130:1 131:7.11 140:3 142:17 161:5 162:17 164:21 167:5,9,10 169:16 171:5 172:13 175:17 181:23 184:4 189:6 199:1,20 203:4 204:3 209:24 210:10 altered (2) 75:14 76:12 alternative (2) 114:9 115:21 although (6) 9:23 22:21 35:11 77:17 116:4,14 altitudes (1) 115:4 always (13) 12:24 13:5 19:10 104:21 109:25 119:22 137:13 141:10,14 179:25 180:6 188:2 200:14 nber (9) 18:3 20:22.25 21.7 27.9 79.6 11 20 94.9 ambiguity (1) 184:19 ambulance (2) 109:25 182:2 ambulances (1) 37:9 end (1) 18:11 amongst (3) 132:22 154:10,10 ount (5) 5:12 17:19 66:17 105:5 192:16 amounts (1) 89:19 analysing (2) 17:16,19 analysis (2) 108:24 156:4 andor (8) 18:3 20:13,14,24 21:5 24:15 39:7 91:9 annex (1) 53:13 anomaly (1) 8:8 another (18) 16:22 50:1 52:8 59:18 80:7.13 85:18 103:18 104:14 105:8 115:1,5 149:5 152:10 153:14 166:25 183:18 193:24 swer (16) 40:24 74:2 89:16,20 94:13 108:13 110:7 125:23 133:1 145:2 156:5.9.24 177:7 178:8.19 answered (3) 87:7 152:4 158:10 swering (3) 43:24 87:12 152:8 anticipated (2) 54:24 127:7 anticipating (1) 31:14 anticipation (3) 64:20 72:16 93:25 anybody (2) 200:16 202:9 anything (10) 61:23 62:18 72:3 124:6,13 135:2 140:7 180:20 204:13 209:13 anyway (5) 30:12 77:10 140:13 149:9 190:13 anywhere (1) 58:20 apart (1) 115:12 apologies (5) 108:7 132:5 144:14 150:7 191:8 apparatus (1) 10:24 apparent (3) 16:14 17:11 18.2 apparently (2) 198:23 199:9 appear (2) 74:13 139:11 appearance (1) 31:25 appeared (2) 12:5 154:19 appearing (1) 4:18 appears (1) 14:23 applied (3) 24:8 183:18 202:13 applies (3) 4:21 6:6 54:13 apply (5) 6:7 61:18 119:20 124:19 208:20 appreciate (1) 77:13

apprenticeship (1) 86:6 approach (5) 25:15 140:12 154:5 155:8 159:11 approaches (1) 112:20 appropriate (65) 14:14 18:10 24:21 25:3 33:16 37:20 46:15.24 47:4 56:2 62:13 66:21 67:22 76:3 84:16,25 86:7 87:6,10,12 88:7 102:22 104:1.1.3 105:1 109:17 111:13 113:3.12 114:22:23 115:4 122:11 126:24.25 132:1 134:15 141:1 142:21 143:12 148:9 149:4 150:21 153:22 154:8,14 159:24 160:7,19 166:3 172:14 173:23 174:4 175:7.8 176:5.8.25 177:25 180:2.8.24 181:20 193:14 appropriately (4) 35:7 45:9 97:13 130:9 appropriateness (2) 62:20 85:21 approved (1) 207:1 approximately (1) 19:3 aptitude (1) 85:3 arcc (4) 120:21 181:15.23 182.3 area (16) 62:6 100:16 104:8 120:25 155:16 158:25 159:2 169:25 170:4.9 171:10 173:25 174:3 176:4 180:12 205:21 areas (6) 26:11 28:25 46:25 59.3 98.19 101.9 arent (2) 18:8 178:22 arises (1) 60:11 armstrong (1) 41:23 arose (1) 11:19 around (38) 3:18 29:10 32:10 44:10 57:4,5 59:1 62:23,24 64:1 79:15,17 80:19 81:14 95:4,5 97:18 104:8 113:22 127:3 132:19 147:15 150:3 152:8 154:9 160:3 162:16,17 176:7 180:10,23 185:3 195:23 196:2,3 199:3,4 203:9 arrangement (1) 129:11 arrangements (5) 94:18 115:18,20 121:15 132:17 arrest (1) 109:24 arrival (1) 106:24 arrive (1) 137:13 arrived (2) 154:12 168:16 arriving (1) 94:1 art (1) 172:1 artemis (2) 162:2,13 article (1) 164:10 articles (2) 164:9,17 artificial (2) 180:14 206:23 ascertain (1) 148:6 ask (15) 3:7 60:8 63:7 108:13 114:23 126:5 138:2 147:21 148:10 152:7 169:22 175:4 177:11 200:24 207:20 asked (2) 135:22 148:16 asking (2) 80:5 129:5 aspect (3) 45:19 185:20 187:21 aspects (1) 162:17 assessment (1) 188:9 asset (47) 37:20 41:14.15.18 44:14,20,22 45:3 98:2 99:25 100:4 102:9 103:11.13.21 104:25 105:1 109:17 110:6 111:10 112:6 113:7 114:13 115:2,16,18,21 118:9,18 119:22 121:5 125:5 141:1,5 142:22 155:15,15 157:1,2,9 163:24 183:8,10 184:1 187:8 203:5 208:10 assets (46) 17:10 32:14 43:6,6 44:4,7 79:17

101:14.16.17 102:7 103:12 105:22 110:10 111:6.8 114:3.12.17 115:24 118:1 119:4,6,19,20,25 120:4.16.20.23 123:13 124:10 140:9,18 164:14 209:5 assigned (1) 57:10 assist (11) 29:17 32:23 35:22 85:25 94:3 97:2 135:16 162:19.21 165:4 193:13 assistance (6) 29:9 42:10 43:21 87:22 164:18 197:11 assistancesar (1) 195:9 assistant (7) 2:24 3:3,7,11 4:8 52:22 128:18 sisted (5) 119:10 161:19.24 164:21 209:4 associated (3) 10:11 11:17 14:2 assumed (1) 42:22 assumption (2) 23:20 66:12 assurances (1) 121:20 assure (1) 136:12 attempt (2) 150:1 195:17 attempted (2) 4:17.24 attempting (1) 42:23 attempts (1) 147:10 attend (3) 17:3 38:7 99:15 attendance (2) 37:8 77:1 attendant (1) 192:7 attention (5) 11:11 92:9,13 143.6 15 attract (1) 11:11 audit (1) 58:16 audited (2) 58:13,15 august (47) 8:11,18 14:23 15:2,8,19 21:17 22:9 23:5 25:23,25 26:12 27:25 31:8,20 32:5 34:1,19 36:3 38:11 41:1 45:7,22 46:18 63:16.22 64:18 65:12 66:1.5.23 68:1.22 70:7.16 71:22 72:16 79:9 87:21 93:17 96:21 102:13 103:2 136:18,20 145:6 179:15 authorities (4) 11:24 41:8 48:25 102:23 authority (9) 59:18 102:1 141:13 149:17 164:2 172:25 181:18 182:3 202:7 automatically (3) 161:2,6 183:8 autumn (2) 64:19 67:20 avail (1) 202:8 availability (4) 41:19 64:3 98:10 99:25 available (54) 12:18 17:10 27:3 36:4 37:20.23 39:23 43:16 44:14.20 55:9.11 57:17 66:18 68:16 74:7,20,24 75:4 79:23 81:15 92:19 95:10 97:21 99:15 100:8.23 101:2.5.14 104:18 110:13 111:10.20.23.24 112:18 113:25 114:9 115:1 117:4.14 120:1.20 123:13 124:11 133:25 134:17 145:19 146:7,17 150:18 160:18 180:16 average (1) 9:2 aviation (13) 43:6 114:12 115:6 119:22 120:23 122:2.9 142:6 181:5.17 188:16 189:3 208:10 await (1) 167:1 aware (65) 9:13 12:14 14:1,5,9 19:8,11 23:8,9 36:2,3 37:19 40:20 43:19 45:20 46:25 47:5 58:1 75:13.17 93:4 95:9 99:18 113:12 121:23 122:1 128:21 129:1 132:16

97:20.20.22.24 98:9.13.24

99.18 100.8 23

147:10.12 149:24 151:25 152:8 156:11 158:24 159:11,20 161:12,15 167:15.18 172:7 179:21 180:5 186:4,5 190:21 192:9 201:17 206:14,15 wareness (22) 16:19 22:18 26:7.21 32:15 45:2 69:13 70:22 88:4 95:22 115:11 120:12 125:12 127:19.25 128:2 136:15 141:21 142:23 152:23 188:24 189:11 away (5) 124:13 129:14 168:3 180:7 209:23 в b (6) 114:14,25 115:23 120:5 121:11 122:7 back (58) 3:23 6:21 8:21 9:19 10:11 18:6.15.18 24:11.20 32:20 38:10 40:17 42:21 47:8 52:18 53:25 64:25 69:9,11 71:8.20 74:9.10 75:5 80:2 87:19,20 92:16 93:10,13 95:13 103:12 104:13 108:14 110:9 114:3,21 117:20 118:3 126:16 128:4 129:5 136:19 146:11.23 147:7 148:10 157:2.8 159:4 168:8 180:17 189:10,23 191:20 201:2 204:19 backdrop (1) 43:2 background (4) 4:15 5:9 163:21 196:9 backup (2) 93:15 116:17 bad (1) 145:10 balance (1) 180:1 ball (2) 135:17 139:7 barnett (5) 81:22 83:21 86:21 139:6 189:24 based (14) 16:23 20:21 65:11 71:21 90:17 92:2.7.23 121:23 122:4 138:22 152:25 156:8 173:7 basic (1) 198:25 basically (3) 20:20 22:22 140:13 basis (15) 19:17 22:18 28:10 36:22 85:2,6 94:24 99:13 112:12 125:15 131:4 134:14 135:21 136:9 151:7 beach (1) 67:21 bearing (3) 65:25 180:19 202:10 became (6) 5:18,20 14:1 18:2 168:24 182:22 become (3) 31:1,6 192:13 becomes (1) 180:16 before (46) 1:6 3:2 4:22 14:18 21:14 22:4 27:15 30:8 43:21 45:5 54:9 65:14 66:5,5 81:12 84:15 85:4,16 90:21 99:2,19 100:24 102:7 103:1 120:4 122:13.18 128:25 129:6 139.12 145.18 147.10 161:13 163:9 174:8 180:18,21 182:18 189:19 192:9 194:17 195:25 197:7 198:22 199:14 207:11 began (3) 57:20 63:15 191:10 begin (4) 30:11 56:6 139:17 157:12 beginning (1) 15:1 begins (1) 1:7 behalf (4) 1:13 4:19 88:18 209:15 behaviour (1) 157:14

concluded (2) 153:5 185:17

concludes (1) 174:9

behind (4) 90:10 108:12 148.3 160.19 being (86) 2:10 6:12 8:7 11:10 13:1.12.13 16:22 17:6.11.23 29:14 30:7 31:15 32:17 33:11.15.15.25 35:6,9,11,13 38:8 39:1 46:15 64:9 65:25 66:7 69:6.8.12.19.25 70:20 71:10.13.15 75:9 79:15.18.19 82:22 85:2 87:23 93:10 10 94:12 97:6 98:24 102:6 103:9 111:23 113:12 119:12 122:9 126:9 127:1 128:7 134:24 139:20 142:13 144:3,5 147:3 148:22 154:18 159:10.11 161:6 165:10 166:17 174:3.19 180:24 181:23 183:6,22 186:25 188:10 190:7 192:16 193:9 205:4.9 208:10 belgians (1) 115:20 belief (4) 154:3 157:16 190:1 208:15 believe (71) 4:4 6:4.5.11 8:4 10.2 3 4 21.16 16 22.10 26:14 31:16 39:22 40:4 41:4 54:13 65:15 67:11,22 75:25 76:10 77:23 78:7 85:12 86:3.3 88:23 89:7 93:1,23 94:10 95:12,12 97:6,15 99:23 100:4 107-14 111-7 117-3 119-23 120:7.7 126:19 133:2 135:10 141:4 144:21,24 145:1,18 152:16 154:20 155:5 165:17 166:7 171:3 174:4 177:20 178:18 180:22 182:10,10 189:8,22 198:25 199:2 202:15 208:7,13 believed (4) 187:20 193:8,21 202:15 belonging (1) 164:14 below (3) 170:11,15 195:21 benefit (3) 64:1 161:5 204:25 benefits (2) 69:12 70:8 berthed (1) 100:25 bespoke (1) 160:17 best (33) 2:12 11:11 12:13 25:1 32:14 39:25 40:23 43:23 45:12,17 51:21 55:11 59:5 61:24 71:17 79:21 106:15 108:20 122:10.23 131:20 144:9 158:5 159:23 170:22 172:8.20 182:24 184:11 188:5 192:3 203:5 208:10 better (5) 62:2 82:12 127:14 131:14 201:6 between (35) 2:10 6:17,23 21:18 34:20 36:13 42:5 76:4 86:13 102:20 103:15 119:24 120:18 123:3.7.16.23.25 125:11 126:6 128:10 129:8.11 130:11.13 132:10 139:5 144:16 145:4 149:9 150:13 162:5 167:11 180:2 182:12 bidding (1) 206:21 big (2) 122:16 176:4 biggest (1) 209:3 bill (8) 25:24 39:9,13 40:8 45:20 46:4 15 79:8 bills (3) 38:10 136:20 182:13 bingo (1) 175:20 bit (3) 53:3 100:12 144:3 blind (1) 142:14 board (24) 2:18 11:10,14,23 12:21 13:2,7 14:7 21:25 25:17 49:25 58:25 61:22 104:7.23 105:2 110:5 115:5 119:10,14 133:3

171:25 176:5 195:8 boat (73) 3:18 5:10.11 6:2 10:14 12:12 14:7 24:10 26:5 28:9 33:20 37:3 42:1 46:21 54:21 57:13.18 65:9,14 66:19 80:19 88:12 93:15.20 95:2.18.23 97:2,14,17 101:24 111:9 112:15 113:2,23 128:15 129:2 130:23 137:6 144:7 147:9 153:2 155:19.21 159:2.6.17 163:4.15 164:20 169:4 4 5 8 17 171:2,4,9,22,24 173:14 174:1 176:2 190:19 192:10 198:24 199:7 201:7 203:13 205:2,8,12 210:3 boats (61) 5:18 11:4,14 12:6.15 14:2.18 28:4.12.16 34:10 35:23 37:19 39:17,20 42:14,16,23 43:18 64:13 67:18 70:10 73:6 80:20 84:20 89:18 93:3 94:1,19 101:19 104:8 119:11 123:1 126:8,20 139:25 140:10 145:5,10 147-19 152-12 24 156-13 17 157-17 159-3 161:18 162:6 163:5 168:20,25 169:16 173:13 174:18,22 183:5 192:13 193:16 197:3.16 207:3 bodies (1) 188:1 bolster (1) 44:12 border (51) 5:20 17:5,24 43:12 44:15 50:11 98:1,12,15 99:11,14,18 100:13,23 103:16 104:14 110:9.19 111:11.19.24 120:15,20 122:20 123:4,7,13,17 124:1 125:11,19 129:8 130:14 132:11 137:20 140:8,12,17 144:23 182:13.18.21 191:3.5 197:2.8.15.24 200:6 201:3,16 bordering (1) 18:1 borne (1) 41:18 both (21) 15:8 21:4 32:20 44:11 54:2 59:21 61:1 62:9 78.24 82:5 98:12 99:18,24 118:25 119:23 122:6 130:19 134:17 178:13 191:20 193:6 bottom (13) 5:25 15:19 17:12 26:6,21,24 27:7 42:8 77:4 142:2 197:1,19,20 box (1) 206:1 branch (2) 47:16 52:10 break (5) 50:24 81:9 86:19 117:23 168:11 breakdown (1) 7:13 breaks (7) 17:21 27:3 29:10,12,14,21 72:8 bridge (1) 88:3 bridges (1) 88:5 brief (2) 2:1 184:21 briefed (4) 34:18 35:14,19 135:7 briefings (1) 35:6 briefly (1) 48:3 bring (6) 14:19 60:7 64:2 70:20 141:23 207:3 bringing (2) 48:18 110:18 broad (2) 63:11 149:23 broadcast (6) 21:8 95:19,24 96:3 163:4 177:1 broaden (1) 30:9 broadening (1) 58:7 broader (2) 125:1 194:2 broadly (2) 33:24 56:22 broken (1) 18:24 brought (1) 43:7 bucked (1) 7:12 built (2) 112:9 126:22 bullet (6) 24:2 170:14,15

194.7 195.5 7 busiest (4) 2:15,20 12:16 107:22 business (7) 33:20 48:16 83:9 84:3.4 180:12 206:16 busy (7) 44:4,23 64:20 79:6 99:6 179:23 192:14 caesar (6) 32:10 35:25 118:7,10,22 191:25 calculated (3) 104:7 108:2,2 calculations (2) 107:18 140:25 call (33) 15:10 32:10 46:12 52:15 84:23 85:11,17,19 87.10 98.24 103.15 19 104:6.12 111:7.8 114:25 127:1 139:5 145:24 146:11,22 148:3,5,7,10,17 154:13 157:10 161:22 167:1 188:10 191:6 called (8) 1:3 58:11 93:23 94:23 118:11 145:15 160:20 166:21 caller (3) 147:1 148:10 159:7 callers (7) 147:18,21 152:11,24 154:4 157:17 194:6 calling (3) 94:25 95:2 166:4 calls (33) 11:19,24 12:4 16:23 34:22,23 40:4 51:14 54:19 74:2.2 84:10.10.19.22 85:8 86:25 87:7.12 146:25 149:11.16 156:3,17,19 157:12 158:6,10 159:5,7 187:22 192:16 206:19 calltaker (1) 153:9 came (15) 11:19 51:11 73:19 80:2 93:21,24 100:4 105:21 110:21 128:6 137:5 146:25 150:5.9 164:25 campaign (2) 73:17,22 campaigns (1) 72:9 cannot (2) 77:24 204:13 cant (25) 8:10 10:7 19:9 66:20 72:13 85:20.23 89:15.20 92:21 93:5.6 94:13 95:8 99:1.5 103:5 117:16 120:6 127:19 128:2 144:18 157:23 188:10 190:3 capabilities (1) 33:14 capability (13) 34:9 37:12 44:13 45:1 112:3 116:24 117:3 118:9,19,24 119:1 203:6 208:10 capable (1) 44:17 capacity (11) 26:25 82:2,9 84:5 98:14 99:22 100:10 104:9 105:1 110:4 113:6 captain (3) 170:24 171:19 172.7 capturing (1) 179:9 card (1) 133:13 cardiac (1) 109:24 career (4) 2:1,18 53:7 155:25 careful (1) 21:8 cargo (1) 69:23 carried (2) 75:22 90:12 carry (3) 11:9 113:18 164:5 carrying (2) 2:18 190:8 cascaded (1) 180:23 casebycase (1) 85:6 cases (2) 134:13 136:8 casualties (1) 119:13 casualty (3) 134:4 146:11,23 categorisation (1) 24:8 categorised (1) 127:5 category (5) 6:7 121:10,11 122:7.7 caused (1) 209:18 caveat (1) 43:23 cell (5) 57:5,8,11 96:13,24 centrally (1) 4:10

centre (5) 34:12 53:9 96:4 181.17 182.1 certain (6) 22:2 46:10 96:1 117:16 123:11 140:10 certainty (1) 14:13 cessation (1) 206:2 chain (1) 59:16 challenge (18) 6:12 11:21,22 26:16 28:5 59:23 64:16 69:1 70:1 111:14 112:16 131:18.22 138:1 152:18.22 179:25 210:3 challenges (16) 10:10.18 11:17 13:16 14:2,6 21:18 26:7,23 34:7 68:21 126:20 145:23 146:9 147:7 207:3 challenging (4) 9:18 40:2 43.2 192.18 chance (5) 91:16 106:8 148:11 174:25 191:12 chances (1) 202:9 change (14) 24:22 28:9,11 45:15,15 47:1 55:9 72:25 100:17 112:15 124:14,16 125:13 129:9 changed (7) 39:24 88:11 191:13.15 207:18.23 208.13 changes (10) 26:16 46:6 118:18 191:11,19,23 208:2.12.17.20 changing (1) 28:15 channel (33) 3:12,22 4:2 8:6 10:22 12:22 31:2 37:15 65.10 68.6 71.4 105.6 112:7 119:7 125:7 146:9,18 148:21,25 149:19 153:17 156:20 157:24 159:16 161:21 162:3 166:6,24,25 167:1,14,21,25 chapter (1) 202:1 characterisation (1) 177:16 charge (1) 140:5 charged (1) 12:1 charlie (19) 91:10 159:2 163:16 169:14 174:10 176:12 183:4,7 184:9 185:13,25 186:16 187:11,15,25 189:17,18 202:10.25 chasing (2) 138:10 141:17 check (2) 51:18 188:18 checked (1) 194:16 checklist (1) 198:19 chief (30) 2:24 3:3,8,11 4:8 26:3 46:8,9,10,13,19,25 47:4,6 65:18 66:9 77:9,20 78:12 79:5.8.16 81:12.25 82:1.2.5.12 83:3 128:18 choice (4) 84:6 85:20 110:6 171:12 choose (1) 76:16 chronology (1) 5:4 circle (1) 39:20 circumstances (4) 104:16 120:5 121:11,17 civil (2) 36:24 41:8 claimed (1) 156:14 clandestine (1) 15:9 clarify (2) 129:7 144:14 class (2) 2:17 89:21 classed (1) 49:24 classify (1) 126:7 clear (17) 37:25 46:14 63:1 82:8 107:12 108:17 134:8 147:24 153:15 165:17.20 183:2.24 185:12.13 186:14 205:2 clearly (2) 140:20 165:9 close (3) 38:8 186:18 187:2 closed (8) 50:16,18 187:12 188:2 200:1.1 205:4.9 closely (2) 4:7 112:24 closer (1) 139:25 closest (1) 163:15

closing (4) 187:15 188:6 193-14 206-16 closure (2) 198:23 199:8 cmc (1) 17:20 coast (1) 69:22 coastal (5) 58:12,20 60:4 62:23 148:14 coastguard (254) 1:14,21,24 2:3,11,12,24 3:3.8.11.17.20 4:1.6.10 5:18 9:15 12:1.3 13:5 14:1 18:9 19:7.13.16 20:1.3.18 21:19 26:3 29:11 13 31:5 32:6 33:9 35:13,21 37:1,14,19 39:11,25 41:1 42:17 44:11,20 46:8,10,11,13,22,25 47:5.6.13 48:6.10.18 50:20 51:10.13.25 52:8.19 53:8.15.21.54:5.13.17.20 56:11,16,16,22 57:21 58:8,17 59:2,19 60:8,11 61:18 63:9.23 64:3 65:4.18 66:9 67:18 70:5 72:13 77:9,20 78:12 79:5,9,17 81:11,12,25 82:1,2,12 83-3 15 84-11 85-12 15 99.25 101.8 12 22 102:1,4,6,9,17,20,21 103:7,8,9,22,24 104:21 109:16 111:10 114:12 115:10.19 118:20 119:2.24 120:14,18 121:3,18,19 123:4,7,14,16,25 125:5,11 127.10 23 128.18 129.8 12 130:13 132:11.13.16 133:3,20 134:17,18,24 135:15 136:1 137:2,17 138:7 139:23 140:21 141:11 143:5,11,21 145:5,7,14 147:2,10,22 148:18 150:1,10,13,19 151:7 152:2 153:4.9.10 154:4.6.10 155:8 156:1.12.18 158:7.14 159:14,14,20,21 160:1,9,18 161:2 162:5 163:22,23 164:19,19,21,22 167:6,12,13,13 168:5 169:21 172:10 176:22,24 178:3.5.12.14.14 179:21 180:9 181:1.16.18 182:13.19 185:10 188:19 190:20 191:7 192:9,18 196:7 197:6 198:18,21 199:11,25 200:9 201:4 205:11 206:9,20,23 208:21 209:15,20 210:1 coastguarding (1) 62:14 coastguards (17) 4:3,8 15:13 29:14.14 40:22 46:19 49:15 70:23 139:21 150:3 155:22,24 177:17 178:25 179:12 201:23 cockerill (2) 80:22 81:4 code (1) 58:11 coerce (1) 197:25 colleague (1) 28:22 colleagues (22) 7:9 9:14 15:18 17:24 19:13.25 24:17 25:11 27:25 28:22,24 34:19 37:6 77:1 87:21 120:8 123:17 131:12.25 162:17 178:15 179:7 collectively (1) 208:4 collided (1) 69:23 colo (6) 15:11.18 18:7 20:19 23:20 31:7 colocated (1) 189:7 combined (1) 197:15 come (34) 6:21 9:19 12:23 22:22 24:11 32:20 47:8 48:19 55:7 57:11 58:18 59:19 64:25 69:25 74:9 75:5 80:23,24 93:13 94:10

111:1 117:17.20 146:4 149-18 150-22 159-4 162:19 168:8 178:12 180:17 191:20.24 194:23 comes (2) 148:5 209:20 comfort (1) 27:3 coming (15) 12:4 27:20 37:19 38:19 40:4 52:18 65:16 71:8 79:12 101:19.21 119:7 129:13 143-18 206-19 commander (49) 2:15 25:25 29:3 56:18 74:20.22 79:24 80:12 88:10,15,19,24 89:13,24 90:13,20,25 91:5,13,22 92:8,15 93:4,9,10,16 94:5,19,23 95:2.17.18 96:2.4 105:16 114.12 115.7 142.6 7 143:8.14 168:18 185:24 186:19 187:13 188:17 189:3,7,7 commanders (9) 38:5,6 67:1 75:5 88:9 89:4 91:8 116:4 117:14 commenced (7) 32:6,10 36:3 65.12 71.22 73.15 16 comment (22) 23.10 31.23 39:14 40:8 62:6 70:13 76:21 85:20,23 91:18 92:21 93:6 122:3.10 127:19 128:3 137:22 138:18 158:13 188:10 190:3,23 ents (2) 89.15 204.23 commercial (3) 11:8.13.25 commission (1) 51:24 commissioned (2) 48:10 133:19 common (3) 141:6 157:11 190:25 commonly (1) 27:9 communicated (2) 127:13,14 communicating (2) 17:20 161:18 communication (8) 10:24 12:2,19 16:17 22:17 56:16 145:4,9 communications (7) 49:1 71:4 73:25 162:5 166:15 167:14 170:10 community (1) 135:13 compares (1) 42:25 compelled (2) 121:12 122:6 competent (2) 59:18 85:14 complemented (1) 120:8 complete (7) 50:12,17,18 51:9 53:23 116:11 176:6 completed (9) 38:4 47:12,15 48:2,15 55:6 74:4 130:7 187:18 completely (1) 155:12 completeness (3) 30:23 56:2 58:1 completion (2) 16:2 73:25 complex (2) 64:10 71:16 concede (1) 90:1 concept (11) 57:8,10 63:23 70:2 71:1.6 73:7 82:25 83:4.9 150:17 concern (5) 26:11 27:1 31:20 62:19 66:24 concerned (21) 13:25 21:15 58:3 85:22 90:6 91:4 98:23 99:10 100:16 101:17 110:18 123:18 126:2 129:16 134:21 137:7 138:13 182:20 191:4.10 201:13 concerns (18) 22:8 24:16 25:12 26:4 30:13 34:18 35:15 40:20 63:19 70:6 114:13 115:8 117:2 142:7 179:17 180:19.21 192:5 concerto (6) 166:22 167:4,6,12,15 168:3

conclusion (6) 175:6 202:2 204:23.25.205:3.14 conclusions (2) 54:10 116:3 condition (4) 120:2 170:17 171:15,17 conditioned (1) 154:20 conditions (8) 8:5 12:17 68:5 113:1 119:21 173:8 176:9 203.17 condolences (1) 209:16 conduct (6) 48:11 52:9 76:17 88:13 142:14 197:24 conducted (3) 32:2 52:11 179:24 conducting (2) 20:23 114:20 conference (1) 69:18 confidence (1) 194:17 confirm (5) 120:13.17 123:21 143:23 185:15 confirmed (1) 146:7 confused (1) 192:14 confusion (1) 183:23 connect (1) 149:2 connected (1) 148:1 connecting (1) 159:7 connection (1) 159:15 connectivity (1) 145:10 consequences (1) 16:18 consequent (1) 18:1 consider (11) 14:14 54:9 63:7 69:4 71:7 119:3 126:1 156:1,13,16 198:6 considerably (1) 108:21 consideration (11) 39:21 43:20 44:1 46:19 115:5 137:18 138:10,16 156:12 161:12 204:4 considered (8) 27:10 45:23 49:14 50:15 105:13 127:10 135:13 203:22 consisted (1) 42:8 consistent (4) 109:18 113:2 144:22 187:24 consolidated (1) 194:23 constabulary (1) 61:9 constant (2) 111:16 113:21 constantly (2) 45:16 144:1 construct (2) 14:6 126:22 consulted (2) 108:10 127:24 contact (3) 11:21 12:3 181:25 contacted (4) 59:18 166:23 167:5 168:5 contained (3) 19:4 187:24 198:7 content (2) 34:23 54:19 context (11) 31:9 35:19 98:5 101:3 116:22 126:4 147:9 148:19 196:17 197:14 199:7 contingencies (1) 36:24 contingency (4) 115:14 116:7 117:5,11 continually (10) 12:2 45:14 47:2 112:7,8,14 134:15 180:15 192:1 206:11 continue (10) 9:11 102:4 118:22 130:23 132:6 135:20 167:8 204:5 210:2,3 continued (11) 33:16 35:12 86:24 96:21 102:18 121:24 130:22 132:22 156:2 157:9 199:18 continues (5) 26:22 83:5 118:22 193:4 207:5 continuing (7) 7:22 34:15 35:11 112:11 124:16 167:15 206:15 contract (1) 145:14 contribute (1) 68:25 contributed (1) 176:11 control (3) 35:3 86:14 149:13

easier (1) 87:24

controlled (2) 21:20 90:11 controller (1) 2:7 convenient (3) 50:21 117:19 168:7 conventional (1) 11:7 conversation (3) 85:15 165:9 167:11 conversations (3) 43:25 44:11 132:19 cooperation (1) 122:16 coordinated (3) 40:1 52:8 196:21 coordinating (7) 102:1 131:22 132:13 133:6 141:13 164:2 172:25 coordination (9) 43:7 53:8 59:24 96:4 98:11 109:15 181:17 182:1 195:4 coordinator (5) 2:6 64:14 69:6.9 189:5 coordinators (2) 64:12 119:9 coping (1) 44:5 copy (5) 106:11,12,14,14 192:24 corner (1) 109:25 corp (1) 30:20 corporate (6) 4:19 31:25 33.2 41.21 126.17 156.7 correct (110) 1:16,19,22,25 2:21 3:1 4:20 5:23 7:2 8:14,20 9:3,12 10:1 11:6 12:14.22 13:3 16:12 26:2 43:14 47:14,17,19 48:11,12 49:19,20 50:18 52.25 53.19 56.14 25 57:23 61:3.6.14.17 65:24 68:4 72:23 73:4,21 77:22,23 80:8,11 81:5,7 86:12.16.18 93:18.23 94:22 100:18 101:7,24 102:16 110:13,16 118:16 119:17 122:22 123:2.8.9.20 126:10 128:20.23 129:4 131:3 138:7 139:13 140:1 142:15 146:12 151:1,21 152:14 153:6 154:1 155:11 161:3,4 162:8 163:25 165:1 167:17 169:6,11 173:10 177:4 178:20 179:23 181:11 183:11.12 184:10 196:19.25 197:9.13 198:15 202:18 204:17 205:23 206:7 208:19 corrected (2) 78:10 175:17 couldnt (6) 87:1,3,5 110:15 151:13 181:9 counsel (1) 1:5 counterparts (1) 137:2 countries (1) 12:23 couple (12) 14:24 24:6 37:2 46:2 57:1 69:4 88:21 103:3 118:7 160:14 193:4 199:3 course (16) 7:22 38:5,6 42:12 50:22 67:24 68:18 118-14 122-3 139-3 9 164:23 169:23 174:8 186:10 189:23 cover (7) 17:10 22:25 24:16 92:25 141:22 171:10 173:25 coverage (3) 148:24 169:25 170:4 covered (5) 157:21 176:4 199:8,17,19 covering (2) 23:24 56:15 covid (1) 71:9 coxswains (1) 108:10 cpd (2) 199:4,18 craft (6) 39:3,16 67:21 111:5 112:10 126:22 cranston (10) 1:4,11 50:22 51:1 117:20,25 168:8,13 210:9.14 create (4) 71:13 140:23 183:16 200:3

created (8) 12:4 16:23 55:10 93:17 133:21 192:12 193:10 197:6 creating (2) 31:16 70:9 creation (1) 21:10 credibility (1) 60:20 credible (2) 20:24 202:22 crew (10) 43:11 105:2 110:5,20 111:3,25 112:22 113:6 127:24 172:12 crews (2) 172:22,22 crime (2) 28:16 45:16 criminal (3) 51:7 54:6 55:3 crisisdriven (1) 62:4 criteria (3) 95:6,9 200:18 critical (6) 6:9 33:22 98:1,16,25 100:14 criticisms (5) 177:13,14 178-4 9 180-19 cross (2) 42:23 161:21 crossing (20) 5:19 10:3,6 11:15,18 12:22 28:12,17 31:2.13.14 33:12 34:10 45:18 93:3 101:11 113:9 116:7 142:10 200:16 crossings (29) 6:2 7:1,11 8.25 9.11 10.14 19.11 28.9 42.2 46.21 57.18 65.5 14 68:8 80:16 88:20 94:1 97:14,17 101:9,13 102:10 113:2,23 128:16 130:23 131:21 192:10 201:7 crown (1) 114:17 cry (1) 157:3 ctv (1) 113:14 culture (1) 29:19 currency (1) 135:3 current (8) 3:6,23,25 55:24 112:17.18 121:24 191:9 currently (1) 111:23 curve (1) 67:18 customer (1) 2:10 cutter (1) 100:25 cutters (1) 44:15 d (2) 142:4 211:1 da62 (1) 118:12 daily (6) 28:10 112:12 124:2 125:14 131:4 136:9 danger (1) 156:14 dangerous (5) 28:12,17 34:10 45:18 142:11 dangers (1) 142:8 data (3) 10:4 66:10 161:6 date (12) 14:22,23 15:1 110:18 130:13 135:23,25 136:5 143:18 184:17 193:1 197:17 dated (3) 1:17 48:7 49:3 david (2) 67:2 75:10 day (26) 13:11,12 16:10 20:25 68:10 79:19 80:25 93:21.22 96:7 118:14 155:22 184:4 185:11.24.25 186:1 187:11 190:14.17 205:4 209:20.20.25.25 210:6 days (27) 10:2 17:24 18:3 20:22 21:8 27:9,10,10,10,14 38:14 39:13 57:18 75:15.15.16 76:23 77:3 79:6.7.12.13 81:12 83:16 103:3 131:19,20 daytoday (1) 201:10 deal (16) 26:17 30:22 49:17 64:23 70:1 75:7 90:6 108:12 122:13 152:20 155:18 164:6 193:10 195.17 197.6 201.4 dealing (12) 5:20 35:22 44:5 87:8 139:16 143:3 144:15 160:12 168:15 192:20 199:14 201:6 deals (2) 106:17 194:13

dealt (6) 38:11 55:18 56:3 177:24.25 199:21 debrief (3) 23:5.7.8 debris (2) 172:4 203:17 december (3) 5:25 36:11 127:9 decide (3) 29:16 60:8 141:9 decides (2) 149:1 189:5 deciding (4) 60:7 84:24 103:17 204:4 decision (16) 34:25 65:17 73:4 84:12 104:17 105:6.10.20 126:16 157:1 163:13 171:19 184:8 194:17 203:14 204:11 decisionmaking (5) 40:22 91:9,17 157:18 195:1 decisions (3) 45:24 105:15 185.6 deck (1) 112:3 declaration (3) 36:10,23 41:11 declare (5) 20:14 37:1,5,15 39:11 declared (7) 6:1 38:1 40:12 41:1,5,6 125:5 declaring (5) 27:16 37:3 38.15 39.21 40.21 declined (1) 99:13 decreases (2) 55:15,16 dedicated (5) 57:7.9.10.12.17 deemed (1) 132:20 deescalated (1) 197:23 defend (1) 20:15 defined (1) 129:1 definition (3) 27:15 38:14,24 delay (2) 16:5 139:19 delays (4) 19:8,9 136:16 138:25 deliberately (1) 156:17 deliver (6) 34:15 71:7,14,17 79:21 192:2 delivered (9) 33:17 35:25.25 44:8 57:15 59:6.8 156:22 199:2 delivering (11) 3:21 4:10 34:8 44:25 46:5 79:2 99:4,5 109:21 121:2 131:4 delivers (1) 4:6 delivery (1) 78:9 demand (1) 67:18 department (16) 2:11 32:24,25 33:5 34:21 35:2,14 36:1,3 38:13 52:16,24 59:15 61:20 62:9 128:11 departments (3) 3:20 36:9 42:1 depended (2) 101:21 137:16 depending (2) 132:9 149:20 deploy (7) 37:8 101:9 102:7 105:23 106:6 137:14 141:10 deployed (16) 79:24 101:13 104:25 105:7.9 109:14.17 113:5,14 115:9 116:20 117:4,9 153:20 209:6,11 deploying (1) 110:4 deployment (4) 98:10 103:11 112:20 141:5 described (8) 70:8 75:11 91:6 120:9 155:13 178:1 179:11 188:14 describing (1) 183:20 descriptions (1) 157:13 design (3) 52:14 66:18 111:25 designated (1) 11:23 designed (4) 44:16 111:21 146:20 179:14 desirable (3) 122:5 124:5,5 despite (2) 19:2 159:10 detail (14) 22:6 25:21 39:13.15 43:5 45:6 53:2

74:8 127:3 133:10 162:25

184-18 185-5 196-9 detailed (4) 7:13,19 60:2 118:9 details (8) 26:22 76:21 84:22 118:11 194:10.14.15.18 detect (1) 174:22 detected (2) 174:14,19 detecting (1) 174:25 detection (2) 10:25 174:21 determine (1) 65:7 determines (1) 202:7 determining (2) 172:8 195:15 detrimental (1) 116:16 develop (2) 15:23 146:2 developed (3) 21:5 160:17 181:16 development (2) 160:17 100.18 develops (1) 28:8 deveran (3) 94:11 98:5,9 dft (5) 34:18 35:17,19 58:25 61:22 dfts (1) 33:7 dial (2) 71:15 147:21 dialled (2) 81:16,17 diary (1) 138:14 didnt (47) 21:14 45:23 46:7 49:13 60:9 67:24 68:12 70:7 71:12 74:13 81:8 83:17 89:15,16,20 90:3 91:13.14.16.19.21 93:1 94:9 95:20 100:17 101:4,21 117:2 129:1 139-11 154-20 155-4 163:18 165:13 169:16 170:23,25 171:13 172:19 183:24 184:4 188:7 190:6 192:13 198:21 201:10 203:12 difference (10) 36:13 40:5 124:22 140:17 142:18 165:6 189:2 208:4 209:8,9 different (26) 3:11 11:20 12:24 14:5 68:12 71:2 76:7 82:10 104:23 120:11 125:16 132:13,14 133:22 151:6 153:14 154:5,12 156:19 160:22 181:24 182:16 185:4 192:17 196:14 197:4 differently (1) 140:8 differing (1) 130:20 difficult (12) 12:7 13:7,19,20 70:13 87:24 92:25 108:5 158:3 171:18 184:3 200:19 difficulties (10) 12:11,19 14:6 35:22 121:8 147:8 161:17 167:7 192:10 206:15 difficulty (3) 59:12 149:7 158:1 digital (1) 166:3 direct (2) 165:5 182:4 directed (2) 35:17 48:24 directing (1) 169:10 direction (1) 79:17 directly (4) 121:4 163:23 175:2 187:12 director (10) 33:19 34:12 35:10 44:3 51:25 52:22 82:3,6 133:20 134:6 disadvantage (1) 185:7 disagree (1) 62:18 disclosed (8) 5:2 19:12 35:6 69:14 74:18 151:5 153:16 179:16 disclosure (2) 124:9 200:9 discussed (11) 13:17 31:9 34:24 36:10 126:3 139:4 141:20 145:8 158:1 193:15 199:5 discussing (4) 91:14 103:16 120:4 161:17 discussion (4) 31:16 77:8,15 189:24

dispatched (1) 154:8 displayed (1) 170:2 displaying (1) 17:25 dispute (1) 28:6 distinct (1) 10:17 distinction (2) 6:17 36:20 distinctions (1) 36:21 distraction (1) 201:14 distress (35) 12:9 13:13.13.23 16:14.22 17:11 24:7.10 39:3 74:2 85:19 119:11 126:9 127:5.11 152:24 153:14 156:3,20 157:18 161:22 165:24 176:25 194:7 195:15,16 196:21 197:21 198:19 200:17 202:4,6 203:19 210:4 distressing (1) 12:8 diversion (6) 115:9 121:9,13,16,25 122:7 divisional (2) 25:25 29:2 dl (1) 80:5 document (36) 14:22 15:15,16,20 18:18 19:20 20:8 22:3 23:3,15,17,19 25.22 38.12 22 53.13 54.1 125.3 128.21 130.28 137:23 141:25 143:19 144:18 169:21 170:1 186:10 194:12.13 195:3 196:5.14 197:15 198:10 207:8 documentation (3) 130:8 151.4 152.5 documented (1) 117:15 documents (11) 5:2 15:7 19:15 20:6 21:20 31:19 34:6 35:8 45:8 66:24 95:21 does (31) 3:7,9,10 24:16 55:4,15 61:22 82:7 85:14 107:11,13 109:1 111:22 119:20 129:23.24 135:15 141:14.14 142:16 143:25.25 144:1 149:15 159:14 193:11,12 195:11,12 196:15 208:20 doesnt (24) 13:11 24:17 37:14 80:10 85:7 109:22 114:15 124:1 131:6 132:7 148:15 153:18 180:7 185:5 190:8 193:7.10.13 194:15.25 195:10 196:16 197:10 203:21 doing (14) 9:2 26:10,19 28:14 30:6 44:17 59:5 85:5,15 86:8,14 135:17 143:24 206:20 domain (6) 32:15 34:13 45:2 115:11 120:12 142:23 done (26) 30:12 41:9 44:18 48:17 50:20 53:24 61:23 72:24 85:1 88:13 89:25 90:17 91:2 92:21 135:3 140:7 143:22 151:7 152:25 164-3 165-4 172-20 180-21 183:22 194:14 198:17 dont (74) 6:5 23:1.10.19 26:9 28:6.13.18.19 31:20 32:21 34:2.22 36:5 40:4 43:25 45:19 48:4 53:12 55:8,8,16 62:18 66:20 67:21.21 68:11 70:2 74:7 76:18.21 77:18 78:4 84:22 85:21 86:3.3 89:25 90:23 91:2 93:7.23 96:19 97:21 99:15 107:12 108:1.16 116:19.21 119:16 125:9 126:23 128:24 133:10 134:14 136:19 138:15 154:9 155:14 157:6,16 158:19 161:19 165:7.11 167:18 175:12 176:19 181:14 189:2 190:23 191:8 210:9 door (1) 72:13

doubt (3) 15:4 47:5 151:10 dover (96) 17:25 19:2 20:21,22 23:19,21 27:19 32:9 38:18 42:23 63:20 64:17 65:12.13.20 66:4 67:4 68:24 71:21 72:20 73:9.15 74:11.14 75:8,10,14 77:8,11,16,17 78:1,3,5,11,13,14,16 80:6.10.15 81:3.8.13 82:18.20.20 83:2.12.14 84:9 85:10 86:2 10 14 25 87:3.5.11 95:11 96:14,16,25 97:2,12,15 100:25 101:1 106:18 107:12,15 108:17 110:11 112:24 118:15 121:3 126:9 138:24 142:20 150:6.7.13.24 158:14 159:10.12.21.24 166:23.24 167:13 169:16 187:22 189:19,25 190:15 dovers (2) 72:25 136:23 down (17) 17:2,12,14,22 24:6 26:24 52:3 67:20 72:8 80:4 91:7 97:5 164:7 172:9 174.12 197.19 204.16 downgraded (1) 195:16 downs (5) 86:19,20 159:6 186:14 190:6 downwards (1) 195:16 dr (2) 134:5 135:7 draft (3) 47:20 51:5,16 drawing (3) 68:18 104:13 143.6 drawn (4) 92:9.13 142:9 143:14 dream (2) 103:20,21 drift (2) 158:24 168:18 drive (1) 65:23 driven (1) 72:18 drone (1) 32:12 drones (3) 118:12,25 120:24 drop (2) 8:2 18:1 dropped (1) 68:4 due (12) 8:5 21:7,18 31:1 47:23 68:8 110:25 115:8 117:2 120:25 146:9 178:13 duplicate (8) 193:9 195:11,17 197:12 198:23 199:9 206:16.18 duplication (1) 199:21 duplications (1) 17:16 during (38) 4:4,22 8:1,6 10:2,3,7 16:21 31:3 35:4 39:10,24 41:14 44:13 52:7 58:15 65:3 78:24 84:20 87:13 96:20.21 100:20 103:19 112:23 116:8 117:6 129:3 133:5 138:11.15 153:7 183:25 184:3 187:23 190:17 202:6 205:8 dutch (1) 115:20 duty (10) 74:16 82:3,6 84:1 88:15 93:20 94:5,7,25 185.10 dynamic (4) 104:17 105:6.15.20 dynamics (1) 28:9 e (1) 211:1 earlier (28) 25:14 27:11 31:22.25 45:13 51:5 65:6 66:10 68:21 74:7 128:13 136:17 140:6,7,16,18,22 141:4.5 152:20 164:10 177:23 179:16 189:24 194:9 206:24 207:13 209:6 earliest (1) 59:9 early (17) 2:17 14:3 21:9 37:18 77:5 80:23 81:23 89:17 101:7 102:12 137:13,14 139:4 166:23 182:7,10 209:4 ease (1) 52:16

east (1) 69:22 eat (1) 29:24 echoed (1) 22:7 educated (1) 136:5 effect (16) 4:19 54:4 59:13 82:7,8 86:21 96:15,17 102:10 111:1 120:11 130:14 144:7 169:10 186.25 202.8 effective (11) 16:17 22:17 34:16 68:22 98:18 100:15 143:24 157:24 171:1 174:20 175:25 effectively (21) 2:10 36:24 48:19 52:17 58:12 69:18 70:21 100:11 127:14 133:24 142:14 144:11 147-1 148-8 153-9 162-11 173:20 174:24 181:15 183:17 200:19 effectiveness (5) 61:12 174:9 176:13 203:25 204:9 effects (3) 39:6 116:16 138:25 efficiency (1) 61:11 efficient (1) 34:15 efforts (1) 149:8 eg (1) 170:17 eight (1) 73:18 either (9) 45:8 49:13 79:18 88:20.24 113:5 149:18 160:6 178:12 elected (1) 17:14 element (4) 33:20 71:1 162:9 196:2 elements (5) 29:4,9 64:6 160:20 203:3 elicit (2) 95:20,24 else (5) 106:14 108:25 135:2 177:19 209:13 elsewhere (5) 10:23 73:8 97:12 121:3 159:25 email (9) 25:23 33:18 38:10 40:17 46:18 79:8 80:5 136:20 182:13 emailed (1) 46:7 embark (2) 112:4 126:23 embarked (1) 183:5 embedded (1) 57:15 emergence (1) 14:11 emergency (20) 11:24 37:10 38:7.24 39:6 60:12 61:15 85:18 147:5 148:1 149:16,17,18,20 158:6 179:25 180:5 181:25 202:23,25 emphasised (1) 35:10 employed (2) 1:20,23 employee (1) 29:9 empowered (1) 104:2 empowerment (1) 84:6 enable (6) 53:22 71:5 115:10 121:16 162:5 200:5 enabled (2) 39:11 102:6 enables (4) 64:10 137:25 146:2 161:1 enabling (1) 69:16 end (6) 6:13 8:17 36:17 157:14 177:15 205:3 ending (1) 16:1 endorse (1) 103:23 endurance (1) 115:3 enforcement (4) 47:23 98:20 197:2 200:6 engage (2) 121:4 130:23 engaged (3) 46:11 127:23,24 engagement (10) 3:18 19:7,16 121:21 127:22 131:24 132:22 150:9 168:5 201:1 engaging (1) 3:19 engineer (1) 116:13 english (13) 3:22 8:6 12:20.24 37:15 65:10 68:6 125:6 140:10 146:8 149:19

159.2 202.9

handed (1) 187:7

161:2,21	45:20 68:7 69:14 75:10	191:11
enhanced (3) 43:7,18 118:24	78:24 81:10 83:22 90:2,16	explained (16) 6:25 54:6
enlarge (2) 7:18 30:19	95:14 97:23 102:16 103:2	61:25 83:14,22 88:11 92:3
enormous (2) 68:2 126:4	105:19 106:5 108:9 110:19	112:1 127:8 128:5,13
enough (7) 77:11 78:1,13	111:17 120:10 121:10,14	137:1 140:1,20 159:9
81:13 82:20 165:20 194:17	123:4 126:19 127:7 128:12	168:18
ensure (18) 4:6 21:4 44:7	130:12 133:14 134:2	explains (4) 41:23 42:7 54:4
45:17 52:18 53:23 58:18	137:11 138:3 140:4	197:20
60:3 71:17 79:21 98:17	145:9,13 153:16 154:16	explicitly (2) 83:8,10
100:15 102:9 194:16	156:8 159:6 162:1,1	exponential (1) 6:25
198:15,17 200:16 205:11	163:1,18 167:16 169:13	exposure (3) 21:7 60:17
ensuring (4) 2:11 3:20 44:8	175:14 190:5 195:25	156:2
47:7	200:12 204:8,13 209:19	expressed (4) 24:17 34:19
enter (2) 140:24 202:2	210:10	114:13 179:17
entered (5) 92:6 143:10	evidenced (1) 44:17	expressing (2) 25:12 63:19
144:6 166:15 185:13	evolution (1) 151:14	expressly (3) 163:19
entering (3) 80:20 190:22	evolve (2) 45:14 207:5	165:13,14
191:5	evolved (1) 150:18	external (1) 58:18
enters (1) 102:7	evolving (7) 28:25 35:12	extract (1) 30:20
entirely (1) 86:14	36:7 46:23 112:9 151:12	extremely (3) 163:5,8 178:1
entitled (1) 23:5	180:15	eye (1) 110:5
.,		eye (1) 110.5
entrance (1) 107:14	exact (2) 99:1 181:14	
entries (3) 87:15 184:5	exactly (8) 25:11 43:15 50:3	F
188:20	100:21 138:8 140:3 141:6	
entry (6) 30:24 185:16	181:24	face (10) 122:8 153:19,22,2
186:1,12,19 187:12	exaggerate (1) 154:4	154:14 155:2,10,23 180:1
entry143627 (1) 142:2	exaggerated (3) 156:3	207:3
environment (1) 173:8	157:13,17	faced (2) 6:12 121:8
epe (1) 18:23	exaggeration (4) 152:23,24	facilitate (1) 121:21
equipment (8) 2:12 10:23	154:9 156:25	.,
11:9,10,12 14:8 105:17	example (52) 5:19 8:1,11	facilities (6) 29:24 37:23
126:24	13:2,6 14:25 21:13,13	39:7 123:14 124:11 202:5
equivalent (2) 33:2 107:4	23:25 24:1 29:6,10 31:7	factor (3) 119:23 156:3
,		204:7
error (4) 77:23 166:3	35:16,24 37:7 48:24 52:10	factored (1) 204:11
190:13,17	55:7 61:4 62:10 69:6	factors (2) 99:9 108:8
errors (1) 191:1	75:11,13 76:18 81:22	failure (5) 20:14 24:9 141:2
escalate (1) 93:8	84:11 86:5,6 92:2 96:11	176:12,14
especially (1) 67:16	112:19 113:16 115:18	failures (1) 177:5
essentially (1) 83:23	120:24 132:10 135:5 150:2	fair (29) 4:13,16,23 11:5
establish (1) 63:17	152:3 154:21 160:2 164:23	13:15,24 14:4 22:7,9 23:1
establishing (1) 57:7	178:5 181:10 182:1 185:23	26:12 27:24 54:10,12
establishment (1) 57:5	187:17,23 188:21 203:24	70:5,11 72:1,4 74:12 88:1
estate (1) 42:10	207:21 209:10	
estimate (1) 42:10 estimate (5) 106:17,19	examples (2) 59:7 153:11	90:4 102:24 108:22 137:1
107:5,11 108:16		158:13 165:16 177:16
estimates (1) 108:13	exceeded (1) 105:20 exceeds (1) 112:21	189:23 201:12
		fairly (2) 14:2 32:22
estimating (1) 13:6	excellent (1) 161:10	false (1) 157:3
etc (34) 10:25 20:13 21:7	exchange (2) 63:16 87:23	familiar (6) 4:14,17 15:4
26:17 37:7 40:4 42:11	executive (2) 31:10 32:4	24:13 167:1 186:9
51:14 65:1 74:3 79:20 85:8	exercise (17) 51:17 56:19	family (1) 209:16
95:5 97:9 101:16 107:23	71:24 72:2 91:13,17	far (49) 8:12 13:24 23:9 38:
110:6 111:13 112:15	130:13,23 131:20,22	39:17 40:19 43:19 45:21
121:11 130:9 132:19	132:9,10,12,15,21,21	48:5 68:15 86:9 90:6 91:4
138:23 145:11 150:21	133:6	95:9 98:22 99:9 100:16
152:9 160:19 169:19	exercised (1) 21:2	
170:18 171:17 184:22,22	exercises (7) 130:11,19	101:17 105:24 110:17
		A 4 4 6 4 6 4 5 5 5 5 5 5 5 5 5 5 5 5 5 5
186.23 188.1		
186:23 188:1	131:1,9,11 132:14 133:2	129:16 134:20 138:16,22
even (8) 11:8 65:22	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25	129:16 134:20 138:16,22 140:12 141:16 144:5
even (8) 11:8 65:22 105:18,19 148:19 162:6	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 39:10 existed (3) 39:10 202:23 203:1	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 events (11) 4:15 5:5 7:3	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14;18 68:5,5 92:4,8,12 113:18	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113;7 114:7 127:23 130:18 155:16 138:15 138:12 events (11) 4:15 5:5 7:3 37:16 51:11 100:21 124:15	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expectation (1) 185:18	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 feature (2) 153:2 155:19 feedback (3) 25:17 135:12
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:11 00:21 124:15 134:3,4 180:8 201:19	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 66:5, 92:4,8,12 113:18 expected (3) 7:11 9:17	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningeary (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 events (11) 4:15 55 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 39,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expectation (1) 185:18 expectation (1) 185:18	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 133:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 evert (2) 113:19 163:3 evert (10) 13:12 25:2,18	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expectation (1) 185:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3 every (10) 13:12 25:2,18 48:17 52:19,19 58:13	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 existid (2) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 experience (18) 13:4 53:10	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 133:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 evert (2) 113:19 163:3 evert (10) 13:12 25:2,18	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expectation (1) 185:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 fet (3) 74:15 76:19 81:10 ferries (1) 2:19
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3 every (10) 13:12 25:2,18 48:17 52:19,19 58:13	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 existid (2) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 experience (18) 13:4 53:10	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 11:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 felt (3) 74:15 76:19 81:10 ferries (1) 2:19 few (5) 7:10 59:3 64:4 81:1
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 138:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 evert (2) 113:19 163:3 everty (10) 13:12 25:2,18 48:17 52:19,19 58:13 109:25 138:15 154:13	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expectation (1) 185:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 expecting (2) 142:10 165:15	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 157 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 felt (3) 74:15 76:19 81:10 ferries (1) 21:9 few (5) 7:10 59:3 64:4 81:1 136:8
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 events (11) 4:15 55:7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3 every (10) 13:12 25:2.18 48:17 52:19,19 58:13 109:25 138:15 154:13 everybody (10) 6:24 29:16 69:17 85:14 106:14 108:25	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 39,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expectation (1) 185:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 experience (18) 13:4 53:10 60:1,17 62:12 84:15 85:5 86:6,7 92:7,23 104:13,20 105:5 108:12 110:6 122:5	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 fet (3) 74:15 76:19 81:10 ferries (1) 2:19 few (5) 7:10 59:3 64:4 81:1 136:8 fields (1) 184:17
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningcarly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 event (11) 4:15 55 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3 every (10) 13:12 25:2,18 48:17 52:19,19 58:13 109:25 138:15 154:13 everybody (10) 6:24 29:16 69:17 85:14 106:14 108:25 132:8 143:11 208:9 209:19	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expectation (1) 185:18 expected (3) 7:11 9:17 185:15 expected (3) 7:11 9:17 185:15 expected (18) 13:4 53:10 60:1,17 62:12 84:15 85:5 86:6,7 92:7,23 104:13,20 105:5 108:12 110:6 122:5 153:6	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feedlack (3) 25:17 135:12 206:12 feeding (1) 24:20 fett (3) 74:15 76:19 81:10 ferries (1) 2:19 few (5) 7:10 59:3 64:4 81:11 136:8 fields (1) 184:17 figure (1) 105:14
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 154:13 109:25 138:15 154:13 everphody (10) 6:24 29:16 69:17 85:14 108:25 132:8 143:11 208:9 209:19 everybody (1) 204:25	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 experience (18) 13:4 53:10 60:1,17 62:12 84:15 85:5 86:6,7 92:7,23 104:13,20 105:5 108:12 11:0:6 122:5 113:6 experienced (2) 27:9 105:3	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 11:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 fett (3) 74:15 76:19 81:10 ferries (1) 2:19 few (5) 7:10 59:3 64:4 81:11 136:8 fields (1) 184:17 figure (1) 105:14 figures (2) 6:23 68:11
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 133:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 evert (2) 113:19 163:3 every (10) 13:12 25:2,18 48:17 52:19,19 58:13 109:25 138:15 154:13 everybody (10) 6:24 29:16 69:17 85:14 106:14 108:25 132:8 143:11 208:9 209:19 everybody (11) 204:25 everybody (11) 204:25 everybody (11) 24:25	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expectation (1) 185:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 experience (18) 13:4 53:10 60:1,17 62:12 84:15 85:5 86:6,7 92:7,23 104:13,20 105:5 108:12 110:6 122:5 153:6 experienced (2) 27:9 105:3 expert (2) 122:1,10	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 157 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 fetl (3) 74:15 76:19 81:10 ferries (1) 2:19 few (5) 7:10 59:3 64:4 81:11 136:8 fields (1) 184:17 figure (1) 105:14 figures (2) 6:23 68:11 final (5) 25:22 51:5 55:22
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1.2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 133:15 185:12 events (11) 4:15 5:5 7:3 37:16 51:1 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3 every (10) 13:12 25:2,18 48:17 52:19,19 58:13 109:25 138:15 154:13 everybody (10) 6:24 29:16 69:17 85:14 106:14 108:25 132:8 143:11 208:9 209:19 everybody (1) 204:25 everybody (1) 1:4 everything (7) 33:24 35:3	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 66:5, 92:4,8,12 113:18 expectation (1) 185:18 expectation (1) 185:18 expecting (2) 142:10 165:15 experience (18) 13:4 53:10 60:1,17 62:12 84:15 85:5 86:6,7 92:7,23 104:13,20 105:5 108:12 110:6 122:5 153:6 experienced (2) 27:9 105:3 experience (2) 122:1,10 expertise (4) 42:10	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 11:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 fett (3) 74:15 76:19 81:10 ferries (1) 2:19 few (5) 7:10 59:3 64:4 81:12 136:8 fields (1) 184:17 figure (1) 105:14 figures (2) 6:23 68:11
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 1147 127:23 130:18 155:16 183:15 185:12 event (11) 4:15 55:7 3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3 every (10) 13:12 25:2,18 48:17 52:19,19 58:13 109:25 138:15 154:13 109:25 138:15 154:13 everybady (10) 6:24 29:16 69:17 85:14 106:14 108:25 132:8 143:11 208:9 209:19 everybadys (1) 204:25 everybadys (1) 204:25 ev	131:1.9.11 132:14 133:2 exercising (5) 131:12.24.25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 existi (2) 3:9.10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5.13 26:14;18 68:5.5 92:4,8,12 113:18 expectation (1) 185:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 experience (18) 13:4 53:10 60:1,17 62:12 84:15 85:5 86:6,7 92:7,23 104:13,20 105:5 108:12 110:6 122:5 153:6 experienced (2) 27:9 105:3 expert (2) 122:1,10 expertise (4) 42:10 178:5,13,17	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 fetl (3) 74:15 76:19 81:10 ferries (1) 2:19 few (5) 7:10 59:3 64:4 81:11 136:8 fields (1) 184:17 figure (1) 105:14 figures (2) 6:23 68:11 final (5) 25:22 51:5 55:22
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningcarly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 114:7 127:23 130:18 155:16 183:15 185:12 event (11) 4:15 55:7 3: 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3 every (10) 13:12 25:2,18 48:17 52:19,19 58:13 109:25 138:15 154:13 everybody (10) 6:24 29:16 69:17 75:14 106:14 108:25 132:8 143:11 208:9 209:19 everybodys (1) 204:25 everybodys (1) 204:25 everybodys (1) 204:25 everybodys (1) 204:25 everybodys (1) 204:25 everybodys (1) 33:24 35:3 69:11 70:24,24 153:21 183:10	131:1,9,11 132:14 133:2 exercising (5) 131:12,24,25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 exist (2) 3:9,10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5,13 26:14,18 68:5,5 92:4,8,12 113:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 expecting (2) 142:10 165:15 experience (18) 13:4 53:10 60:1,17 62:12 84:15 85:5 86:6,7 92:7,23 104:13,20 105:5 108:12 110:6 122:5 153:6 experienced (2) 27:9 105:3 expert (2) 122:1,10 expertise (4) 42:10 178:5,13,17 experts (1) 53:17	140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feet (3) 74:15 76:19 81:10 ferries (1) 21:9 few (5) 7:10 59:3 64:4 81:12 136:8 fields (1) 184:17 figures (2) 6:23 68:11 final (5) 25:22 51:5 55:22 132:7 152:18
even (8) 11:8 65:22 105:18,19 148:19 162:6 208:1,2 evening (14) 5:1 51:14 60:25 75:4 85:20 89:14,17 93:3 94:8 108:4 116:19,24 138:15 139:5 eveningearly (1) 117:1 event (12) 19:14,24 39:18 52:19 89:3 113:7 1147 127:23 130:18 155:16 183:15 185:12 event (11) 4:15 55:7 3 37:16 51:11 100:21 124:15 134:3,4 180:8 201:19 ever (2) 113:19 163:3 every (10) 13:12 25:2,18 48:17 52:19,19 58:13 109:25 138:15 154:13 109:25 138:15 154:13 everybady (10) 6:24 29:16 69:17 85:14 106:14 108:25 132:8 143:11 208:9 209:19 everybadys (1) 204:25 everybadys (1) 204:25 ev	131:1.9.11 132:14 133:2 exercising (5) 131:12.24.25 132:7 133:4 exhaustion (1) 18:1 exhibiting (1) 21:6 existi (2) 3:9.10 existed (3) 39:10 202:23 203:1 existing (1) 177:1 exists (1) 3:13 expanding (2) 171:4 175:16 expect (11) 24:25 25:5.13 26:14;18 68:5.5 92:4,8,12 113:18 expectation (1) 185:18 expected (3) 7:11 9:17 185:15 expecting (2) 142:10 165:15 experience (18) 13:4 53:10 60:1,17 62:12 84:15 85:5 86:6,7 92:7,23 104:13,20 105:5 108:12 110:6 122:5 153:6 experienced (2) 27:9 105:3 expert (2) 122:1,10 expertise (4) 42:10 178:5,13,17	129:16 134:20 138:16,22 140:12 141:16 144:5 146:12 149:8 150:18 156:11 159:20 161:11 167:15,18 168:3 171:11 177:8 182:20 190:20 191:3,4,9 193:25 201:13 fashion (2) 130:20,20 fast (4) 2:18 41:12 110:24 111:5 fatality (1) 52:7 feature (2) 153:2 155:19 february (1) 1:17 feed (1) 119:9 feedback (3) 25:17 135:12 206:12 feeding (1) 24:20 fett (3) 74:15 76:19 81:10 ferries (1) 2:19 few (5) 7:10 59:3 64:4 81:12 136:8 fields (1) 184:17 figure (1) 105:14 figures (2) 6:22 51:5 55:22 132:7 152:18 final(5) 26:21 26:41

fine (2) 33:25 82:18 finished (1) 187:25 fire (7) 37:7 60:13 61:7.9.12 62:11 182:2 firmly (1) 93:6 first (50) 1:14 5:9,18 11:18 12:20 14:11,21 16:5 18:9.19 19:1 31:7.19 48:6 56:8 63:13 69:5 73:22 86:11 88:9.23 100:12 101:4 119:7 122:17 135:21 139:11 145:13 158:15 160:12 162:25 163:3,5,22 168:15,24 169:3,4,8,22,24 176:21 177:20 183:3 188:18 189:17 192:24 198.16 206.3 207.20 firstly (2) 151:3 184:15 fishing (1) 174:15 fit (1) 84:7 five (5) 16:1 58:13 73:17 110:20 174:12 fixedwing (15) 32:12 101:16 114:8,14 115:2,7 116.5 9 24 117.7 118.12 119.1 120.6 141.22 142.24 flamant (2) 163:14,20 flew (1) 175:1 flex (1) 64:15 flexibly (1) 71:10 flight (2) 114:14 116:5 flowchart (3) 133:18,22 195.22 fly (8) 114:8.15 115:8.14 141:22 142:24 175:15,22 flying (1) 118:13 focus (7) 5:6 65:9 73:5 74:11,11 201:5 207:12 focused (3) 17:14 33:22 69:8 focuses (1) 67:19 focusing (1) 132:15 follow (3) 23:6 68:12 160:8 followed (7) 68:3 90:20 134:20 168:18 170:20 193:8 194:16 following (6) 9:1 48:22 71:11 93:25 110:22 120:13 follows (1) 94:19 foot (2) 38:22 98:7 footprint (1) 171:23 force (49) 5:20 17:5.24 42:24 44:15 50:11 98:1,12,15 99:11,14,18 100:13,23 103:16 104:14 110:9,19 111:11,24 120:20 122:20 123:4,7,13,17 124:1 125:11,19 129:8 130:14 132:11 134:11 137:20 140:8.12.17 144:23 162:20 182:13.18.21 191:3.5 197:2,8,15,24 200:6 forced (1) 29:13 forces (5) 43:12 111:19 120:15 201:3.16 forecast (1) 64:20 foreseeable (3) 81:11 116:15.23 form (2) 124:12 194:25 formal (7) 50:10 130:13 177:15,18,21 185:16 187:15 format (1) 151:6 forum (2) 37:11 135:11 forward (10) 2:22 41:12 44:6 118:3 125:24 126:1 130:24 131:8 135:20 160:11 found (8) 73:10 150:10 153:6 168:17,20,24 169:8 174:15 foundation (1) 202:11 four (7) 16:22 37:18 49:4 75:16.25 104:8 110:21 fourth (3) 40:18 116:3 147:22 framework (1) 63:17 find (3) 72:7 176:12 203:12

finding (4) 83:24 115:7 france (6) 5:19 47:24 131:12 132-1 144-19 23 frankly (1) 201:5 frenchs (1) 137:9 front (1) 176:20 frontline (1) 156:18 frozen (2) 18:23,24 fruit (1) 41:18 191:25 fulltime (1) 109:13 178:18 184:17 147:25 172:24 functions (1) 73:8 fundamental (1) 71:6 funded (1) 61:15 206:21 207:1 202:7 180:9,10 206:21 gap (1) 88:6 gathered (1) 155:10 171:12 generalities (1) 143:4 geographic (1) 39:4 174:3 george (1) 186:18 152:11 163:13 135-11 157-13 155:4.14 163:12 165:13

french (68) 16:6 19:2,7,16,25 21:9 48:25 51:6.7.13 53:25 54:5,6,8,20,21 55:1 84:10.20 85:11.15 101:8,12,22,25,25 102:4,12,17,21,22 103:7 109:15 115:18 131:11 132-16 133-1 136-16 137:2.17 138:7.10 139:7.11 140:16 141:18 143:21 144:6,16,25 147:4 148:22 149:20 150:10 159:8,17 163:14,19,23 164:18,21,24 165:15 167:5.8.12 168:5 174:15 fruition (3) 57:11 117:17 full (14) 5:4 23:5,7,8 29:21 49.11 54.19 57.16 74.5 7 77.13 85.9 169.23 176.14 fully (10) 36:2 83:18 99:17 116:16.21 127:9 134:10.25 function (4) 71:14 82:4 functionality (1) 148:20 functioning (2) 98:13 99:3 funding (6) 35:17,21 36:1,4 further (16) 9:21 11:17 35:16.21 52:3 54:25 75:6 85:23 94:13 95:24 127:3 161:5 168:14 187:7 188:7 future (9) 63:6 118:23 125:21 131:9 132:25 133:7 gain (3) 85:5 149:6 160:21 gaining (2) 86:6 134:2 gangs (2) 28:16 45:16 gather (2) 148:11 150:11 gathering (3) 56:16 194:4,23 gave (3) 79:17 128:15 general (7) 17:5 41:25 45:5 67:6 80:19 203:20 207:7 generally (5) 12:11 15:23 156:13 169:16 177:12 genuine (2) 27:1 66:24 geographical (2) 171:23 geolocation (1) 160:21 get (21) 20:6,20,21 35:21 65:22 82:16 87:10 95:16 103:21 105:25.25 109:8 114:18 119:12 136:2 147:22 148:1,11 151:17 gets (2) 120:14 196:13 getting (7) 53:2 75:17 102:12 115:22 134:10 gibson (17) 76:18 83:14 86:14 91:16 103:15 104:11 139:5,6 140:4 142:16

gibsons (3) 86:24 154:17 190.1 give (17) 2:1 6:22 30:1 35:2 39:14 69:1 85:23 94:13 100:17 118:11 119:4 133:8 134:23 135:1,3 156:9 176:14 given (32) 4:13 7:9 10:17 43:20 44:2 46:14 59:7 85:7 90:5.25 121:20 125:17.21 127:8 137:5.18 138:10.16 147:20 154:14 155:16 156:8.12 157:22 163:14 169:15 170:12,21 174:23 177:7 182:18 199:12 gives (7) 64:1,15 89:5 90:22 147:1 148:8 173:6 iving (4) 58:25 106:5 154.15 170.9 glean (1) 158:5 gleaned (1) 86:23 global (2) 60:16 135:12 globally (2) 53:11 59:25 globe (1) 58:21 goes (8) 11:13 43:3 55:13 90:21 100:13 165:10 174:5 209-24 going (48) 3:23 5:4 9:6 15:10 20:5 22:5 27:4,12 30:2,3 38:10 53:25 54:23 63:10 65:22 68:24 69:7 71:20 74:10 80:14 87:19.20 88:4 89:19 95:13 98:17 101:23 103:12 106:13 110:24 116.25 119.22 126.16 128:4 129:5 130:1 138:2 140:10 142:24 151:18 162:24 164:6 165:18 177:7 189:10.23 200:23 204:24 gold (1) 38:5 golden (2) 156:23 157:8 gone (3) 64:12 146:1 191:23 good (27) 1:4,4,12 7:10 31:3 36:6 61:24.24 62:19 64:4 68:7 76:6 84:18 101:22 108:12 120:17 122:13 123:15,19 125:19,21 131:6,18 150:11 154:21 203:6,17 goodwin (1) 169:5 google (1) 152:15 governance (4) 52:23 124:12.13 160:19 government (4) 3:19 42:1 44:8 71:11 gps (1) 152:17 great (11) 22:3 25:21 39:15 44:18 53:1 105:4 107:20 112:3 200:13 201:4 210:5 greater (2) 89:5 150:18 greatest (1) 37:4 green (1) 27:10 grew (2) 7:2,4 grisnez (5) 19:14 150:13 163:19 164:1 168:6 ground (1) 203:4 group (1) 62:15 grow (1) 7:25 growing (1) 66:15 grown (2) 8:14 89:4 guess (4) 62:19 89:16 94:6 109:23 guessing (1) 179:3 guidance (20) 48:14 64:8 71:12 90:24 91:25 92:17 95:3.10 133:17 134:1 135:14 144:10.15 152:2 155:18 175:4 194:5,15 197:10 200:22 hadnt (4) 45:25 71:9 72:2 137:8 half (3) 76:1 86:13,21

hampered (1) 176:14

hand (2) 99:19 139:6

171:12 179:11 190:11

handover (2) 184:20 185:4 hang (1) 147:21 happen (5) 21:14 67:24 113:13 149:15 184:14 happened (18) 15:2 42:21 43:4 74:12 92:3 100:20 109:7 114:14 124:15 137:5 147:13 149:5 164:24 167:24 171:12 183:8 188-11 207-23 happening (3) 102:13,25 151:12 happens (2) 125:14 132:10 hard (1) 30:16 hasnt (3) 57:11 125:23 170:2 hats (1) 82:5 haven (1) 37:23 havent (3) 23:7 78:10 178:19 having (21) 18:5 38:4 39:13 45:16 47:5 50:15 71:11 74:16 75:19 89:22 93:11 105:3.4 112:7 119:9 120:10 136:22 146:7 153:4 164:16 205:2 hazards (1) 107:22 head (3) 2:7 15:13 96:19 headcount (3) 65:11 71:21 97:5 heading (9) 14:24 63:13 80:3 170:8,11 173:5 182:14 194:4 195:4 headings (2) 23:12 63:11 health (1) 37:6 healthy (3) 82:14,23,23 hear (4) 5:3 71:3 166:8 190:6 heard (33) 4:4 5:12 7:3,8 10:13 29:10,11 32:13 44:10 75:8 78:24 80:17 81:8,9 95:13 99:11 102:5 105:4 106:4 111:18 118:23 133:14 145:22 150:3 157:10 161:25 166:6,16,21 169:13 190:5 195:25 203:5 hearing (4) 12:8 70:12 157:6 166:8 heaviest (1) 8:17 heavily (1) 122:25 heavy (2) 7:5,7 height (5) 110:5 112:20,23 113:10.13 held (1) 91:9 helicopter (38) 69:10 70:7 114:16,21,24 115:3,10,13,16 116:20 117:10 159:1,4 169:1,9,12,15,17 170:21,25 171:12,19 172:1.22 173:2.11.20 174:20 175:1.15.22 187:18 189:4 203:12.15.25 204:10 208:9 helicopters (3) 44:22 101:16 176:12 helming (1) 12:12 help (17) 14:10 23:8,15 29:15,17,20 79:10 95:1 126:17 127:1 137:17 138:9 144:19 162:4 164:25 169:23 202:12 helpful (7) 18:13 20:4 22:10 71:25 141:10 193:23 210:11 hence (3) 62:21 72:15 80:22 here (33) 5:17 6:22 9:8 10:21 18:7 22:25 26:10 28:2.21 29:2 30:18 35:10 48:23 54:4.4 58:23 62:5 71:20 118:6,7 133:19 146:19 156:7 170:24 173:18 178:22 179:6 187:14 194:2 195:17 204:22 205:15 207:9 hes (5) 78:11 90:5 106:7 133:5 142:17 high (14) 9:23,25 10:5,8,8

151:9.10.18 152:2 157:11

161:19.23 162:17 163:2.5

168:25 172:13 17 25 174:6

183:2.17.17 186:8 187:18

189:4,13 192:2 193:25

159:1.24 160:7.16.18

176:13 178:4 179:8

180:4,10,22 181:23

27:8.14 33:12 38:14 41:3 im (16) 6:23 19:21 70:13 incidents (52) 15:22 16:22 infrastructure (5) 2:8 3:4,25 53:24 64:10 67:19 85:3 76:22 85:24 91:3 92:22 17:3.11.15 19:4 24:7.11 39:8 43:16 higher (4) 8:9,12 99:3 194:6 94:14 95:8 96:19 39:2 40:2 52:17 54:21 58:3 ingredients (2) 39:10 40:14 highest (4) 52:4 98:13 99:21 108:18.25 138:18 167:23 64:10 65:9 71:16 79:25 initial (2) 105:25 203:21 100:10 88:12 89:8 92:12.18 93:11 188:18 191:8 initials (1) 80:12 highlevel (1) 34:24 imagery (1) 118:15 98:15 104:1 111:9 initiated (1) 13:14 highlighting (1) 28:25 imagine (3) 25:12 108:1 144:8.20 164:20 183:19 input (5) 21:12 144:13,16 highpressure (1) 70:10 168:1 188:2,6,8 193:10,15 182:22 201:4 himself (3) 140:4 157:9 immediate (4) 109:19,21,24 194:2,8,10 195:11,17 inputted (1) 179:18 196:16 197:12 198:24 172:7 inq0001671 (1) 30:16 144:7 hindsight (5) 31:20 44:1 immediately (2) 109:22 199:9,11 200:1 204:23 ing00016724 (1) 30:18 66:3 108:5 161:10 183:21 205:2.8.12 206:12.17.18 ing0002061 (1) 76:24 historically (2) 85:2 125:23 immigration (1) 188:13 include (3) 39:2 107:11 ing0002064 (2) 77:7 80:3 imo (3) 58:11 62:22 135:5 inq0002065 (1) 79:5 history (2) 129:21 182:5 203:24 included (1) 43:10 inq0002351 (1) 141:23 hm (59) 3:20 4:3,6,10 18:9 imos (1) 60:3 19:13 32:6 35:13 impact (17) 32:1 37:4 123:12 includes (1) 170:14 ing00023523 (1) 141:24 136:22 138:24 139:20,21 37:1,14,19 39:25 44:11,20 including (13) 14:24 27:1 ing0002353 (1) 142:5 50:20 51:10 52:19 53:21 156:1 157:4.14.18 165:25 28:1,22 47:12 49:10 67:5 inq0002371 (1) 186:8 56:11 58:8 59:2 64:3 172.5 182.4 189.14 201.10 111-19 125-25 132-16 ing00023713 (1) 186:9 102:6.9 103:7.9 104:21 207:18 137:6 170:15 188:24 ing0004151 (1) 38:21 111:10 115:10 120:18 impacted (1) 172:6 incoming (2) 184:4 185:7 ing0004158 (1) 38:23 ing0004159 (1) 39:5 121:3 123:14 125:11 impacting (1) 67:3 incompatibility (2) 181:12 127:23 129:12 132:11.13 implement (3) 45:22 57:25 inq0004281 (1) 193:24 188:21 incompatible (1) 181:6 133:20 134:17 139:21 162:15 ing0004282 (1) 194:3 141:11 145:5 147:2 implementation (3) 20:25 inconsistent (2) 155:12 inq0004285 (1) 195:4 inq0004286 (1) 195:14 153:4,9 164:19,21 21:3 36:25 205:1 implemented (10) 49:11 incorporated (2) 133:16 178:14.25 180:9 181:16.18 inq0004501 (1) 192:24 198-18 200-9 205-11 55.25 56.23 57.1 59.11 134.7 ina00045012 (1) 193:7 206:20,23 209:15,20 126:12,13,18 162:14 incorrect (2) 13:10 165:23 ing0005661 (1) 100:22 ing0032871 (1) 197:14 hmcg (4) 31:1 197:24 176:23 increase (21) 7:1,12,22 8:7 implications (1) 40:21 198:11.15 31:12 32:11 35:21 36:2 inq0032873 (1) 197:18 hoc (1) 121:15 importance (5) 19:17 20:1 44:7.13 65:18 66:11.22 ina0032878 (1) 198:3 102:12 103:8 180:24 67:7 80:9 96:13,16,22,25 hold (2) 114:21 178:18 inq0033221 (2) 25:23 40:17 98:2 100:1 home (34) 6:1,4,19 7:9 8:25 important (18) 21:24 29:12 inq0033222 (1) 26:22 9.13 21.19 27.18 36.10 23 32.3 34.11 35.9 48.14 increased (6) 16:15 64:18 ing0033223 (1) 27:4 38:17 44:12 50:16 65:5.21 49:23 64:7 124:14 125:12 65:13 71:16 118:13 188:25 inq0033224 (3) 27:13 38:12 66:2,6 68:7 99:24 118:24 127:12 130:21 136:7 increases (4) 5:10,14 72:21 40:19 ing00332245 (1) 27:23 119:25 120:9,15,18,20 138:20 142:19 158:21 118:18 121:5 123:17 128:11 171:5 209:24 increasing (4) 9:11 33:14 inq0033231 (2) 14:20 22:5 importantly (2) 125:7 139:10 129:11,12 147:3 179:7 66:3 98:14 inq0033232 (1) 19:20 inq0033234 (1) 22:20 201:2 210:1 impression (2) 15:22 17:5 independence (3) 52:15 improve (4) 47:2 59:6 58:23 61:21 inq0033791 (1) 23:4 homework (1) 59:14 hope (3) 25:13 106:10 205:17 206:9 independent (10) 34:11 ing0033792 (1) 24:2 209:18 improved (6) 43:1 113:19 58:8.10.24 59:21 60:3.14 ing0033793 (1) 24:12 hoping (2) 108:20 129:21 188:25 189:11.13 206:6 61:20 62:3.13 ina0037951 (1) 169:21 ing0043421 (1) 49:2 hour (6) 106:23 107:8 improvement (3) 55:22 independently (3) 52:6 108:22 109:10,11 138:15 59:19 191:6 ing0043423 (1) 49:8 75:11 137:9 hours (11) 17:4 37:18 76:1 improvements (3) 137:3 indicator (1) 159:17 inq0043451 (1) 48:7 80:16 106:4 109:8,20 205:12 208:2 individual (9) 7:21 8:12 inq00434521 (1) 48:22 imrf (3) 134:5 135:7,18 118:14 138:12 139:8 23:18 78:25 80:18 85:2,22 inq0072791 (2) 14:19 18:19 174:14 inability (3) 20:15 146:11,22 121:16 188:8 inq0072792 (3) 16:1 18:21 hovering (2) 173:21 175:3 inaccurate (1) 12:25 individually (1) 208:3 19:21 however (8) 27:16 38:15 individuals (7) 12:15 60:16 ing0072793 (1) 16:20 inadequacies (4) 28:3,6,13,19 62:20 74:8 76:16 92:1 ing0072794 (2) 17:17 20:9 78:7 109:3 122:9 124:14 inq0072795 (1) 20:20 172:13,22 inadequate (2) 17:20 24:14 193:22 hubs (3) 69:15 70:20 88:5 incident (146) 2:9,23 ineffective (1) 24:14 inq0073811 (1) 196:7 huge (3) 7:12,22 89:19 4:15,22 5:1,12 6:1,5,7,9 ineffectiveinadequate (1) inq0073815 (1) 196:20 hugely (2) 161:19,24 14:18 17:13 20:15 inq0089051 (1) 51:3 20:12 humber (2) 16:11 69:25 21:11,15 25:4,18 27:13,16 inevitably (1) 10:17 ing008905106 (2) 56:7 207:9 hundreds (1) 112:12 29:7 33:22 36:11 inform (3) 27:18 38:17 96:2 ing008905115 (1) 53:16 hunter (2) 101:1 104:14 37:2.3.6.13.15.17 information (117) 12:25 ing0089055 (1) 51:24 38:1.5.9.15.21.25 39:12.21 hurricane (1) 101:2 13:4.9.22 17:19 19:18 ina00890558 (1) 204:21 hyperlink (1) 195:21 40:6,11,19,21,25 41:4,6,11 20:1,2,24 36:5 38:8 41:3 inq00890567 (1) 54:2 hypothetical (1) 109:4 42:12 43:22 45:10 46:22 47:23 51:6 54:14,18,25 inq00890577 (1) 205:25 47:10,12 51:11 52:7 55:14 55:8,9,11,22 56:15 68:13 inq0089441 (1) 128:8 58:4 59:17 60:9.21.24 63:5 74:18 75:20 76:10 77:13 inq0090061 (1) 133:13 1 64:2 67:3 69:21 71:25 84:20 87:23 92:9,20 93:5 inq0096491 (1) 41:22 72:3.25 89:6.7 90:19.23.25 101:8,19,21 102:18,23 ing00964915 (1) 43:4 iamsar (11) 25:20 48:14 64:8 91:10 92:3.24 95:4 97:24 103:5.9 104:18.20 120:19 ing00964918 (1) 43:9 153:20 172:24 173:7 99:12 100:5.6 109:15 126:14 128:1 134:18 136:1 ing0096492 (2) 41:24 42:21 174:17,23 175:4 201:24 110:18 122:18,25 123:5 137:6,25 138:21 139:1,19 inq0096493 (1) 42:7 202:1 126:3 143:18 145:21 140:21 141:4 142:17,19,21 inq0099571 (1) 98:4 icu (2) 160:21 161:1 146:1,13 147:11 149:16,25 143:6,9 144:5,7 145:11 inq0099572 (1) 98:8 idea (3) 133:8 136:2 157:3 153:3.5 161:14 147:18 148:2.6.7.12 inq0099573 (1) 98:18 identification (1) 138:5 163:4,10,16,20 166:17 151:17 152:8 153:4,25 inq0099811 (1) 50:13 identifications (1) 192:11 169:14 171:18 176:12.21 155:2.10.23 158:6.21 ing0100981 (2) 65:2 90:8 identified (14) 5:7 18:7 178:24.25 179:19.24 160:9 161:9 166:11 167:6 ing010098101 (1) 114:4 20:10 22:21 26:11 31:6,20 180:18.21.25 181:4.9 170:10.12.25 172:14 ing010098109 (1) 90:9 39:1 45:7 68:21 167:4 182:21 183:4,9,10 178:21 179:6,6,9,18 inq010098110 (2) 94:16 183:6 189:20 205:9 184:9,10,16 185:13,16,25 180:13,23,24 181:1 183:4 139:15 identify (3) 26:15 159:3 186:2,15,16,22 187:2,24,24 189:9,18 ing010098121 (2) 30:24 96:8 192.11 187:4,7,11,15,19,25 190:9,10,12,16,22 191:5 inq010098122 (1) 96:15 identifying (1) 29:3 189:17.19.20 190:16.20 193:17 194:4,4,5,22 196:9 inq010098124 (1) 49:18 identity (1) 147:1 191:12 195:15 198:22 198:6 199:25 202:3,14,22 ing010098128 (1) 56:21 ie (4) 66:8 98:19 99:10 199:15 202:10.25 204:19 203:4 209:5 ing01009831 (1) 118:4 137:19 207:24 209:1 informed (1) 171:19 ing01009852 (1) 146:5 iiic (2) 58:11 62:22

inq01009864 (1) 152:21 ing01009867 (1) 10:21 ing01009868 (1) 184:13 ing01009872 (1) 164:8 inq0100988 (3) 5:16 10:12 36:16 ing0100989 (3) 6:15 8:22 65:3 inq01009890 (2) 107:3 108:15 ing010098910 (1) 11:3 ing01009893 (1) 73:12 ing0101341 (1) 7:16 inq01013428 (1) 7:17 ing0103371 (1) 33:1 ing01033730 (1) 33:6 ing0104451 (3) 50:3,6 173:3 ing0104452 (1) 50:7 ing01044558 (1) 173:4 ing01044578 (1) 174:7 inq01044593 (1) 116:1 inq01044598 (1) 50:9 ing0107391 (1) 106:10 inq0107431 (1) 175:20 inquest (1) 20:16 inquiry (52) 1:6,13 4:4 5:2,7 6.25 7.3 8 9.22 19.5 12 24 20:17 29:11 32:13 35:5 37:17 40:6 44:10 49:4 61:5 63:2 67:2 69:14 71:23 74:19 75:19 91:11 94:3 98:23 102:5 107:21 112:1 118:17,23 121:10 125:10 145-22 150-3 151-5 156-24 162:4.22 176:22 179:16 185:21 191:22 199:4 200:8 203:5 209:13 210:16 inquirys (6) 80:14,17 124:9 125:12 158:23 183:7 insights (1) 134:3 inspectorate (2) 61:8,15 instead (1) 5:5 instigate (1) 58:18 instigated (1) 21:16 instilled (1) 155:24 instituted (2) 178:3,8 institution (1) 101:15 instruction (1) 46:14 instructions (4) 170:9,21 172:18 176:15 insufficient (1) 67:2 integrated (4) 150:25 151:11,13 158:12 integrating (1) 151:16 intelligence (3) 20:24 180:14 206:24 intelligent (1) 2:10 intends (1) 206:9 intensity (2) 27:14 38:14 intentionally (1) 13:1 interact (1) 161:8 interest (5) 34:17 61:13,16 62:19 126:11 interested (2) 20:9 37:17 interesting (1) 148:25 interestingly (1) 22:21 internal (12) 6:11 14:16 30:11 47:18 51:3 52:11 178:13 191:21 204:19.22 205:14 208:1 internally (5) 21:4 52:5 58:22 59:21 178:14 international (7) 15:14 25:19 52:23 62:23 135:8,11,14 internationally (1) 134:7 internetbased (1) 138:5 interplay (1) 99:9 interpret (1) 165:15 interpretation (4) 36:14 78:12 145:16 157:25 interrelationship (1) 182:12 into (45) 21:12 25:18 31:13 44:6 51:12 53:2 64:19 72:7 78:7 87:4.10 94:8.10 96:15,17 101:11 108:3,8

inq0100985859 (1) 201:20

109:1 111:1 118:22 127:3

128:7.22 133:16 134:16

135:14 142:9 143:10 144:13.16 148:25 150:18.25 151:18 156:4 160:22 162:20,25 166:15 171:7 179:18.24 204:11 207:4 introduce (1) 201:3 introduced (1) 205:11 introduction (3) 4:12 51:23 56:7 introductory (1) 56:8 invaluable (1) 119:6 investigation (10) 20:16 47:16 50:5,8 52:9,10 53:19 54:7 55:4 61:2 investigations (1) 58:2 investigator (1) 53:17 involve (1) 131:11 involved (30) 4:25 5:20 13:18 27:2 31:16,24 40:13 41:15 43:24 51:22 52:12 63:4 66:25 67:8 68:18,19 69:8 84:4 86:24 94:12 114:18 121:18 122:17 123-1 129-2 130-22 131-1 132.12 156.23 191.18 involvement (5) 14:3 51:13 54:5 85:25 122:20 involves (1) 197:20 involving (3) 96:13 130:15 194:2 ipads (2) 69:15 88:5 ipadssurface (1) 70:19 irrelevant (1) 55:25 isik (1) 148:7 island (1) 39:19 isle (1) 39:20 isnt (56) 5:22 6:3 7:20 13:5 22:7 31:4 32:22 34:1 39:17 41:11 42:15 46:17 51:8 59:12 61:16 66:2,3 73:3 76:9 77:11.22 78:1.12.13 82:17.20 87:25 93:22 113:4 122:20 124:24 125:19,20 127:12 129:6 130:25 136:9 145:17 150:23 151:17 154:22 157:11 163:2,25 164:24 165:16 168:25 172:15 173:9 179:22 184:10 185:8 187:1 188:4 189:21 196:24 isolate (1) 71:11 isotrope (8) 41:14 42:13 43:5,10 110:23 128:7,13 129:3 issued (2) 165:22 188:24 issues (11) 5:6 17:2 18:6 24:19 33:13 35:5,7,9 45:7 121:24 185:4 italics (2) 17:13 27:1 itd (1) 53:22 its (152) 2:23 3:11,21 4:6,11,13 5:7,24 7:20 13:3 14:22 18:10.24 19:19 22:6 23:20,24,25 29:8 30:7 31:4.21 34:11 35:9 36:7.15.25 39:7 41:21 44:9 46:17 48:14 49:4 50:4 51:17 52:4,5,6 54:14 55:25 56:2,20 57:1,15 59:8,13 62:6 63:1,24 66:18 70:3,12 71:6 73:12 79:20 82:21 83:8 85:6 88:6,6 95:23 97:12 98:4 103:7 104:4 105:16.17.25 106:4 108:7 110:4.5.5 112:13 115:2 116:16 117:13 120:10 123:14 124:23 125:12 127:2,13 130:21 131:18,21 133:20,25,25 136:2,4 138:20.20 139:16 140:6.7 142:21.23 143:10 144:1.11 146:20 147:3 148:17 149:1,4,13,17 150:23

194:2 198:22 201:21 204:1 209:18.24 210:11 itself (11) 4:22 5:1 8:16 9:23,25 32:2 70:9 74:13 139:3 162:24 210:6 ive (12) 36:5 38:8 68:14 74:18 87:16 106:14 137:11 139:2 152:5 153:15 203:2 204:13 january (2) 2:23 42:5 jennifer (1) 41:23 jet (1) 17:5 jewel (1) 114:17 msc (3) 33:19 35:10 44:3 job (5) 44:17 143:24,25 144:1 172:10 join (1) 84:15 joined (4) 2:3,4 81:6 188:18 joint (14) 16:19 34:12 96:3 98:5 130:10,10,13,15 131:1,10 132:15,25 144:11 191.17 jointly (1) 144:20 jones (4) 67:2 75:10 92:3 142:4 journey (1) 135:6 jrcc (12) 67:5 68:20 81:23 82:22 86:4,11,13,22,24 116:4 139:6 189:18 judgment (3) 84:24 110:3 168.2 julieanne (1) 52:22 july (6) 8:11 14:23 48:7 50:14 197:17 206:3 june (1) 8:11 kc (2) 1:10 211:2 keep (1) 138:14 kept (1) 179:18 kev (4) 147:17 178:22 187:14,17 kind (2) 129:7 130:15 kinds (1) 154:6 knew (2) 93:7 146:13 know (125) 5:12,19 11:13 13:6 18:9 19:15 21:13 23:10 24:8 25:24 34:17,20,22,25 35:3,4 36:5 40:9,24 42:12 45:19,23 50:4 55:8,8 60:20 61:1,24 66:20 68:10.11.15 72:1,8,12 76:21 78:2 80:13 81:2 83:2 84:9,22 85:17,21 86:5.9 87:12 90:23 91:2.15 93:16 94:6 96:18 19 97:21,24 103:12 104:6,9 106:4 109:3,8 110:9,19,24 111:2 116:23 122:24 123:10,11 124:19 125:10 126:14 127:15 128:12 132:18 133:4 134:10 135:22 138:15 17 139:4.9 142:22 143:7 147:12 148:15 149:8 150:14 151:2 153:13 156:21 157:21 158:8,19 159:21 162:21,22 165:2,7,8,11,23 167:18 168:16 175:17 176:9.10.10 177.7 179.15 180.20 182:7.17 187:17 189:15 190:21,23 191:4,8 192:19 200:3,16 207:23 209:3 knowing (5) 93:5 113:12

171:15.17 181:23

175:19 204:12.20

133:8 148:21 151:17

migrants (1) 194:3

202:10

197.8

78:10

190.15

184:16 189:5

misspelt (1) 142:14

mitigate (1) 138:24

mitigated (1) 45:9

mmhm (1) 201:25

113:24

modifying (1) 28:18

module (1) 73:25

modules (1) 73:24

193:16 206:21

monitors (1) 61:11

monthly (1) 7:24

103:1 136:4

moos (1) 18:4

morale (1) 20:11

203:20 207:7

monday (1) 1:1

23:4

minimal (1) 122:22

ministers (1) 35:4

minor (1) 75:11

	I	I	I	
knowledge (20) 11:12 12:13	let (2) 114:23 162:22	location (16) 57:8 71:2	luck (1) 104:12	marked (1) 196:12
39:25 40:23 43:23 45:12	lets (30) 7:13 10:10 14:11	102:9 106:1,25 147:19	lunch (2) 117:23 120:4	marking (1) 59:13
51:21 53:10 54:19 60:1	22:3 32:23 38:20 41:20	148:2,8,11 149:6	luncheon (1) 122:13	mast (1) 168:3
62:16 110:14 121:23 144:9	48:3 51:22 56:6 73:11 79:4	150:1,11,15 152:7,12		master (1) 2:16
159:23 163:11 172:20	80:1,1 83:12 90:7,15 94:15	158:21	M	match (2) 194:11,14
182:24 184:11 188:5	108:19 109:11 117:20	locations (1) 115:16	m (2) 189:16 190:19	material (27) 4:24 9:22
known (4) 88:20 140:9	133:12 146:5 171:11	locked (1) 87:4	m957 (2) 189:17 190:1	27:24 30:10,11 31:4 54:7
163:15 201:6	173:1,2 174:5 186:6 193:5	lodged (2) 32:4,17	m958 (1) 190:19	71:22 86:23 91:11 99:12
L	195:3	lodging (1) 31:17	maca (5) 41:8,9,17 42:2	109:19 136:17 137:9
	letter (1) 49:6	log (20) 142:1 143:10,10	43:21	138:23 145:6,6 153:1
labelled (2) 31:15 124:24	level (26) 3:15 24:5 26:19	166:16,16 183:4 184:5,10	maib (22) 47:16 50:3,16	154:2 167:16 170:19
lack (7) 14:7,8 22:16 26:6	27:8 41:4 46:21 52:4 53:3	185:16,22 186:25 187:13	54:14 60:23 115:24 116:3	179:15,16,20 185:21 200:23 204:9
70:21 116:14 121:9	60:20 62:7 67:19 77:16 85:3 90:22 97:11	188:3 189:1,1,12,19 191:3,6 194:8	166:7 167:5 173:2 174:5	materially (2) 207:18,23
lacking (2) 54:15 147:2	98:14,16,25 99:3,21	logged (6) 17:11 32:17 78:7	175:12	maths (1) 9:2
land (3) 33:22 45:2 98:9	100:10,14 119:11 152:23	79:2 87:10 180:24	177:5,11,15,17,21,24	matter (6) 13:11 34:17
landbased (2) 60:12 146:21	166:1 201:9	logging (2) 17:19 70:23	178:4,10,15 208:22	53:17 122:9 126:11 153:18
landings (1) 42:25	levels (3) 31:2 130:20 157:17	logical (2) 122:9 184:7	maibs (2) 61:1 175:5	matthew (3) 1:3,9 211:2
landside (3) 33:12 37:4,21	liaised (1) 19:25	logically (1) 203:14	main (2) 98:19 201:14	maybe (2) 84:9 140:20
lane (1) 107:22 lanes (1) 12:16	liaison (9) 15:10,14 34:20	logs (5) 87:2,14 181:10	mainly (1) 162:16 maintain (1) 61:21	mayday (19) 92:6,10,10
language (14) 6:4,6 12:20	56:18 102:17 103:7 124:10	188:13,18	maintaining (1) 90:13	93:13 95:13 96:3 106:1,24
	126:5 150:12	london (2) 2:4,20		163:1,3,13 165:22 166:18
145:10,13,16,24 146:14,15,16 157:22 158:1	life (12) 20:12 22:22	long (10) 1:15,18 26:25 53:7	majestys (32) 1:21 2:3 9:15 13:5 14:1 20:3 21:19 42:17	168:17 169:19 176:21,25
	24:14,23 25:2,10 29:15	59:10 136:2,11 145:25	46:22 51:25 52:8 53:7	188:22,24
161:3 165:8	134:22 208:15,25	198:19 204:4	40:22 51:25 52:8 55:7 58:16 61:8,8,18 63:23	mca (14) 1:14,21 4:19 34:21
languages (2) 12:24 160:23 large (9) 39:3 46:23 68:1	209:21,23	longer (9) 76:7 108:21 138:1	99:24 102:20 103:22,24	39:6 47:18 58:25 59:1
105:1,2 112:3,4 171:6,22	lifeboat (6) 2:16 101:15	191:16 198:19	99:24 102:20 103:22,24 118:20 119:24 121:17,19	61:22 62:9 63:3,10 114:7
los:1,2 112:3,4 171:0,22 larger (2) 171:9,24	104:15 106:18 127:25	202:4,9,23,25	123:16,25 125:5 140:21	129:16
larger (2) 171:9,24 last (10) 1:15 12:25 21:13	172:22	longstanding (2) 136:22	123:16,25 125:5 140:21 163:22 167:13 209:25	mcas (6) 30:15 36:1 47:13
58:15 111:1 163:15 192:4	lifeboats (2) 101:14 106:6	153:2	major (27) 6:1,4,7 20:14	49:2 50:13 178:13
58:15 111:1 103:15 192:4 194:7 195:6 207:13	lifesaving (6) 10:23 11:9	look (72) 7:13,21 10:4,10	27:13.15 36:11	mcga (1) 198:7
lasted (1) 181:12	25:1 41:15 105:17 126:24	11:24 14:16 22:3 25:18	37:1,3,5,12,15	meal (2) 27:3 29:24
late (5) 116:24 117:1	lift (1) 15:20	30:3,6 36:15 37:16 38:20	38:1,12,15,21,25	mean (19) 18:20 35:14
137:4,6 182:10	light (3) 147:8 176:10 178:3	39:15 41:20 42:20 44:6	39:1,11,21 40:11,19,21,25	37:5,14 67:25 81:17 101:4
later (14) 11:1 17:13 23:4	lightvessel (2) 104:9 106:19	45:6 47:9,21 48:3 51:22	41:4,6,11	108:19 109:22 119:16
30:4 39:4 43:3 49:3 80:22	like (21) 5:5 16:3 23:17 29:6	56:6 58:21 60:8 62:21	majority (3) 56:23 97:9	127:12 138:3 141:6 143:5
93:14 106:2 143:1 151:14	47:9 55:2 59:17 60:12	64:8,21 65:1 67:9 69:5	98:23	150:6 165:12,17 190:9
164:24 174:14	63:6,14 79:7,13 118:2	72:10 73:11 76:23 77:19	makes (3) 13:20 153:22	207:21
latest (1) 51:19	134:5 139:2 161:13 172:22	79:7,12 80:1 90:15 94:15	186:19	means (13) 10:24,24 11:10
latter (2) 22:11 146:21	187:9 190:25 192:22	95:5 98:3 106:8,9 107:3	making (23) 11:23 21:20	19:9 29:17 52:2 55:16
latterly (1) 2:7	209:13	108:6 118:2 126:20 128:8	27:15 28:17 34:9 40:8	73:25 101:3 131:7 180:14
launch (1) 113:15	likelihood (1) 174:19	129:15 131:8 133:6 136:21	43:20 44:2 45:18 46:18	185:5,6
launching (1) 28:16	likely (10) 9:11 20:25 76:8	139:14 142:1 146:5 154:23	68:7 79:6 84:19 85:7 87:15	meant (4) 170:23 174:25
layered (1) 120:11	88:20,20 131:21 149:19	169:20 171:11 174:11	95:23 104:17 115:24 136:5	176:3 188:6
lead (7) 3:18 52:21 97:24	162:19 190:4 191:1	186:6 191:18 192:22	149:10 168:1 176:25	measure (2) 9:21 80:9
129:10 133:4 154:5 191:1	likewise (1) 132:12	194:3,12,22 195:21 196:6	207:22	measures (2) 36:25 72:1
leader (3) 2:6 26:18 46:4	lima (4) 189:20 190:2,16,20	197:14 200:18 207:2,15	man (1) 140:4	mechanism (1) 127:1
leaders (2) 26:15 46:15	limitation (1) 113:17	looked (22) 22:3 31:5 34:6	manage (1) 18:5	mechanisms (2) 59:21 75:3
leadership (9) 28:2 43:25	limitations (3) 98:10 112:19	36:11 44:6 59:9 62:7 63:18	managed (4) 33:11,15,25	median (5) 101:20 127:11
47:3 66:8 73:5 82:11	146:14	65:6 66:10 75:20 96:11	69:24	137:7,15 139:25
91:9,17 125:25	limited (2) 61:2 142:13	130:5 140:23 153:1 179:15	management (8) 4:8 29:7	medical (2) 133:20 134:5
leading (7) 5:11 51:11 53:20	limits (3) 39:8 83:20 99:19	180:20 198:10 202:20	46:9 49:1 178:21,24,25	meet (2) 27:14 38:14
82:10 132:13 153:8,17	line (25) 4:8 15:21 33:9 46:9	204:20 207:10,13	180:25	meeting (13) 16:21 60:4
leads (2) 165:2 198:2	91:8 101:20 107:17	looking (50) 9:20 13:15	manager (2) 126:15 127:16	62:23 76:23,25 77:13,16
learn (9) 25:17 52:1,19 59:21	116:3,3 127:11 137:8,15	30:10,15 31:13,19 32:23	managers (1) 127:23	80:2 82:1,3,6 98:6 140:14
60:10 62:1 84:3 89:11	139:25 145:16,24	36:24,25 40:6 44:12	managing (1) 43:17	meetings (9) 19:6,11 82:10
135:19	146:14,15,16 147:1,22	45:5,11,19 58:6 59:4 63:16	mancheplan (6) 20:2	94:13 102:17 124:10
learned (1) 21:4	149:1 157:22 186:12			
· · · · · · · · · · · · · · · · · · ·		65:16 75:6 76:10 83:20	102:19,25 115:17 164:9	132:18 137:2 150:12
learning (15) 18:10	194:19 196:22	88:8 96:6,23 99:25 112:17	102:19,25 115:17 164:9 165:3	132:18 137:2 150:12 member (4) 84:1 85:19
25:14,16,19 28:15 48:13	194:19 196:22 lines (1) 174:12	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6	165:3 mandate (2) 3:21 102:21	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18
= ()	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11	165:3	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3
25:14,16,19 28:15 48:13	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5	165:3 mandate (2) 3:21 102:21	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8)
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6,23,24 124:21,24
83:23 89:6 132:22 150:9	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manner (2) 103:10 180:3	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23,24 124:21,24 125:3;17 128:9
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6:23:24 124:21.24 125:3,17 128:9 memory (3) 67:10,14 109:10
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6,23,24 124:21,24 125:3,17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linkad (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,45 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manual (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24 42:13 51:8 83:13;22 108:9
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mentioned (13) 7:14 35:24 42:13 51:8 83:13;22 108:9 113:17 118:6 136:24
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21,24 125:3,17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 160:13 163:1 164:10
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 21:09 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 25:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6:23:24 124:21.24 125:3,17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mentioning (1) 109:5
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 21:09 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16	194:19 196:22 lines (1) 174:12 ling (10) 106:5.16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marine (1) 52:10	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mentioned (13) 7:14 35:24 42:13 51:8 83:13;22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mentioning (1) 109:5 merely (1) 114:20
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2.6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 15:9,16 17:4	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listening (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marine (1) 52:10 maritime (59) 1:13 2:6,25	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mentioned (13) 7:14 35:24 42:13 51:8 83:13;22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mentioning (1) 109:5 merely (1) 114:20 merge (1) 194:10
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 15:9,16 17:4 116:13 142:2 158:1	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linkted (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marine (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6,23,24 124:21,24 125:3,17 128:9 memory (3) 67:10,14 109:10 mentioned (13) 7:14 35:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 150:13 163:1 164:10 mertloinig (1) 109:5 merely (1) 114:20 mereg (1) 182:8
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 15:9,16 17:4 116:13 142:2 158:1 legacy (1) 43:10	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 list (2) 38:25 100:23 list (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24 42:13 51:8 83:13;22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mentioning (1) 109:5 merely (1) 114:20 merge (1) 194:18
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 159:16 17:4 116:13 142:2 158:1 legacy (1) 43:10 legal (1) 162:17	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:4.8 134:3 137:20,23	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looko (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25	165:3 mandate (2) 3:21 102:21 mandated (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marine (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21,24 125:3,17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mentioning (1) 109:5 merely (1) 114:20 merge (1) 194:10 merged (1) 182:8 merging (1) 194:18 message (2) 35:2 186:19
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 21:09 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 159:16 17:4 116:13 142:2 158:1 legal (1) 162:17 legal (1) 162:17	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 list (2) 38:25 100:23 list (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 list (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:48, 134:3 137:20,23 138:5 143:20 191:25	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,45 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marine (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21,24 125:3,17 128:9 memtory (3) 67:10,14 109:10 mentioned (13) 7:14 35:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 100:13 163:1 164:10 mentioning (1) 109:5 merely (1) 114:20 merge (1) 194:10 merged (1) 182:8 merging (1) 194:18 message (2) 35:2 186:19 messages (1) 161:1
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 15:9,16 17:4 116:13 142:2 158:1 legast (1) 162:17 leggislation (3) 25:19 135:14 162:16	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listening (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:4.8 134:3 137:20,23 138:5 143:20 191:25 lives (3) 151:10 198:16	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17 lot (12) 10:6,13 23:24	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:4 marine (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24 90:12 91:5,7,12 92:8 94:5	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 membras (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24 42:13 51:8 83:13;22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mentioning (1) 109:5 merely (1) 114:20 merge (1) 194:10 merged (1) 182:8 merging (1) 194:18 message (2) 35:2 186:19 messages (1) 161:1 messaging (1) 146:2
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 159:16 17:4 116:13 142:2 158:1 legacy (1) 43:10 legal (1) 162:17 legislation (3) 25:19 135:14 162:16 leisure (2) 11:8 67:21	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linkted (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:4,8 134:3 137:20,23 138:5 143:20 191:25 lives (3) 151:10 198:16 209:17	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17 lot (12) 10:6,13 23:24 32:4,16 61:4 95:14 137:6	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 mary (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 maritime (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24 90:12 91:5,7,12 92:8 94:5 95:17 97:19,22	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6,23,24 124:21,24 125:3,17 128:9 memory (3) 67:10,14 109:10 mentioned (13) 7:14 35:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 merely (1) 114:20 merely (1) 114:20 merely (1) 142:8 merging (1) 194:18 mersage (2) 35:2 186:19 messages (1) 146:2 met (3) 87:9 57:14
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6.9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 159:16 17:4 116:13 142:2 158:1 legacy (1) 43:10 legal (1) 162:17 legislation (3) 25:19 135:14 162:16 le5:ure (2) 11:8 67:21 lends (1) 194:25	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:4,8 134:3 137:20.23 138:5 143:20 191:25 lives (3) 151:10 198:16 209:17 local (3) 37:10 151:7 152:1	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loos (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17 lot (12) 10:6,13 23:24 32:4,16 61:4 95:14 137:6 156:8 157:12 200:25 208:4	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 maritime (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24 90:12 91:5,7,12 92:8 94:5 95:17 97:19,22 98:1,9,12,16,24 100:13	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21,24 125:3,17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 merteg (1) 109:5 merely (1) 114:20 merge (1) 194:10 merge (1) 194:10 merge (1) 194:18 merging (1) 194:18 message (2) 35:2 186:19 messages (1) 161:1 messaging (1) 146:2 met (3) 38:7,9 57:14 metre (4) 112:21,22
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 159:16 17:4 116:13 142:2 158:1 legacy (1) 43:10 legal (1) 162:17 legislation (3) 25:19 135:14 162:16 leisure (2) 11:8 67:21 lends (1) 194:25 lengths (1) 107:20	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 list (2) 39:16 15:5 119:9 131:48, 134:3 137:20,23 138:5 143:20 191:25 lives (3) 151:10 198:16 209:17 local (3) 37:10 151:7 152:1 locally (3) 150:4,14 151:3	88:8 96.6,23 99:25 112:17 121:7 122:18 125:24 134.6 143:17 157:20 100:11 168:14 170:23 172:3,45 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17 lot (12) 10:6,13 23:24 32:4,16 61:4 95:14 137:6 156:8 157:12 200:25 208:4 lots (9) 12:8,23 62:11,11	165:3 mandate (2) 3:21 102:21 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 3:31:3,14:19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24 90:12 91:5,7,12 92:8 94:5 95:17 97:19,22 98:1,9,12,16,24 100:13 101:17 103:13	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mentioned (13) 7:14 35:24 42:13 51:8 83:13;22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mentioning (1) 109:5 merely (1) 114:20 merge (1) 194:10 merged (1) 182:8 mersing (2) 35:2 186:19 messaging (1) 146:2 metr (4) 112:21;22 113:3;10
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 15:9,16 17:4 116:13 142:2 158:1 leggislation (3) 25:19 135:14 162:16 leisure (2) 11:8 67:21 lends (1) 194:25 lengths (1) 107:20 less (4) 113:2 148:20 156:13	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listening (1) 155:4 listening (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:48 134:3 137:20:23 138:5 143:20 191:25 lives (3) 151:10 198:16 209:17 local (3) 37:10 151:7 152:1 locally (3) 150:4,14 151:3 locate (3) 172:3 203:21	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17 lot (12) 10:6,13 23:24 32:4,16 61:4 95:14 137:6 156:8 157:12 200:25 208:4 lost (9) 12:8,23 62:11,11 191:15,23,23 203:6 209:3	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marine (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24 90:12 91:5,7,12 92:8 94:5 95:17 97:19,22 98:1,9,12,16,24 100:13 101:17 103:13 111:6,8,11,24 115:10	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mentionel (13) 7:14 35:24 42:13 51:8 83:13;22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mentioning (1) 109:5 merely (1) 114:20 mergel (1) 182:8 merging (1) 194:18 message (2) 35:2 186:19 message (2) 35:2 186:19 message (1) 161:1 messaging (1) 146:2 met (4) 112:21;22 113:3;10 metres (1) 173:13
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 159:16 17:4 116:13 142:2 158:1 legalstion (3) 25:19 135:14 162:16 leisure (2) 11:8 67:21 lends (1) 194:25 lengths (1) 107:20 less (4) 113:2 148:20 156:13 183:22	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:4.8 134:3 137:20:23 lixes (3) 151:10 198:16 209:17 local (3) 37:10 151:7 152:1 locate (3) 172:3 203:21 208:11	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17 lot (12) 10:6,13 23:24 32:4,16 61:4 95:14 137:6 156:8 157:12 200:25 208:4 lots (9) 12:8,23 62:11,11 191:15,23,23 203:6 209:3 low (4) 77:17 113:10 115:4	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marine (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24 90:12 91:5,7,12 92:8 94:5 95:17 97:19,22 98:1,9,12,16,24 100:13 101:17 103:13 111:6,8,11,24 115:10 119:5 142:6,23 153:10	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6;23;24 124:21;24 125:3;17 128:9 memory (3) 67:10,14 109:10 mention (1) 119:16 mentioned (13) 7:14 35:24 42:13 51:8 83:13;22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 mertioning (1) 109:5 merely (1) 114:20 merge (1) 114:20 merge (1) 194:10 merged (1) 182:8 merging (1) 194:18 message (2) 35:2 186:19 messages (1) 161:1 messaging (1) 146:2 met (3) 38:7,9 57:14 metre (4) 112:21;22 113:3;10 metres (1) 173:13 middle (5) 140:14 159:16
25:14.16.19 28:15 48:13 83:23 89:6 132:22 150:9 151.12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 159:16 17:4 116:13 142:2 159:16 17:4 l16:13 142:2 159:11 legacy (1) 43:10 legal (1) 162:17 legislation (3) 25:19 135:14 162:16 leisure (2) 11:8 67:21 lends (1) 194:25 lengths (1) 107:20 less (4) 113:2 148:20 156:13 133:22 lesson (6) 25:14 89:6	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linkted (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:4,8 134:3 137:20,23 138:5 143:20 191:25 lives (3) 151:10 198:16 209:17 local (3) 37:10 151:7 152:1 locale (3) 150:4,14 151:3 locate (8) 16:10 32:9 63:25	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17 lot (12) 10:6,13 23:24 32:4,16 61:4 95:14 137:6 156:8 157:12 200:25 208:4 lots (9) 12:8,23 62:11,11 191:15,23,23 203:6 209:3 low (4) 77:17 113:10 115:4 176:10	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 mary (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marite (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24 90:12 91:5,7,12 92:8 94:5 95:17 97:19,22 98:1,9,12,16,24 100:13 101:17 103:13 111:6,8,11,24 115:10 1195:15 161:22 181:5,21	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6,23,24 124:21,24 125:3,17 128:9 memory (3) 67:10,14 109:10 mentioned (13) 7:14 35:24 42:13 51:8 83:13,22 108:9 113:17 118:6 136:24 160:13 163:1 164:10 merely (1) 114:20 merely (1) 114:20 mereg (1) 194:10 mereg (1) 182:8 merging (1) 194:18 message (2) 35:2 186:19 messages (1) 161:1 messaging (1) 146:2 met (3) 38:7,9 57:14 metre (4) 112:21,22 113:3,10 metres (1) 173:13 middle (5) 140:14 159:16 174:12 198:4 205:6
25:14,16,19 28:15 48:13 83:23 89:6 132:22 150:9 151:12 178:2,2,6,9 least (4) 48:17 111:18 174:1 188:12 leat (17) 1:3,5,9,12 5:6 18:24 51:2 63:7 106:21 118:1 126:7 157:11 168:15 193:6 209:12 210:9 211:2 leave (1) 88:24 leaving (2) 21:22 73:3 led (6) 41:7 53:9,9 64:13 65:23 95:16 left (7) 14:22 159:16 17:4 116:13 142:2 158:1 legalstion (3) 25:19 135:14 162:16 leisure (2) 11:8 67:21 lends (1) 194:25 lengths (1) 107:20 less (4) 113:2 148:20 156:13 183:22	194:19 196:22 lines (1) 174:12 ling (10) 106:5,16 107:25 127:8 129:19 130:2 134:1,12 135:10 136:8 lings (4) 108:24 127:18 128:2 130:12 linked (1) 28:3 linking (1) 203:10 list (2) 38:25 100:23 listed (3) 25:4 95:3 136:1 listening (1) 155:4 listing (1) 26:5 little (9) 5:9 16:25 51:4 140:17 141:9 144:3 175:19 194:6 198:11 live (11) 21:18 118:15 119:9 131:4.8 134:3 137:20:23 lixes (3) 151:10 198:16 209:17 local (3) 37:10 151:7 152:1 locate (3) 172:3 203:21 208:11	88:8 96:6,23 99:25 112:17 121:7 122:18 125:24 134:6 143:17 157:20 160:11 168:14 170:23 172:3,4,5 176:19 180:10,11,18 182:11,25 193:19 201:2,18 203:20 204:18 206:22 lookouts (1) 105:2 looks (21) 14:21 23:17,24 26:10 31:18 52:9 54:16 71:22 80:7 85:7 133:3 137:8 154:2 166:24 170:19 186:23 187:9,14 197:5 206:2,5 loss (10) 16:16 20:10,11 22:17,21 24:14,23 208:15,25 209:23 lost (3) 151:17 184:25 209:17 lot (12) 10:6,13 23:24 32:4,16 61:4 95:14 137:6 156:8 157:12 200:25 208:4 lots (9) 12:8,23 62:11,11 191:15,23,23 203:6 209:3 low (4) 77:17 113:10 115:4	165:3 mandate (2) 3:21 102:21 mandate (1) 76:14 manner (2) 103:10 180:3 manual (3) 172:24 173:7 174:23 many (8) 13:7 16:23 22:7 39:3,16 119:13 146:25 174:14 maps (1) 152:15 march (9) 1:1 56:11 57:22 100:4 119:8,16,16,17 210:17 marine (1) 52:10 maritime (59) 1:13 2:6,25 3:8 17:17 32:15 33:13,14,19 34:12,13 43:6 45:2,3 47:15 73:23 78:23 88:10,15,19 89:3,13,24 90:12 91:5,7,12 92:8 94:5 95:17 97:19,22 98:1,9,12,16,24 100:13 101:17 103:13 111:6,8,11,24 115:10 119:5 142:6,23 153:10	132:18 137:2 150:12 member (4) 84:1 85:19 148:13 190:18 members (2) 70:20 78:3 memorandum (8) 123:6,23,24 124:21,24 125:3,17 128:9 memory (3) 67:10,14 10 mentionel (13) 7:14 35 42:13 51:8 83:13,22 1 113:17 118:6 136:24 160:13 163:1 164:10 merter (1) 119:10 merely (1) 114:20 merge (1) 194:10 merge (1) 194:10 merge (1) 194:18 merging (1) 194:18 message (2) 35:2 186:19 messages (1) 161:1 messaging (1) 146:2 met (3) 38:7.9 57:14 metre (4) 112:21,22 113:3,10 metres (1) 173:13 middle (5) 140:14 159:1

152:16 169:18 201:5 207:19.24 210:12 migrant (22) 2:24 3:8 15:22 most (1) 11:4 17:4 19:3 21:3 9 11 23:5 mostly (1) 59:11 24:7 27:8 31:2 96:12.24 mou (9) 125:9.10 128:6 98:15 116:6 128:18 129:7,9,11,17,25 130:2 142:1,10 188:3,12 197:21 mous (1) 128:4 move (5) 32:23 74:23 130:24 mike (7) 25:24 38:10 39:9 181:19 192:4 40:8 45:20 79:8 136:20 moved (4) 2:7 18:14 115:17 military (2) 41:7 42:2 175:10 mind (11) 9:21 38:20 65:25 moves (1) 16:2 98:3 132:20 157:3.8 moving (7) 3:2 17:12,17 169:20 180:19 201:18 122:12 126:1 173:21 207:7 mrcc (9) 17:25 19:13 32:9 65:20 73:9 80:6,15 150:13 168:6 ministry (4) 41:20 128:10,14 mrsc (1) 2:4 much (50) 1:11 4:18,24 7:12.18 8:7.9 14:9 22:5.25 29:18 35:8 53:2 63:24 minute (3) 76:24 77:20 67:19 68:23 69:7 70:3 74:7 minutes (10) 50:22 79:4 80:22 87:1,23 103:24 82:16 103:17 106:23,23 114:25 117:18 120:1 107:9 108:19,22 109:12 122:12 127:3 131:14 139:1 missed (5) 158:9,17,22,23 148:6,11 158:2,6 168:9 170.7 12 172.22 174.20 mission (14) 2:5 64:11.13 182.25 190.4 196.2 198.16 69:6,8 83:7 104:5 114:1 200:15 204:21 206:8 207:6 119:9 121:6 142:14 163:24 209:11,12 210:10 multiagency (2) 38:5 43:18 multiple (10) 12:4 18:3 40:3 misunderstood (1) 140:19 133:11 134:4 183:18 192:9 194:8,10 206:19 must (5) 81:25 90:3 128:25 mitigating (1) 96:10 170:12 184:15 mitigation (1) 120:5 mv (2) 197:21,25 myself (4) 4:17 85:2 89:23 mitigations (1) 98:22 125:25 mobile (24) 84:11 85:8,12,13 N 146:10,19 148:24 149:2 150:1,4,14,24 151:9,16 n (1) 211:1 158:7,8,14 160:12,16 name (1) 23:19 161:6.20 162:2.7 190:6 namely (1) 206:6 mod (8) 41:14.14.25 narrative (1) 187:3 42:14,18,22 43:21 197:2 narrower (1) 61:4 modifications (1) 26:17 national (36) 3:3,24 4:3 37:6 modified (2) 112:5 130:9 57:9 63:24 64:10.15.25 modify (4) 24:21 45:16 55:9 65:10 66:16,18 67:4,10,15 68:16 71:7.9 73:7 74:25 75:9 78:8 79:2.23 81:15.20 82:13.19 83:1.5 89:17 97:3,16 101:15 121:4 moment (20) 9:20 21:22 153:17 23:14 50:21 74:10,23 99:5 natural (1) 97:8 117:19 119:3 124:2 132:17 nature (1) 35:12 138:2 159:5 168:7 171:21 naval (1) 163:14 173:24 184:20 185:3 navigation (3) 10:24 11:10 108:4 navigational (1) 107:21 monitored (1) 158:15 neal (5) 76:18 91:16 103:15 104:11 154:17 month (13) 7:5,7,19,19 8:12 near (5) 38:8 112:12 137:25 9:2,23,24 10:3,5,8 22:4 146:3 180:9 nearly (1) 137:7 necessarily (3) 41:12 147:6 months (10) 7:21 8:6,17 190:9 30:8 49:3,4 74:5 83:16 necessary (1) 122:5 need (17) 25:20 53:12 62:7 moo (2) 17:18 83:13 67:6 73:13 77:19 98:17 99:15 100:14 112:14,15 132:8,11 145:24 195:8 more (34) 7:13 12:6 13:19 203:22 204:3 20:4 51:12 68:16 72:20 needed (5) 21:25 83:10 78:17 79:7,13 82:13 88:8 100:17,17 171:1 93:15 103:21 105:21 needs (7) 29:1 113:22 134:12 110:21 113:19 114:21 135:2 136:11 143:24,25 119:12 125:7 127:14 negatively (1) 116:5 130:15 135:4 139:9 141:9 negligible (1) 175:1 144:3 164:16 175:25 neither (1) 208:3 183:22 190:4 191:1 199:18 nervous (1) 175:19 network (56) 3:3,24 4:3 57:9 morgan (2) 134:5 135:7 60:16 63:25 64:7,10,15,25 morning (18) 1:4,5,12 37:18 65:11 66:17,18 67:4,11,16 77:5 80:22 82:24 93:25 68:16 71:7,9,12 73:7 117:1 154:16 163:2 166:23 74:20.25 75:9 78:8

79:2.23.24 80:5 81:15.20 82-14 19 23 83-1 89-18 92:15 93:4.9 96:2.4 97:4.16 121:4 143:11 145:10 147:4.5 148:1.22 149:3,21 153:17 159:16 160:1 162:12 networks (1) 149:10 never (3) 167:12 169:14 188.1 next (32) 6:14 8:23 12:19 15:25 19:19 20:8.19 27:22.23 30:9 32:23 47:8 49:3 65:22 93:22 94:16 96:14 122:16 136:14 142:4 145:4 162:23 166:10 178:21 184:7 185:11,20 186:1 187:21 196:5 204:12 205.6 night (84) 4:22 9:24 38:1 40:6 67:9 68:15 74:13,15 78:4,14,16 79:22 80:6 81:1.1.8.9.22.23 82:20 83:14 84:2,21 85:10 86:1,9,11 88:9,19 90:3,15 93:21 94:4,4,18,24 99:19 100.22 24 101.12 102.15 103-1 14 108-21 110-9 11 114:6 115:6 116:23 117:17 120:3 121:7 137:5,16 139:3,10 140:5 141:16 142:8.10.17 146:24 156:23 157:20 158:14,20 162:25 163:3 166:22 168:15 173.8 12 174.24 176.10 177:6 182:18.25 184:3 187:23 188:19 190:14 192:15 201:19 209:8 nights (4) 75:16 77:11 78:1,13 nine (5) 20:19 73:16 74:5 83:16 115:15 nods (6) 133:15 134:9 140:15 145:12 186:17 206:4 none (5) 11:4 37:10 94:24 110:10 207:21 nonemergency (1) 148:14 nonetheless (1) 179:8 nonoperational (4) 83:17,23 190:18.21 nonsustainable (1) 98:2 nor (1) 124:15 normal (4) 10:22,22 76:5 142:10 normally (1) 25:5 note (10) 5:24 16:9 46:7 49:23 72:12 136:7 171:5 186:2,22 209:24 noted (3) 34:14 56:1 69:21 notes (2) 19:12 76:25 nothing (8) 76:14 167:23 168:17 177:19 207:16 208:24 209:22 210:6 notice (2) 9:10 102:12 notification (2) 139:22 177:1 notified (5) 8:25 65:4 92:4,24 101:12 notify (1) 37:21 noting (2) 179:10 203:15 novel (1) 42:10 november (39) 1:14,24 4:16 7:3,5,11 8:7,15 9:23 10:3,7 30:20.25 31:10.15.22 32:4 33:7 42:3.5 45:10 50:4 67:17 68:2.3.11 73:18 76:25 97:25 111:21 124:15 126:3 138:9 153:7 159:12 161:11 192:9 207:19 208:16 nowhere (1) 38:8 number (46) 7:2 8:15 11:19 13:2 16:14 17:10 23:11 24:22 25:8 29:4.11 35:5 39:16 47:11 55:13 61:19 63:2 67:7,7,11 74:6 79:1

80.9 98.15 104.23 105.2 19 21 107.21 110.5 112:4 147:2,6,7 148:2,15 158:7 160:20 166:8 171:6.22 177:12 190:19 203:3 205:8 208:7 numbered (1) 198:3 numbering (1) 144:25 numbers (21) 7:20,25 8:1.9.10 9:21 10:5.9 31:13 33:12 39:3 65:13 66:14 67:25 72:8 77:17 82:22.23 98:2 100:1 189:16 numerous (2) 37:8 145:8 0 objective (1) 132:9 objects (1) 172:3 obligations (4) 4:7 60:4 62:24 198:18 observational (1) 84:5 observations (9) 15:20 16:3 17:23 18:20 19:1 22:12 23:21 178:11 207:9 observe (1) 69:10 observed (4) 15:18 24:19 44:24 65:25 observing (4) 28:14,24 83:23 92:16 obtain (1) 146:10 obtained (1) 147:18 obvious (6) 7:20 16:16 92:2 130:25 189:13 192:13 obviously (18) 8:5 19:8 38:24 47:15 51:17 55:13 59:7,8 60:5 68:2 77:15 97:20 100:5 125:18 147:17 187:2 188:9 191:15 occasion (2) 29:21 187:10 occasions (8) 75:22 113:1.4.9 146:11 160:14 189:16 208:8 occupants (1) 174:13 occur (23) 19:9 60:19 66:22 68:8 81:21 91:21 92:10 100:2 113:24 117:2 124:10 131:21 132:8.18.19 134:14 138:1 147:7 153:13 178:16 189:9 199:12 200:2 occurred (22) 19:8.15.16.23 32:18 52:7 69:21 80:20 90:24 150:13 163:9,11 166:3 167:19 178:7 191:19 198:25 199:13.16 208:11 209:23 210:6 occurrence (1) 116:15 occurring (5) 31:2 57:18 63:5 153:11 192:10 occurs (2) 60:4 83:10 oclock (11) 77:5,5 80:21 93:24 101:2 117:20 169:2 185:25 186:18 210:12.16 october (5) 8:19 58:15 68:4 126:15 193:2 odds (1) 33:25 ofcom (1) 162:16 office (29) 7:9 8:25 9:13 21:19 27:18 38:17 44:12 50:16 65:5,21 66:2,6 68:7 99:24 118:24 119:25 120:9.15.18.20 121:5 123:17 128:11 129:11.12 179:7 187:22 201:2 210:1 officer (8) 15:10 73:24 78:24 148:5,10,18 153:10,11 officers (11) 17:18 27:2 66:25 67:8 70:5 73:16,19 74:4,6 147:21 185:10 official (2) 20:18 196:12 often (8) 11:19 12:19 13:9 17:8 18:4 29:16 154:11 192:16 oh (2) 18:24 130:4 okay (20) 10:10 18:19 22:11 30:5.14 66:23 83:12 91:4

94-15 95-13 111-6 128-4 133-8 147-16 174-5 181-4 182:11 191:9 195:3 199:20 oldfashioned (1) 106:13 omahonev (4) 6:8 7:14 118:23 200:12 omahoneys (3) 7:15 68:6 120:10 onboarded (1) 73:21 onboarding (1) 72:11 oncall (3) 82:4.9 94:23 once (7) 19:2 55:22 127:11 130:7 153:5 169:8 194:10 oncoming (1) 190:14 oneoff (1) 62:4 ones (3) 13:16 59:9 70:15 ongoing (7) 44:6 55:3 89:22 92:18 99:23 119:12 162:15 onstream (2) 73:20 83:19 onto (3) 144:6 147:4 182:22 op (2) 41:14 196:9 open (4) 17:15 71:4 122:6 205:3 opening (2) 63:1,12 operate (5) 11:13,25 115:4 120:6 124:16 operated (5) 2:16 84:11 146-15 153-9 182-4 operating (11) 21:1 23:20 85:8 88:14 159:10,22 162:3 186:23 192:20 193:24 199:22 operation (28) 35:17 42:13,24 43:5,10,17 53:9 58.24 83.4 9 98.5 9 109.13 110:22 128:7.13 129:3 154:7 161:16 162:24 184:9 195:23 196:4,17,24 197:20 202:21 203:23 operational (19) 24:4,5 35:8 42:22 43:7 59:16 61:21 78:3,9,14,16 81:2 87:6,13 96:13,24 110:25 125:13 150:12 operationally (1) 52:12 operations (39) 2:11,25 3:3,9,12,24 15:10 17:18 33:13,20 41:16 45:15 52:6 55:24 56:11 57:8,13 63:23 66:19 73:23 78:23 81:21 82:3.6.25 121:24 128:19 131:4.8 146:21 153:10 181:21 189:25 192:7.22 197:3 201:10 202:2 206:10 operator (2) 18:23 205:9 operators (1) 81:23 opinion (4) 8:4 117:13 203:8,8 opportunities (1) 55:21 opportunity (3) 35:16,20 59:5 opposed (1) 62:4 option (2) 115:1 149:5 options (4) 26:23 98:21 114:9 147:11 oral (1) 175:14 order (4) 72:20 135:3 200:5 203:22 organisation (84) 3:16 9:5,12 13:25 14:5,8 18:10 19:24 20:7,16 21:25 22:1 24:17,20,21 25:1,13,16,16,20 26:19,23 28:1.10.14.17 29:1.7.19 30:7,12 32:2,9,16,25 34:8 35:1 36:6 40:10.11 43:20 44:8 47:1.2 48:13 52:5.9 53:1 54:24 55:2.2.4.23 59:13 60:6,7 62:1,2 65:15 68:14 75:7 76:15 79:14,20 84:2,15 85:18 88:2,18 97:12 99:17 113:18 119:3 127:4 145:7 146:1.13.15 153:22 156:16 178:1.2 192:1 208:17 organisational (4) 20:10 30:1

48.25 52.14 organisationally (2) 124:8 129:14 organisations (17) 13:3 14:17 25:9 26:4 28:4 37:22 39:7 79:11 89:10 113:24 123:23 126:6 129:2 130:22 131:19 182:16 210:2 organised (2) 28:15 45:15 originated (1) 5:13 originating (1) 184:15 others (8) 22:22 49:12 59:3 157:5.9 181:9 205:3.4 otherwise (4) 54:8,9 136:23 201:5 ought (2) 135:4 143:7 ourselves (3) 136:12 138:7 142.9 outcome (5) 57:16 133:22 165:11 189:14 209:10 outcomes (1) 132:14 outlier (1) 8:8 outline (1) 2:1 outlined (1) 61:19 outset (1) 158:2 outside (4) 52:6 59:15 67:18 89.18 outwith (1) 53-21 over (25) 2:14 5:14 7:1 15:23,25 17:4 24:12 26:20 27:4,12 39:5 46:12 49:8 64:12 67:12.20 77:6 98:17 112:22 122:19 137:17 173:13 175:2 187:7 193:4 overall (3) 8:9 15:22 197:5 overcome (2) 70:19 184:1 overlaps (1) 17:16 oversee (2) 4:3 69:11 oversight (16) 47:3 58:9,10,24 59:1 60:14 61:22 62:3,13 90:11,14,19,23 91:22 93:11 205:20 overspill (1) 87:8 overtime (3) 76:13.17 77:12 overturned (1) 170:17 overwhelmed (10) 24:3,4,5 31:1,6 33:15 34:4 44:23 74:15 81:10 own (19) 7:15 27:21 30:7 36:1 39:7 44:21 45:22 47:18 59:13 66:1 76:16 97:22 107:4 111:19 129:23 159:24 160:7 169:7 182:22 pace (4) 18:14 28:11 151:12.13 paciferous (1) 201:11 paddy (1) 134:5 pages (10) 1:15,18 10:20 22:11 48:22 54:1 141:24 193:4,6 201:20 papadopoulos (4) 29:22 80:18 94:20 185:11 papadopouloss (1) 93:16 paper (2) 105:15.18 para (1) 41:23 paragraph (43) 5:17 6:14 7:17 8:23 10:20 11:3 15:1 16:7,9 17:9 19:1 22:18 30:23 33:6 36:12.18 43:4 56:9.21 65:3 77:10 90:8 96:9 98:8 106:17.20 114:5 116:2 139:16,17 142:5 146:6 152:22 174:7,12 175:21 184:13 197:1.19 198:3 201:21 205:7 207:12 paragraphs (3) 17:22 24:6 56.8 parameters (1) 176:17 nardon (6) 11:6 118:20 156:5 179:23 195:18 202:14 part (34) 1:21 2:17 11:4 25:15 38:23 40:21

48:12.13 49:11.15 57:2.3

69-19 74-1 76-11 78-10 11 85.9 87.5 110.22 114.11 139:5 146:21 147:3 148:17 154:5 159:22 163:12 172:13 180:10 187:16.17 203:11 206:5 particular (14) 9:24 14:2 63:20 66:4 68:20 70:9 91:12 148:20 154:17 155:18 166:21 183:9 192.12 195.10 particularly (6) 9:25 18:2 43:2 77:16 147:8 192:14 parties (3) 21:11 132:23 191:18 partner (3) 27:19 38:18 39:7 partners (2) 133:6 135:8 partnership (1) 42:18 parts (1) 66:7 narty (2) 164:14.15 pass (3) 172:14 190:3 209:16 passage (3) 36:12 55:25 73:10 passed (5) 13:4 73:2,8 127:11 153:4 passenger (2) 2:17,18 passing (1) 172:17 passionate (1) 209:22 past (6) 50:22 86:13,21 103:17 164:20 168:9 patchy (2) 146:20 193:17 path (1) 148:14 pathway (3) 73:23 74:5 199:1 patrol (1) 114:20 pattern (8) 15:23 68:2.13 75:14 76:19,22 170:10 175:22 patterns (6) 76:5,6,8 125:2 171:13 174:16 peak (1) 72:17 peer (6) 48:15,17,19 58:17 60:2,7 pending (1) 55:3 penultimate (1) 206:1 people (52) 2:18 9:1 10:6 11:20 12:8 13:2,6 28:16 29:20,20 30:7 31:14 39:3 52:12 58:18.20 59:25 62:15.15.66:1.67:7.20 68:24 70:2 72:21 76:6 80:10 83:12 87:25 88:6.8 92:5 93:15 104:7 111:20 112:13 113:9 143:7 149:10 152:17 154:18 156:19 157:6 169:18 171:7,16,23 174:18,21 176:1 190:8 192:17 per (2) 57:16 68:6 perceive (1) 188:11 perceived (2) 30:8 70:21 percent (1) 7:10 perform (5) 113:5 116:20 171:1 172:12,24 performance (5) 15:18 18:2 43.1 76.8 137.9 perhaps (12) 27:17 38:16 66:2 74:6 129:21 136:4 162:4 165:20.21 168:3 177:6 203:20 period (15) 4:22 5:11 7:23 8:1 63:22 65:15 72:15 74:16 80:23 94:9 103:5 145:25 179:24 180:18 181:22 periods (7) 10:2 26:25 31:3 75:25 76:3 7 94:7 persistent (2) 102:14 136:21 person (10) 3:13,15 11:23 12:1,12 15:11 16:17 53:20 74:1 180:7 personal (4) 76:16 153:6 203:7.8 personally (2) 85:22 209:15 nersonnel (8) 20:22 43:6 62:11 82:10 121:5 180:1,5

persons (23) 13:7 93:2 95:4,22 104:23 112:4 119:13 126:23 133:12 153:14 155:5 171:2.7.22 172:4 173:24 187:20 195:8 202:15 203:10.17.19 208:11 perspective (1) 200:24 pertained (1) 121:12 phase (7) 16:22 25:22 127:5 128:6 166:4 194:7 202:6 nhases (2) 15:24 16:1 phenomenon (1) 10:11 phillips (18) 1:5,10,11,12 18:24 50:21 51:1,2 117:18,25 118:1 168:7.13.14 209:12 210.7 13 211.2 phone (36) 46:12 84:11 85:8,13,13 146:10 147:2,3,6,25 148:24 149:2.3.21.22 150:1,4,14,24 151:9,16 152:6,8 158:7,8,9,14 160:5,12,16 161:6,21 162.2712190.7 phones (1) 148:21 physical (2) 81:19 149:1 physically (3) 20:21 78:5 196:23 physics (1) 149:1 pick (3) 16:3 30:3 98:8 picked (1) 152:19 picking (2) 101:18 120:3 picture (10) 28:21 35:12 46:24 50:12 77:14 86:22 115:11 119:5,13 194:24 pieces (1) 147:17 pilot (2) 170:25 203:25 piloted (1) 12:15 place (50) 14:18 29:8 32:5 36:6 39:19 43:1 44:11 45:22 62:3 75:3 88:2 94:10 97:10 111:4 113:11 114:7 115:14,20 116:17 123:7 127:22 128:12 129:6,9 132:17,25 133:9 136:11,11 137:16 138:8,13,24 143:4 144:15 145:14 20.22 147:11 167:11 177:15 182:6 190:11 192:1.20 193:1 194:1 200:18 202:19 208:3 placed (4) 97:2 105:14 122:10 198:18 places (2) 44:10 102:21 plan (20) 38:21 45:21 66:13 96:12 101:8 113:11 114:14:25 115:14:23 116:8 117:6.12.15.16 120:5 124:8 131:9 141:9 201:3 planned (3) 133:2 162:1 181:19 blanner (3) 57:9,12,17 planning (4) 42:10 56:18 57:5.11 plans (4) 114:7 121:21 132:25 201:16 platform (1) 181:19 platforms (2) 180:15 207:4 play (1) 158:2 played (2) 75:6 187:14 playing (1) 139:7 plays (1) 187:16 please (94) 5:16 7:16,18 8:21 10:12 11:3 14:19 15:15.17.20.25 17:12 18:17,22 20:20 23:3 25:22 26:25 27:12 30:15,18 33:1,6 35:18 36:15,21 38:12,20,23 39:5 40:17,18 41:24 42:6.21 43:8 47:9 48:21 49:2.8 50:6 51:2.23

52:2 54:1 56:6 63:6.14

65:2 69:3 73:14 90:8,9

transcripts@opus2.com 020 4515 2252

182.21

98.3 7 100.22 106.9 108:14 114:3 118:2.4.5 123:21 128:8 132:6 133:13 139:15 141:23.25 143:19 147:16 152:21 169:20,24 173:3 175:20 184:12 186:8 192:24 193:6 195:3 196:7 197:15,18 198:2 201:21 204-19 205-24 207-8 plus (1) 19:4 pm (6) 77:9 117:22,24 168:10.12 210:15 pneumonic (1) 170:8 pointed (1) 51:4 points (13) 21:24 23:25 29:5,25 32:20 46:18 88:21 124:18 162:25 170:14.15 179.20 183.2 nolice (5) 37:7 60:13 61:7.12 182:2 policies (3) 49:15 133:17 199:22 policing (2) 62:11 162:17 policy (12) 52:23 126:7,11,16,18 133:25 152.2 194.2 197.5 200.4 201.24 202.12 political (1) 40:20 politics (1) 36:9 pool (1) 59:25 poor (4) 116:8 117:6 142:12 176:10 port (4) 72:12 107:12,14 108.17 portal (5) 134:18 136:1 160:10 181:1 199:25 posed (2) 108:14,15 position (16) 3:13 10:22 41:21 45:6 84:19 96:23 106:6 128:5 147:23 149:20 152:17 163:16 168:17 176:19 191:9 192:2 positional (1) 161:6 positioned (1) 139:24 positions (4) 158:8,16,24,25 positive (1) 136:10 possible (9) 4:17,25 14:19 25:2 57:24 98:21 137:14 147:19 170:13 possibly (1) 169:17 post (4) 2:9 3:13 112:23 125:10 postevent (1) 52:17 postincident (3) 21:3 56:19 128:6 postrescue (1) 104:22 posts (3) 97:1,6,9 potential (10) 39:1 131:13 142:11 149:9 156:25 195:6 196:15 197:2.7 200:6 potentially (13) 13:8 18:15 71:11 92:6,15 104:7 157:4 159:25 168:2 171:9 190:5 191:2 204:2 practicable (1) 88:16 practical (5) 86:7 130:20 131:19.23 132:21 practice (7) 84:18 108:20 134:20.25 140:16 154:5 159:9 practices (3) 159:21,25 160:7 practitioners (1) 178:15 preceded (1) 4:15 precise (1) 138:4 precisely (2) 72:14 95:15 predetermined (4) 37:8 116:7 117:5,11 predict (1) 7:9 predictable (1) 68:14 predicted (5) 7:4 9:14 72:22 80.24 100.2 prediction (4) 9:13 65:7 66:2 79:12 predictions (3) 65:5 68:8

91.7 94.16 96.8 18 97.20

Day 12

174:6,9 177:11,13,15,17,21 178:4,10,13 191:21,21 205:25 207:6 208:21,22 reported (5) 17:8 81:24 104:24 203:15,17 reporting (3) 12:8 62:4 70:6 reports (19) 14:17 15:5 34:1,19 35:20 47:10 54:15 58:2,6 61:11 63:16 70:15 87:20 92:5 102:13 136:20 157:6 194:8 208:25 reputation (1) 20:11 request (17) 41:7,9,17 42:2 43:21 44:2 47:13 99:13 106:7 113:14 163:19 165:5,9,10,14,19 171:14 requested (3) 105:22 163:23

164:15

98:10 requires (1) 109:24 requisite (2) 62:12,16 rescue (98) 3:16,21 4:1 13:14.18 28:11 34:9 39:2 42:18 44:16,21 54:22 59:23,24 61:9,12 62:24 78:3 79:25 80:21 83:7 90:12 94:2 95:24 96:4 97:18 101:11,16,20,25 102:8,10 104:4 109:13,19 111:21 112:9,12 113:5,20 114:1.17 115:3.9 116:20 117:9 119:8 120:22 121:2,6 122:17 123:1 124:12,17 125:2,8 126:8 129:3 135:13 139:25 140:25 141:12 147:9 154:6,12 155:21,21 159:1,18 162:3,24 163:24 170:6 178:11.17 180:7 181:17 182:1 184:8 187:18 189:4 192:3,6,22 196:3,8,16 197:7 199:7 200:5,20 201:15 202:20 203:23 204:12 205:16 206:10 208:9 rescued (4) 187:20 193:22 202:6,16 rescues (2) 114:18 155:19 rescuing (1) 34:9 resilience (1) 37:11 resolved (9) 45:8,9 98:17 100:15 182:8 185:14 186:3,22 187:5 resource (23) 49:1 53:20,22 64:2,3,16 66:17 67:3,15 71:10 74:23.24 84:7 89:5 97:3 103:25 104:4 113:25 137:15 155:14 157:10 183:18 201:8 resources (10) 17:3,6 35:16,21 37:4 63:13 96:7 113:19 141:10 201:5 resourcing (6) 20:23 34:3 39:23 67:22 86:2 122:14 respective (3) 124:4 129:1,7 respond (19) 13:22 22:2 28:11 39:8 64:16 65:9 67:16 89:1 97:13,17 98:14 99:23 100:11 111:9 120:1 136:23 163:14 210:2,4 responded (3) 22:2 166:13.25

requests (7) 19:2 38:19 42:3 75:9 137:1 150:15 164:18 require (2) 47:23 201:4 required (20) 20:2 40:16 41:12 46:6 53:21 65:8 67:11 68:17 75:3,4 76:20 104:4 115:21 120:21 155:20 174:21,22 180:8 196:21 198:6 requirement (5) 37:21 70:4 89:14 93:9 138:21 requirements (3) 94:25 95:1

140:24	85:18 168:2 199:18	80:1,9 81:1,6,8 82:7,16	36:8 43:24 58:7 60:11	recall (14) 10:7 45:21 58:5	27:13 39:16 130:2
prefer (1) 114:20	professionals (3) 48:19 59:22	83:12 84:9,18 85:7,25	63:8,15 67:9 74:10 77:7	80:12,15 95:8 126:11,13	reflect (1) 65:14
preference (3) 70:3,3 180:6	178:6	86:9,13,17,19	78:4 79:22 88:17 93:13	135:23 139:1 142:16	regard (1) 152:5
preferred (2) 27:18 38:17	programme (3) 29:9 133:7	87:8,14,17,19 88:8,22,25	96:6 97:19 99:20 103:12	144:18 181:14 189:6	regarded (1) 172:10
prelocated (1) 79:18	134:10	89:2,6,9,12 90:1,6	105:8 108:13,15 114:2	recalled (1) 190:6	regardless (3) 66:13 79
preparation (8) 20:12,23	progress (1) 45:24	91:4,20,24 92:2,14,23	121:25 122:4,12 125:16	receipt (1) 140:16	148:5
24:15 66:13 72:16 75:19	progressed (3) 2:2,4 80:25	93:13,19 94:3,15,23	128:4 130:10 132:15,24	receive (4) 54:25 55:3,5 74:2	regime (1) 61:16
94:13 152:25	progressing (1) 197:16	95:7,9,13 96:6,18,23	136:16 137:18 143:20	received (21) 9:22 11:16	region (14) 39:4 54:22
preparations (1) 44:25	project (4) 35:25 118:7,10	97:11,19 99:7,9	144:12,14,15 146:24	45:25 51:14 54:7 55:23	94:2 95:24 101:11,20
prepare (1) 9:17	191:25	100:3,5,7,12,19,21 101:17	149:16 152:3 155:1	91:12 103:6 104:21 121:14	102:8 125:8 126:8 1
prepared (1) 44:9	projected (1) 77:3	102:3,11,24 103:4,12	156:6,9,10,25 157:20	123:5 138:3 139:22	159:18 162:6
preparedness (2) 63:13	promptly (1) 144:5	104:6,19 105:8,11,24	159:5 165:4 166:10 169:22	140:3,5,6 158:19,20	regional (4) 102:19 12
122:14	proper (1) 202:7	106:4,13,23	175:5 177:11 178:8 182:12	192:16 202:3 203:4	127:15 128:1
prerequisite (1) 84:14	properly (2) 12:11 158:15	107:2,8,11,16,19,24	183:1 188:19 189:10	receiving (4) 84:19 86:25	register (5) 30:16,17,2
prescribed (1) 90:21	proportion (1) 46:23	108:6,12,19,24	192:21 193:4 194:24	136:17 184:21	31:22 32:1
presence (2) 81:19,20	proportionate (1) 21:8	109:7,11,18 110:2,8,14,17	195:14 197:11 204:10,14	recipe (1) 183:22	regular (6) 19:6 62:3 1
present (2) 88:9 96:7	proposed (1) 201:1	111:6,12,15,17 112:2,17	207:7	reciprocal (1) 115:19	132:18 134:14 138:1
presentations (1) 199:3	protocol (7) 133:11,16	113:16 114:2 115:12,22	questioned (1) 205:10	recognise (3) 20:14 70:7	regularly (4) 21:2 48:1
presented (2) 35:13 46:24	196:7,10 197:23 198:7,11	117:5,11 118:17,21	questioning (2) 30:2 149:5	210:5	92:11
press (1) 102:18	protocols (1) 21:1	119:2,15,18 120:3,13,20	questions (10) 1:6,10 4:12	recognised (6) 53:10 66:23	regulations (1) 121:1
pressing (1) 138:14	proud (1) 209:22	121:7,23 122:3,12,16,24	9:5 129:5 148:15 163:21	98:12 116:17 159:25	reinforced (1) 103:8
pressure (7) 33:13 74:14	provide (27) 37:11 54:19	123:3,10,18,21	168:14 210:8 211:2	161:21	reiterate (1) 81:14
76:20 97:23 99:10 126:4	60:17 62:13,17,17 78:9	124:3,18,25 125:16	quibble (1) 109:12	recognition (1) 6:11	relates (2) 126:7 195:1
201:16	82:14 91:22,22 92:16	126:2,11,16 127:6,17,20	quickly (1) 192:23	recollection (2) 85:11 170:22	relating (1) 91:10
presumably (6) 40:10 76:5	93:12,19 97:3 105:2 107:4	128:4,21,24	quite (10) 23:24 51:18	recommendation (6) 49:9,10	relation (15) 6:1 42:1,2
124:18 128:21 151:22	120:4,12 124:16 143:1	129:5,16,19,25	107:19 109:7 116:24 117:1	57:14 174:23 176:23	58:2 114:5 121:25 16
157:25	162:11 171:13 184:18	130:4,6,10,25	118:8 177:12 200:10 201:9	205:22	176:21 177:5,6 178:9
pretty (4) 85:9 92:11 120:1	193:13 194:15 197:10	131:5,10,14,17	quotation (1) 33:18	recommendations (34)	184:9 198:22 200:5
154:3	198:21	132:2,4,6,15,24	quote (6) 66:24 103:20	20:19 22:24 26:5 27:22	relationship (12) 46:12
prevented (2) 208:16,25	provided (13) 1:12 13:1	133:8,11,16,23	139:7 186:1 197:22,25	45:22 48:23 49:7,14,24	120:18 123:3,12,16,1
preventing (2) 63:4 197:16	32:14 41:15,25 43:5 56:10	134:8,10,19	quoting (1) 202:22	50:9,10,17 55:6,18	124:19 125:4,14 131
previous (6) 2:13 3:7 8:12	57:21 101:14 106:7 126:25	135:2,9,15,21,24		56:5,10,24 57:20,24 58:16	200:13
17:24 60:15 164:20	191:22 207:14	136:2,6,14 137:16,24	R	59:9,10 136:24 174:17	relative (1) 158:24
previously (2) 7:8 80:17	provides (6) 62:22 161:8	138:2,8,19,22 139:3,14	N	177:16,18,21 178:11	relaxing (1) 142:9
primacy (6) 42:14,16,17,22	189:3 195:22 196:9 202:1	140:3,16 141:3,6,9,16,20	- (2) 115.12 100 1 12	191:20 207:10,14,22	relay (16) 92:7,10 95:1
128:14 129:10	providing (4) 16:6 118:13	142:4,16 143:3,14,17	r (3) 115:13 169:1,13	208:12 209:2	106:1,24 163:1,2,3,1
primary (6) 100:25 101:3	142:23 161:5	144:3,10,15,19,22	r163 (1) 177:6	recommendationsobservations	166:18 168:17 169:1
115:2 139:21 178:25	provision (2) 32:12 42:9	145:2,4,13,20 146:4,18	race (1) 39:19	(1) 207:17	176:21 188:22,24
113:2 139:21 178:25	provision (2) 52:12 42:9 public (7) 61:13,16,23 62:18	147:8,14,16 148:19	radar (1) 149:11	recommended (3) 173:6,14	relayed (1) 167:12
principle (2) 59:12 122:11	71:18 85:19 148:13	147:8,14,10 148:19 149:8,14,23	radio (3) 166:5,16 168:3	208:24	
principle (2) 59:12 122:11 privy (1) 190:1	publicly (1) 61:15	149:8,14,23 150:6,8,16,20,22	raft (1) 191:19	208:24 reconcile (3) 27:7 144:20	relays (2) 92:10 93:14 relevant (12) 2:13 5:7
			rag (5) 24:9,10 88:13 90:6,17	192:11	
proactive (8) 9:16 19:10	pull (1) 13:21	151:2,16,20,22,25	rags (3) 89:15 90:10,20		55:24 59:25 60:17 1
101:10 102:6 103:10	purpose (5) 3:12 25:9 82:5	152:10,15,18 153:12,24	raise (3) 35:1,7 127:6	reconciliation (3) 197:11	157:1 161:3 197:10
137:14 141:14,17	93:12 112:9	154:2,15 155:1,7,10,12,17	raised (3) 17:23 63:22 79:8	198:23 199:8	206:1
proactively (1) 209:6	purposes (3) 43:13 120:22	156:1,7,11,16,23	raises (1) 88:17	reconciling (2) 193:14	reliability (1) 159:15
probably (4) 18:13 29:25	179:7	157:11,16,20	raising (4) 19:13 26:4 28:22	206:16	reliable (3) 119:4 146:
46:11 62:6	push (1) 135:20	158:4,7,18,21	135:18	reconnaissance (1) 110:25	202:22
problem (32) 5:10,13,21	pushing (1) 104:12	159:4,14,20,24	ramsgate (1) 99:13	record (5) 49:18 166:8	relieve (1) 74:13
12:25 14:11 27:6 35:23	puts (3) 43:8 57:21 88:6	160:4,6,11,25	ran (1) 53:8	167:24 183:9 185:11	relieved (1) 5:3
42:14,16 63:21 67:8 70:10	putting (8) 26:12 33:13	161:5,10,16,25	range (1) 42:9	recorded (7) 77:10 158:11	rely (2) 108:25 114:23
75:8 102:14,15 121:10	54:10,12 69:18 129:6	162:10,13,19,23	rare (2) 163:5,8	166:12 183:5 184:8,24	remain (4) 51:16 98:18
136:22 138:4 141:20 144:4	138:13 198:16	163:7,9,12,18 164:4,6,13	rather (15) 22:25 31:22	205:4	100:15 111:22
148:23 149:9 153:1 182:6	Q	165:2,12,20,22	33:25 54:9 57:7 58:7 61:1	recording (3) 179:8 180:13	remaining (1) 205:3
183:19 184:2 192:12	¥	166:10,14,19,21	75:15 138:11 169:3 170:1	191:14	remains (1) 123:21
193:15 195:10 199:12,21	q (577) 1:17,20,23 2:1,20,22	167:4,14,20,22,24	185:22 193:9 197:4 200:24	recordkeeping (8) 178:22	remember (16) 63:18
206:18	3:2,7,15,23 4:12,18,21	168:20,24 169:7,12	rationale (4) 49:25 90:10	179:1,25 180:3 183:3	74:14 77:2,19 96:11
problems (8) 18:8 22:15,15	5:3,24 6:10,13,17,21	170:1,5,7,23 171:11	203:18 205:4	187:21 189:15 192:7	106:1 108:9 121:8 14
30:8 70:9 121:7 145:8	7:5,13 8:3,9,15,21	172:2,7,15,19,21	raw (1) 6:22	records (3) 23:11 179:17	154:15 163:16 168:2
183:2	9:4,8,10,19 10:10,17 11:16	173:1,11,17,19,22 174:2,5	rccs (1) 83:6	180:8	175:14 182:14
procedure (7) 116:17 159:11	12:10,19,25 13:15,24	175:9,12,14 176:9,17,19	reach (4) 9:1 65:6 75:2	recovery (2) 111:3 203:9	remembering (1) 144:
177:2 193:25 194:16	14:10,16 15:4,8,13 16:9,13	177:5,11,22 178:1,8,19,21	204:25	recruited (2) 97:7,9	remind (1) 19:17
200:17 206:6	17:8 18:17,20,22 19:19	179:2,5,8,11,15 180:17	reached (1) 40:16	recruiting (2) 9:17 72:20	reminded (2) 19:25 18
procedures (10) 21:1 49:16	20:4 21:22 22:3,12,15	181:2,4,9,12 182:5,11,25	reaching (1) 54:10	recruitment (14) 9:20 32:6	reminder (2) 138:14 1
56:17 88:14 133:17 138:24	23:3,11,23 24:24	183:14,21 184:3,7,12	read (11) 1:7 5:1 30:16	64:17 65:11,23 71:21,23	reminding (1) 176:24
159:22 192:5,20 199:22	25:5,8,11,22 26:3,20 28:20	185:2,5,10,20	82:22 87:20 97:22 139:2	72:2,5,9 73:11,15,17,22	remit (3) 61:1,4,5
proceeding (2) 116:25	30:3,6,15 31:11,18,25	186:6,8,12,18,22	156:8 165:9 204:24 207:25	red (14) 17:24 18:3 20:22,25	remote (16) 16:18 17:
137:20	32:8,20 33:5,11 34:5,17,25	187:6,11,21 188:6,12,16	reader (1) 184:19	21:8 27:9 76:23 77:3	26:7 64:13,25 68:19
proceedings (2) 47:24 51:7	35:14,19 36:8,20 37:25	189:10,15,23 190:4,13,25	reading (12) 15:5 19:15	79:7,13,20 80:4 94:8,9	69:8,20 71:1,15 86:1
process (20) 4:5 42:3 62:22	38:3,10 40:7,17,24	191:3,9 192:4,19	23:17 100:12 107:25	redeployed (1) 187:19	87:21,22
78:25 88:13 90:21,22	38:3,10 40:7,17,24 41:6,10,20 42:20 43:15	193:4,13,20,23 194:21	23:17 100:12 107:25 108:18 116:22 138:23	reduce (1) 141:15	remotely (6) 16:10 22:
121:18 122:22 135:16		195:3,13,20,24 196:1,5,20		reduced (1) 174:20	68:25 69:5 71:5 87:2
143:4 178:2 184:1 187:15	44:1 45:4,19 46:3,17	197:1,10,14 198:9,14,21	165:7,18 176:6 207:6	reduces (1) 67:20	remove (1) 70:21
193:7,13 203:9	47:8,15,18,21,25	199:6,12,20	real (2) 64:1 134:21	reducing (2) 63:4 75:16	rendezvous (1) 37:9
205:1,11,17	48:3,10,21 49:21 50:1,3	200:3,11,21,23	really (16) 13:11 29:12 30:6	refer (1) 111:5	repeat (1) 188:9
processed (1) 194:16	51:17,22 52:11,21	200:3,11,21,23 201:11,13,18 202:1,17,19	32:3 34:11 48:14 63:15	reference (19) 5:8 50:6	repeated (1) 100:9
	53:1,6,12,25 54:16		64:7 65:21 66:20 72:12,18		
processes (3) 48:25 138:23	55:13,20 56:5,15 57:3,6,19	203:11,20 204:3,8,16,18	119:8 130:21 138:20	53:12 66:1 69:15 71:3 72:7	repeats (4) 188:3,6 20
149:24	58:1,6,14 59:7 60:5,11	205:21,24	153:18	94:7 95:6 115:23 166:7	repetitive (1) 21:7
	61:1,4,7,11,15,18,25	206:5,8,13,15,25 207:6	realtime (3) 93:6 137:25	182:9,14 195:5,18 196:22	replaced (1) 64:9
	62:8,25 64:21,23,25	208:1,6,15,20,24 209:7	146:3	197:2 198:10 199:24	replacement (2) 17:14
18:12		qualification (1) 128:15	reason (7) 68:10 76:6 77:24	referenced (2) 136:9 140:22	replicate (1) 87:24
18:12 procurement (1) 43:11	65:19,21,25 66:23			references (2) 72:11 144:22	report (45) 13:12 15:9
18:12 procurement (1) 43:11 produce (1) 113:19	65:19,21,25 66:23 67:13,24 68:18 69:3	qualifications (1) 83:18	110:14 157:7 163:12 169:3		
18:12 procurement (1) 43:11 produce (1) 113:19			110:14 157:7 163:12 169:3 reasonable (2) 143:16 202:9	referred (8) 11:7 29:23 41:8	
18:12 procurement (1) 43:11 produce (1) 113:19	67:13,24 68:18 69:3	qualifications (1) 83:18			
procurement (1) 43:11 produce (1) 113:19 produced (5) 15:8 47:10	67:13,24 68:18 69:3 70:5,15,17,25 71:19	qualifications (1) 83:18 qualified (2) 12:12 53:8	reasonable (2) 143:16 202:9	referred (8) 11:7 29:23 41:8	23:6,7,18 26:12 31:7
18:12 procurement (1) 43:11 produce (1) 113:19 produced (5) 15:8 47:10 72:3 125:11 160:9	67:13,24 68:18 69:3 70:5,15,17,25 71:19 72:6,10,14,18,24 73:10	qualifications (1) 83:18 qualified (2) 12:12 53:8 quality (1) 53:24	reasonable (2) 143:16 202:9 reasoning (2) 184:9 203:11	referred (8) 11:7 29:23 41:8 74:22 76:13 139:6 171:21	23:6,7,18 26: 47:12,15,18,1

responder (5) 6:7 98:18

100:15 101:1,3	106:5 110:8 111:13	scheme (2) 58:11 86:17	seek (1) 144:20	50:14,24 54:5 75:25 84:2	14:2,17 24:10 26:5	176:3
responders (2) 112:6 154:11	112:8,24 113:5,14 124:19	schiebel (1) 118:12	seems (4) 104:1 166:23	97:4 133:18 168:11 185:3	28:4,9,12,16 33:20 34:10	spawn (2) 183:17 184:1
responding (1) 128:15	125:4,22 126:2,15	screen (11) 15:16 23:14	184:7 185:21	208:15	35:23 37:3,18 39:3,16,17	speaking (4) 33:25 56:22
responds (1) 52:20	127:14,18,23 129:16	45:11 48:8 54:3 107:3	seen (57) 9:24 15:7 17:25	shortly (1) 182:17	42:1,14,16,23 43:18 46:21	88:17 203:24
response (76) 13:13,18	130:14 132:10 133:20	108:7 133:13 141:24	19:6,24 22:8 23:7,25 28:20	should (44) 31:21 38:1	54:21 57:13,18 59:24	special (1) 36:25
14:17 18:5,11,12 20:13	134:17 210:2	143:19 193:6	34:1,18 36:5 38:8 58:6,22	41:1,4 44:2 61:18 63:9	60:16 62:15 64:13 65:9,14	specialist (1) 53:22
21:23 24:15 26:4 27:20 28:4 33:16,23 36:7 39:24	rnlis (2) 2:15 133:11	sea (9) 11:14 20:12 37:12 67:22 113:1 127:1 178:16	62:5 66:11,23 68:14 70:6 71:23 74:18 76:24 80:14	66:4 70:24,24 75:4 88:13 92:24 93:6,7 95:16 99:14	66:19 67:18 68:9 70:10 73:6 80:19,20 84:20 88:12	specific (25) 16:3 19:14 21:3 22:12 57:4 73:24 79:14.15
	roam (1) 147:4 robust (1) 47:7	196:23 198:16		105:8 127:13 128:5 130:15	89:18 93:2,15,20 94:1,19	22:12 57:4 73:24 79:14,15 93:20 120:25 125:1,2
40:1 43:17 44:9 45:17,25 46:8 49:2 50:13,14,19	role (30) 2:24	search (136) 2:5 3:16,21 4:1	85:4,17 87:16,17 94:11 97:22 99:11 100:24 102:16	131:11 135:22 138:1	95:2,17,23 97:2,13,17	126:5,23 127:6 144:4
60:15 65:7 66:25 68:22	3:2,4,6,7,9,10,12,23 28:2	13:14,18 34:8 39:2 42:17	103:14,19 124:9 128:25	143:14 144:12,16 152:3	101:24 104:8 111:9 112:14	155:17 156:10 165:8
73:6 76:11 79:11,16,21	56:17 75:5 82:3 83:20	44:16,21 54:21 56:18	136:25 137:11 141:4 152:5	153:21 160:8 166:11	113:2,23 119:10 123:1	166:17 171:13 188:2
81:24 82:15 87:13 90:12	89:22 90:13 91:4,13 92:15	57:5,9,11,12,17 59:23,23	153:15 154:2 170:19 174:8	184:14,23 190:12 193:8	126:8,20 128:15 129:2	199:6,21 200:4
95:20,25 97:2 100:9	93:12,16 104:2 122:22	62:24 64:11,13 69:6,8 78:3	177:12 192:8 194:19	194:5,14,15 195:15	130:23 139:25 144:7	specifically (16) 37:16 44:16
101:19	128:18 133:5 135:15 169:7	79:24 80:21 83:6 90:11	199:4,12,23 200:7,8,9,25	199:14,21 200:2 204:16,16	145:5,9 147:9,18	59:24 64:17 67:17 84:22
109:13,18,19,21,21,22,24	181:16 187:15 189:14	94:1 95:23 97:17	203:2 204:13	shouldnt (6) 60:13,14 104:14	152:12,24 153:2 155:19,21	91:1 95:19 126:21 133:3
112:7 124:1,7 125:14	roles (6) 2:5 83:21 91:9	101:11,15,20,25 102:7	selective (1) 166:4	125:20 188:13 199:15	156:13,17 157:17 159:2,3	146:24 165:18 169:14
130:22 139:21 153:8,20,23	124:4 129:2,7	104:4 109:13,19 111:21	semisubmerged (1) 170:17	show (4) 128:6 136:20 186:4	161:18 162:6 163:4,5	185:3 195:22 196:6
154:8,14,17,17,19 155:16	roll (1) 162:2	113:19 114:17,20 115:3,9	send (6) 37:7 58:20 80:5	209:19	164:20 168:20,24	speed (1) 106:5
156:22 166:17 177:17	rolling (1) 135:18	116:20 117:9 119:8 120:22	140:18 150:15 152:12	showed (3) 35:8 70:15 85:3	169:15,17 171:2,4,9,22,24	spent (1) 201:6
196:10,21 205:15,16	room (11) 68:24 69:7,12,19	121:2,6 122:17 123:1	sending (2) 137:17 139:8	showing (2) 69:25 89:10	173:13,14 174:22 176:1	sphere (1) 128:2
207:19 208:17,21	87:23 88:4,6 184:18	124:11,17 125:2,2,8 126:8	senior (12) 26:18 28:2,22	shown (2) 127:21 173:12	183:5 190:19 192:10	spirit (1) 57:14
responses (4) 50:15,16	189:8,25 190:8	129:2 135:12 140:24	53:3,5 62:7 66:8 81:11	shows (7) 7:19 9:22 35:12	197:3,16 198:24 199:7	spoke (2) 134:6 173:24
166:11 177:8	rooms (1) 43:17	141:12 154:6,12	82:11 88:8 93:15 111:19	47:3 127:25 186:2,22	201:6,9,11 203:12	spoken (4) 12:24 135:10
responsibilities (3) 73:1	rory (1) 1:5	155:15,21,21 158:25	sense (5) 131:23 141:7	sick (1) 88:24	205:2,8,12 207:3 210:3	208:7,9 sponsor (2) 32:25 35:1
124:4 129:8 responsibility (9) 4:1,9 98:19	ross (10) 1:4,11 50:22 51:1 117:20,25 168:8,13	159:1,4,18 162:2,24 163:24 168:15 169:15,25	157:11 190:25 196:13 sensitive (1) 196:12	side (3) 54:8 101:23 144:25 sighted (1) 167:7	smc (57) 16:10,18 17:13 20:21 22:16 26:8 53:8	sponsor (2) 32:25 35:1 sponsorship (2) 58:25 61:22
102:2,8,21 141:12	210:9,14	170:4,6,9,10,20	sent (7) 37:9 51:20 140:9	signal (4) 146:20 149:22	56:17 74:14 75:2 78:23	spotted (1) 203:16
201:14,15	rotary (3) 114:11 117:3	170:4,0,9,10,20	141:2 158:8 161:1 167:21	162:7 168:4	81:8,23 84:6,12,17,24	spread (2) 171:8 174:3
responsible (5) 2:9 3:16 46:5	143:1	173:2,14 174:10,16	sentence (7) 10:15 17:9	signals (1) 146:10	85:2,19 86:22 91:15 92:17	spring (1) 64:19
60:6 121:2	roughly (1) 53:2	175:7,16,22	54:17 198:5 207:13,15,21	significant (17) 28:3 39:18	93:1,2,7 95:15,19 103:25	square (2) 171:4 175:16
rest (9) 27:3 29:21 30:2	round (5) 39:19 82:17	176:4,6,13,14,17 177:6	separate (4) 21:23 181:8	46:21 60:21 63:2,20 66:17	104:3,17,25 105:10,22	sru (2) 170:5,12
49:25 67:17 75:17 76:3	185:23 186:24 187:1	178:11,17 184:8 187:18,18	194:8 200:2	70:1 71:13 89:18,22 95:4	110:3,7 142:20,22 143:15	staff (92) 4:9 9:17 12:5,7
169:2 181:18	routine (1) 85:17	189:3,4 192:3,6,21,25	september (5) 8:11,18 21:17	97:23 100:1 113:10,13	158:19 169:16 172:14	13:11 17:25 20:11 21:6
restricted (1) 27:8	routinely (1) 73:9	193:9,19 196:3,8,16 197:6	68:1 196:8	142:7	184:15,21 185:15	26:25
restrictions (1) 112:19	royal (1) 101:15	199:7 200:4,20 201:15	series (3) 22:24 59:10 193:16	significantly (5) 7:4 9:18	187:4,11,19 189:18,19	29:6,8,11,12,13,21,23 32:7
result (4) 15:5 128:7 187:12	rules (1) 181:2	202:8,20 203:7,16,21,23	serious (3) 18:7 21:24 46:19	10:8 68:12 76:7	190:15 193:19 195:1 199:1	39:7 65:13 67:2,10 68:16
199:13	run (2) 35:11 118:22	204:1,10,11 205:16 206:10	serve (1) 61:23	signs (2) 17:25 21:6	202:7,15 204:15 205:10	71:2,10,15 72:8 73:5,22
resulted (2) 73:16,18	running (1) 163:6	208:8	served (1) 2:14	sim (1) 147:4	smcs (8) 64:9,11 77:11,21,24	75:9,14,22 77:21
results (1) 71:25	runs (1) 83:9	searching (11) 114:19	serves (1) 102:11	similar (5) 22:20 23:2 24:16	82:19 105:12 203:9	78:1,3,7,13,14,16,21
retained (1) 42:17		169:2,7 171:5 172:17	service (23) 4:11 34:16 37:6	63:5 106:6	snapshot (1) 103:3	79:2,23 81:3,13,14,16
retasking (1) 120:21	S	173:12 174:18 176:1 187:8	43:6 44:25 60:13 61:8 64:5	simple (3) 9:2 82:21 185:8	solas (5) 33:16 43:13 44:9	82:20 83:1,2,6 84:1 86:5
retention (1) 20:11		202:5 204:5	71:18 86:17 99:4 110:11	simultaneously (1) 39:4	120:22 201:15	87:4,11 95:10
retirement (1) 97:8 return (1) 86:24	sac (5) 169:24 170:3,20	season (2) 72:17 73:20 second (30) 1:17 10:15	124:17 145:15,16,18 146:7 151:9 157:22,25 180:1,5	since (22) 1:24 3:24 44:18 47:10 55:14 58:4 83:4 89:3	solution (2) 116:14 152:1 somebody (4) 28:1 69:19	96:13,16,22,25 97:1,10,15,16 113:12
return (1) 80:24 returned (1) 86:20	172:15 176:15	12:10 14:25 15:21 16:9	192:3	105:6 119:7 130:18 146:1	87:9 149:7	134:17,17 140:22
review (53) 4:24 16:2,23	sad (1) 209:10	17:8 18:20,21,22 24:2	services (11) 37:10 38:7	147:13,14 148:21 151:23	someone (5) 13:12 34:13	146:16,17 156:3,12,24
18:11,12 24:25 25:4 47:18	sadly (2) 208:14 209:16 safe (3) 90:11 104:9 112:20	50:10 54:17 56:8 73:17	60:12 61:13,15 148:1	163:6 175:17 176:21	84:14 109:23 149:6	158:5 160:8,18 176:24
48:11,15,19 51:3,5,9	safely (3) 21:21 203:23 204:5	77:9 88:23 106:7,16 142:5	149:18,20 181:25 182:2,2	183:15 191:12 205:10	someones (1) 157:8	180:13,23 183:12,15,25
52:1,4,11,17 53:23 55:5	safety (6) 50:5,7,8 61:2	169:4 174:12 175:18	serving (1) 110:10	single (10) 11:20 12:1,3,4	something (42) 32:22 66:3	190:18,21 192:18 193:14
58:19,23 59:8,20	115:8 117:2	190:17,19 195:5 196:22	session (1) 140:2	17:5 27:5 179:12 182:15	68:13,25 82:16 83:2 84:25	194:20,22 198:22 199:17
60:2,3,7,23,24 61:20 62:3	sailing (1) 39:18	197:1,19 207:15	set (20) 10:21 22:19 24:16	190:10 206:19	85:13 86:7 89:7 100:16,17	206:12 209:25 210:1,1
88:12 89:15 90:17	same (35) 6:5,6,22 11:20	secretary (3) 6:1,4 36:23	33:7 37:22 43:4 61:16 76:6	sinking (7) 169:18 170:18	102:25 110:7 112:13,23,24	staffed (1) 97:13
91:14,23 92:21 98:5	16:24 18:4 20:18	secretarys (2) 6:19 36:10	80:24 87:9 98:21 117:15	171:1 176:1 187:25	113:7,16,23 125:24 127:13	staffing (19) 22:16 36:2
103:25 111:16 112:7,14,15	22:4,13,23 23:1,25 53:3	section (4) 11:1 24:13 38:24	119:18 150:14 151:3	203:12,21	129:14 135:4,16,19 136:9	63:15,20 64:19 65:8,18
113:22 119:10 129:20	57:17 63:11 69:18 87:11	146:22	164:16 181:21 184:10,13	sir (18) 1:4,11 30:2 50:21,22	143:8 148:13 149:11,13	66:3,21 75:8 77:7,8,16
130:1 144:2 176:24 179:24	92:19 93:19 104:6,8	security (5) 2:25 3:8 21:18	202:1	51:1 70:13 117:19,20,25	150:18 152:16,20 157:7	80:3 82:15 94:18 96:6
204:20 205:8 208:18	109:23 132:8 133:22	34:12 128:19	sets (6) 7:14 15:19 27:21	168:7,8,13 201:12	161:13 164:2,9 178:17	97:11 191:24
reviewed (3) 21:2 79:20	137:19 173:1 184:5 189:8	see (123) 1:20 5:17,17 6:14	99:18 125:4,5	210:8,9,13,14	180:4 184:23 190:25	stage (3) 45:5 190:20 202:2
185:24 reviewer (11) 52:21	190:8 192:17 200:14	7:24,25 8:10,13,16,18,23 10:15 14:25 15:17,21	setting (2) 124:3 164:8 seven (7) 1:18 42:4,24	sit (1) 69:9 sites (1) 63:25	sometimes (2) 41:8 122:21 sommen (6) 195:23	stakeholder (1) 56:18 stakeholders (6) 3:19 42:19
54:4,8,16 55:10 56:9 57:21	205:25 207:8 208:14,20	10:15 14:25 15:17,21 16:1,6,8 17:6 20:9,18	49:12,12 63:11 170:14	sites (1) 03:25 sits (3) 59:15 157:7 180:11	196:4,17,24 197:20 200:15	122:17 130:11,16 131:25
204:22 205:17.22 208:1	sandettie (1) 104:8	22:18 23:19 26:6 27:1 29:2	several (3) 55:17 173:24	situation (30) 11:18 12:5	soon (2) 57:23 162:21	stand (2) 17:14 69:11
reviewers (1) 205:14	sar (22) 13:20 18:5 48:18 59:18,22 66:25 102:19	30:17 33:7,9 36:17	181:12	28:8,24 33:8,8 39:6 64:2	sooner (3) 139:22,24 209:11	standalone (1) 151:20
			severe (1) 156:14		sop (10) 95:3 160:19 192:25	standard (9) 21:1 53:24
reviewing (8) 17:15 28:18		38:13,23 41:22 42:8 48:7		80:2 90:15 98:1,10,23		
reviewing (8) 17:15 28:18 134:15 178:16 192:2	114:24 139:21 159:17	38:13,23 41:22 42:8 48:7 49:2 50:4,7 51:18 52:21		86:2 90:15 98:1,16,23 100:14 110:17 112:17	193:18 194:25 196:2	88:14 126:23 159:9,10,22
reviewing (8) 17:15 28:18 134:15 178:16 192:2 202:14 206:11,12	114:24 139:21 159:17 162:6 178:6,15 195:6,9	38:13,23 41:22 42:8 48:7 49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19	shall (1) 66:8	100:14 110:17 112:17	193:18 194:25 196:2 197:15 200:2 206:1 208:12	88:14 126:23 159:9,10,22 192:19 193:24
134:15 178:16 192:2	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12	49:2 50:4,7 51:18 52:21				
134:15 178:16 192:2 202:14 206:11,12	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19	shall (1) 66:8 share (4) 102:4 137:19	100:14 110:17 112:17 118:3 122:18,19 129:25	197:15 200:2 206:1 208:12	192:19 193:24
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8	192:19 193:24 standards (2) 52:15,23
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 84:7 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 84:7 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9	 shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4 136:14 141:21 188:23	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 84:7 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19	 shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4 136:14 141:21 188:23 189:11	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:18 2:9 8:7 89:25 91:8 95:1 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19 134:6 136:3 139:17	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4 136:14 141:21 188:23 188:11 situations (2) 116:9 117:7	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10,24	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 84:7 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19 134:6 136:3 139:17 141:16,19 142:2,5,8,20	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19,25	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207.4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 six (2) 75:15 97:6	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2 sounds (4) 122:8,11 185:17	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3 26:15 29:7 30:15,20,21	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10,24 68:1,20 81:21 100:2 102:13 103:2 115:6 116:19 136:17 145:5 176:24 177:5	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 84:7 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19 134:6 136:3 139:17 141:16,19 142:2,5,8,20 147:22 149:3,15 153:24	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19.25 143:5 179:6 189:8 209:5	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207.4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 86:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 six (2) 75:15 97:6 size (4) 171:6,9,21 174:1	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 228:2 sounds (4) 122:8,11 185:17 190:25	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18 72:5,15 80:17 96:20
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3 26:15 29:7 30:15,20,21 31:5,9,12,14,17 32:1,3,17	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10,24 68:1,20 81:21 100:2 102:13 103:2 115:6 116:19 136:17 145:5 176:24 177:5 179:20 182:13 202:20	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 84:7 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19 134:6 136:3 139:17 141:16,19 142:2,5,8,20 147:22 149:3,15 153:24 161:23 164:7,10	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19,25 143:5 179:6 189:8 209:5 shes (1) 207:22	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 six (2) 75:15 97:6 size (4) 171:6.9,21 174:1 sizes (1) 112:15	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2 sounds (4) 122:8,11 185:17 190:25 source (2) 179:12 190:10	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18 72:5,15 80:17 96:20 135:17 160:6
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3 26:15 29:7 30:15;20,21 31:5,9,12,14,17 32:1,3,17 33:14 39:1 63:4 65:16	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 15:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10,24 68:1,20 81:21 100:2 102:13 103:2 115:6 116:19 136:17 145:5 176:24 177:5 179:20 182:13 202:20 saying (21) 37:25 38:2 40:25	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 84:7 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19 134:6 136:3 139:17 141:16,19 142:2,5,8,20 147:22 149:3,15 153:24 161:23 164:7,10 170:3,7,15 171:11 173:6	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 166:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19.25 143:5 179:6 189:8 209:5 shes (1) 207:22 shift (13) 75:14 76:5,5,7	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 six (2) 75:15 97:6 size (4) 171:6,9,21 174:1 sizes (1) 112:15 ski (1) 17:5	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2 sounds (4) 122:8,11 185:17 190:25 source (2) 179:12 190:10 sourced (1) 145:25	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 stands (2) 18:6 104:13 stands (2) 18:6 104:13 stards (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18 72:5,15 80:17 96:20 135:17 160:6 starting (5) 10:19 26:6 79:7
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3 26:15 29:7 30:15,20,21 31:5,9,12,14,17 32:1,3,17 33:14 39:1 63:4 65:16 71:13 111:13 141:15	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10.24 68:1,20 81:21 100:2 102:13 103:2 115:6 116:19 136:17 145:5 176:24 177:5 179:20 182:13 202:20 saying (21) 37:25 38:2 40:25 74:15 77:10,25 78:11	$\begin{array}{c} 49:2\ 50:4,7\ 51:18\ 52:21\\ 53:14,17\ 56:7,9\ 60:19\\ 65:19\ 69:15\ 70:19\ 72:19\\ 73:15\ 77:4,17,24\ 80:1\ 82:9\\ 84:7\ 89:25\ 91:8\ 95:21\ 98:4\\ 99:5\ 106:15,19,25\\ 107:5,9,10\ 108:7\ 109:2,18\\ 111:14\ 112:8\ 124:2\ 125:9\\ 128:129:12\ 130:4\ 133:19\\ 134:6\ 136:3\ 139:17\\ 141:16,19\ 142:2,5,8,20\\ 147:22\ 149:3,15\ 153:24\\ 161:23\ 164:7,10\\ 170:3,7,15\ 171:11\ 173:6\\ 174:6,8,13\ 181:9\ 183:21\\ \end{array}$	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19,25 143:5 179:6 189:8 209:5 shes (1) 207:22 shift (13) 75:14 76:5,57 81:1 86:9 93:21,21 94:4,4	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 six (2) 75:15 97:6 size (4) 171:6,921 174:1 sizes (1) 112:15 ski (1) 17:5 skills (2) 62:16 84:14	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2 sounds (4) 122:8,11 185:17 190:25 source (2) 179:12 190:10 source (1) 145:25 southeast (3) 46:4 79:18	192:19 193:24 standards (2) 52:15.23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14.15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18 72:5,15 80:17 96:20 133:17 160:6 starting (5) 10:19 26:6 79:7 183:1 185:7
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3 26:15 29:7 30:15,20,21 31:5,9,12,14,17 32:1,3,17 33:14 39:1 63:4 65:16 71:13 111:13 141:15 151:16,22 156:4,12,16	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10,24 68:1,20 81:21 100:2 102:13 103:2 115:6 116:19 136:17 145:5 176:24 177:5 179:20 182:13 202:20 saying (21) 37:25 38:2 40:25 74:15 77:10,28 78:11 82:7,19 90:18 96:24	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 84:7 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19 134:6 136:3 139:17 141:16,19 142:2,5,8,20 147:22 149:3,15 153:24 161:23 164:7,10 170:3,7,15 171:11 173:6 174:6,8,13 181:9 183:21 186:9,12,18,19 188:20	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19,25 143:5 179:6 189:8 209:5 shes (1) 207:22 shift (13) 75:14 76:5,5,7 81:1 86:9 93:21,21 94:4,4 138:11,13 185:7	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207.4 208:14 situational (11) 16:19 22:17 26.7,21 69:13 70:22 88:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 sit (2) 75:15 97:6 size (4) 171:6,9,21 174:1 sizes (1) 112:15 skills (2) 62:16 84:14 slightly (12) 3:10 23:3 30:10	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2 sounds (4) 122:8,11 185:17 190:25 source (2) 179:12 190:10 sourced (1) 145:25 source (3) 46:4 79:18 133:24	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18 72:5,15 80:17 96:20 135:17 160:6 starting (5) 10:19 26:6 79:7 183:1 185:7 statement (62) 1:14 4:14
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3 26:15 29:7 30:15,20,21 31:5,9,12,14,17 32:1,3,17 33:14 39:1 63:4 65:16 71:13 111:13 141:15 151:16,22 156:4,12,16 192:13	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10,24 68:1,20 81:21 100:2 102:13 103:2 115:6 116:19 136:17 145:5 176:24 177:5 179:20 182:13 202:20 saying (21) 37:25 38:2 40:25 74:15 77:10,25 78:11 82:7,19 90:18 96:24 117:11 139:18 155:2	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 847 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19 134:6 136:3 139:17 141:16,19 142:2,5,8,20 147:22 149:3,15 153:24 161:23 164:7,10 170:3,7,15 171:11 173:6 174:6,8,13 181:9 183:21 186:9,12,18,19 183:20 193:1,6,25 194:6 195:6	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19,25 143:5 179:6 189:8 209:5 shes (1) 207:22 shift (13) 75:14 76:5,5,7 81:1 86:9 93:21,21 94:4,4 138:11,13 185:7 shifts (5) 75:23,24	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207.4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 86:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 six (2) 75:15 97:6 size (4) 171:6,9,21 174:1 sizes (1) 112:15 skills (2) 62:16 84:14 slightly (12) 3:10 23:3 30:10 52:3 53:5 80:23 91:6 106:1	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2 sounds (4) 122:8,11 185:17 190:25 source (2) 179:12 190:10 sourced (1) 145:25 southeast (3) 46:4 79:18 133:24 southwest (1) 169:5	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 stands (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18 72:5,15 80:17 96:20 135:17 160:6 starting (5) 10:19 26:6 79:7 183:1 185:7 statemet (62) 1:14 4:14 5:15,17,24 6:24 7:15,16
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3 26:15 29:7 30:15,20,21 31:5,9,12,14,17 32:1,3,17 33:14 39:1 63:4 65:16 71:13 111:13 141:15 151:16,22 156:4(1,2,16 192:13 risks (8) 20:10 22:20 23:13	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10,24 68:1,20 81:21 100:2 102:13 103:21 115:6 116:19 136:17 145:5 176:24 177:5 179:20 182:13 202:20 saying (21) 37:25 38:2 40:25 74:15 77:10,25 78:11 82:7,19 90:18 96:24 117:11 139:18 155:2 173:15 175:3 199:6,10	$\begin{array}{c} 49:2\ 50:4,7\ 51:18\ 52:21\\ 53:14,17\ 56:7,9\ 60:19\\ 65:19\ 69:15\ 70:19\ 72:19\\ 73:15\ 77:4,17,24\ 80:1\ 82:9\\ 84:7\ 89:25\ 91:8\ 95:21\ 98:4\\ 99:5\ 106:15,19,25\\ 107:5,9,10\ 108:7\ 109:2,18\\ 111:14\ 112:8\ 124:2\ 125:9\\ 128:8\ 129:12\ 130:4\ 133:19\\ 134:6\ 136:3\ 139:17\\ 144:16,19\ 142:2,5,8,20\\ 147:22\ 149:3,15\ 153:24\\ 161:23\ 164:7,10\\ 170:3,7,15\ 171:11\ 173:6\\ 174:6,8,13\ 181:9\ 183:21\\ 186:9,12,18,19\ 188:20\\ 193:1,6,25\ 194:6\ 195:6\\ 196:20\ 197:17\ 198:4\ 200:3\\ \end{array}$	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19.25 143:5 179:6 189:8 209:5 shes (1) 207:22 shift (13) 75:14 76:5,5,7 81:1 86:9 93:21,21 94:4,4 138:11,13 185:7 shifts (5) 75:23,24	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207.4 208:14 situational (11) 16:19 22:17 26.7,21 69:13 70:22 88:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 sit (2) 75:15 97:6 size (4) 171:6,9,21 174:1 sizes (1) 112:15 skills (2) 62:16 84:14 slightly (12) 3:10 23:3 30:10	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2 sounds (4) 122:8,11 185:17 190:25 source (2) 179:12 190:10 sourced (1) 145:25 southeast (3) 46:4 79:18 133:24 southwest (1) 169:5 space (3) 37:3 82:11 112:4	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 standing (2) 18:6 104:13 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18 72:5,15 80:17 96:20 135:17 160:6 starting (5) 10:19 26:6 79:7 183:1 185:7 statement (62) 1:14 4:14 5:15,17,24 6:24 7:15,16 8:21 9:16 10:12,19 11:2,7
134:15 178:16 192:2 202:14 206:11,12 reviewreport (1) 55:15 reviews (9) 14:16 21:3 24:10,10 47:11 48:17 58:17 60:2 208:24 revised (1) 128:9 rhib (1) 105:17 rings (1) 148:14 rise (1) 10:17 risk (29) 16:19 24:22 25:3 26:15 29:7 30:15,20,21 31:5,9,12,14,17 32:1,3,17 33:14 39:1 63:4 65:16 71:13 111:13 141:15 151:16,22 156:4,12,16 192:13	114:24 139:21 159:17 162:6 178:6,15 195:6,9 196:10 197:23 198:7,12 202:5 204:23 207:19 sat (1) 92:16 save (5) 25:2,10 29:15 158:10 209:21 saved (2) 25:3 151:10 saw (23) 26:11,20 28:7 31:8 45:8 64:18 66:10,24 68:1,20 81:21 100:2 102:13 103:2 115:6 116:19 136:17 145:5 176:24 177:5 179:20 182:13 202:20 saying (21) 37:25 38:2 40:25 74:15 77:10,25 78:11 82:7,19 90:18 96:24 117:11 139:18 155:2	49:2 50:4,7 51:18 52:21 53:14,17 56:7,9 60:19 65:19 69:15 70:19 72:19 73:15 77:4,17,24 80:1 82:9 847 89:25 91:8 95:21 98:4 99:5 106:15,19,25 107:5,9,10 108:7 109:2,18 111:14 112:8 124:2 125:9 128:8 129:12 130:4 133:19 134:6 136:3 139:17 141:16,19 142:2,5,8,20 147:22 149:3,15 153:24 161:23 164:7,10 170:3,7,15 171:11 173:6 174:6,8,13 181:9 183:21 186:9,12,18,19 183:20 193:1,6,25 194:6 195:6	shall (1) 66:8 share (4) 102:4 137:19 152:17 208:6 shared (19) 13:9 16:18 19:3 20:3 35:7 59:6 70:22 102:18 103:9 120:19 126:14 127:15 138:21 139:20 150:12 152:17 180:23 182:22 190:9 sharing (10) 19:17 20:1 102:23 135:7 137:19,25 143:5 179:6 189:8 209:5 shes (1) 207:22 shift (13) 75:14 76:5,5,7 81:1 86:9 93:21,21 94:4,4 138:11,13 185:7 shifts (5) 75:23,24	100:14 110:17 112:17 118:3 122:18,19 129:25 143:17 151:12 154:11 160:12 161:23 191:10 204:18 206:9 207:4 208:14 situational (11) 16:19 22:17 26:7,21 69:13 70:22 88:4 136:14 141:21 188:23 189:11 situations (2) 116:9 117:7 six (2) 75:15 97:6 size (4) 171:6,9,21 174:1 sizes (1) 112:15 skills (2) 62:16 84:14 slightly (12) 3:10 23:3 30:10 52:3 53:5 80:23 91:6 106:1 184:25 185:4 195:21	197:15 200:2 206:1 208:12 sops (6) 150:21 151:6 160:8 202:19 205:20 206:11 sort (11) 9:21 23:15 34:18 35:15 83:18 95:16 97:11 143:6 163:20 180:12 189:14 sought (1) 194:6 sounding (1) 28:2 sounds (4) 122:8,11 185:17 190:25 source (2) 179:12 190:10 sourced (1) 145:25 southeast (3) 46:4 79:18 133:24 southwest (1) 169:5	192:19 193:24 standards (2) 52:15,23 standby (2) 101:1 104:15 stands (2) 47:19 112:11 start (13) 15:14,15 22:12 30:15 48:22 63:14 80:16 83:4 126:19 135:21 136:15 145:9 201:19 started (8) 49:4 64:18 72:5,15 80:17 96:20 135:17 160:6 starting (5) 10:19 92:6: 79:7 183:1 185:7 statement (62) 1:14 4:14 5:15,17,24 6:24 7:15,16

71:20 72:7 73:11 77:18 90:7 91:6 94:15 96:8 106:8.16 107:2.25 108:6 114:3 118:4 127:2 139:14 146:5 152:21 155:3 157:15,23 164:6 175:18 176:6 180:22 182:9 184:12,16 191:22 201:20 205:18 210:10 ents (1) 1:13 state states (8) 58:20 59:19 60:22.22 62:21 164:13 178:14 198:4 static (1) 175:11 stating (1) 175:21 station (7) 2:16,20 16:10 85:10 127:25 160:7 184:15 stations (4) 4:9 73:2 110:10 160.8 statutory (1) 201:15 stay (2) 29:17 120:25 stayed (1) 175:11 staying (1) 36:8 steady (1) 66:11 step (1) 95:15 steps (4) 24:21 32:16 75:7 206.8 stick (1) 88:11 sticking (3) 40:7 71:24 119:2 still (37) 1:20 3:4,9,10,12 13:4 29:23,24 30:11 34:8 43:14.15 44:24 47:19 57:12,16 99:22 100:10,11 109:15 111:22 112:18 119.21 121.24 123.14 134:8 144:24.25 148:21 158:2 159:8 160:14 161:8 166:5 198:18 205:25 208:14 stood (1) 93:10 stop (3) 124:1 134:24 196:23 stopped (3) 168:21,21 169:9 stops (1) 149:2 stored (1) 21:20 straight (1) 107:17 strait (3) 42:23 110:11 126:9 strategic (10) 23:12,13 26:15,19 38:6 46:4 80:11 94:23 130:8 201:9 strategically (1) 3:18 strategy (1) 21:5 streaming (1) 160:23 strength (2) 68:19 69:25 strengths (1) 63:24 stress (2) 21:6 138:20 stretched (10) 17:6 27:19 33:21 34:3,15 35:11 38:18 44:4.24 99:19 strong (3) 129:6 168:4 200:10 strongest (3) 149:3.21.21 struck (1) 180:2 structure (4) 22:13 37:22 52:14 79:20 struggle (1) 60:19 struggling (1) 17:18 stuart (4) 86:19,20 159:6 186:14 study (1) 48:11 subject (6) 51:5 58:8 60:14 122:9 128:14 173:1 subsequent (1) 20:16 substantial (1) 77:1 successfully (6) 33:11,15 34:8 40:1 134:20 193:22 sufficiency (1) 17:3 sufficient (7) 20:21 72:20 76:11 111:8 119:4 184:17 185:14 suggest (3) 11:17 12:10 154:19 suggested (3) 175:15 176:15 207:16 suggesting (1) 39:9 suitable (3) 112:6 121:9 136:13

suite (1) 119:25 suited (1) 44:15 sum (1) 179:20 summarise (3) 26:11 56:15 118:8 summary (2) 27:24 49:5 summer (17) 8:24 9:4,10,12 28:7,21 39:10,25 40:5,7 65:4 67:19 110:21 137:4 145:15 199:2.17 supervise (1) 85:4 supervision (4) 84:8,13,17 86:8 support (29) 21:6 23:13 27:20 29:8 37:12 38:19 41:25 42:7,9 57:8 66:19 68:19 71:1,16 75:2 81:21 82:14 86:10 90:11 92:17 93.12 19 112.9 113.25 121:5 134:1 180:13 203:18 206:23 supported (4) 81:24 120:8 203:4,9 supporting (2) 53:16 113:7 supports (5) 31:12 41:13 153:21 195:1 203:14 suppose (1) 144:3 sure (24) 4:10 21:20 25:24 30:1 36:22 41:17 55:17 59:4 69:20 99:8 100:24 102:22 116:22 122:10 124:6 129:13 139:2 151:14 154:24 157:15 182:9 184:16 186:5 192:2 surely (1) 190:4 surface (6) 44:7 69:15 88:5 98:13 140:9 171:10 surpassed (1) 8:17 surprised (1) 157:23 surveillance (10) 32:11 42:9 79:16 114:24 116:8,14,15 117:6 142:13 203:7 survivability (2) 204:4,10 survivors (1) 202:6 suspect (6) 34:23 53:21 66:12 85:16 136:4 184:6 suspend (1) 193:19 suspendedterminated (1) 205:13 suspension (6) 192:6,21,25 201:22,23 202:11 sustain (1) 145:24 swamped (1) 174:13 sweep (9) 171:14 172:8 173:5,6,11,14 174:3,11,24 swift (2) 102:10 127:21 switch (1) 166:5 system (42) 18:25 29:8 70:23 79:12 90:6,10 92:19 137:16 138:6 143:23 144:6.13.17.25 146:25 148:9 150:25 151:18.20 158:11 161:1,1,11,16 162:2,9,13,13,15 175:19 178:23,24 179:8,10,14 180:25 181:6.14.24 183:1,9,13 systems (9) 69:17 70:22 149:24 178:22 180:10 181:8 182:6.8 191:14 table (3) 8:16 82:17 106:20 tables (1) 173:16 tabletop (2) 130:19 132:20 tackles (1) 183:19 tactfully (1) 200:25 tactical (39) 23:12 24:1 56:17 74:22 88:10,15,19,23 89:3,13,24 90.13 13 19 20 25 91:5.8.12.21 92:8 93:10,15,19 94:5,19 95:2,17,18 114:12 115:6

116:4 142:6,7 143:8,14

185:24 187:13 188:16

tactics (12) 21:5 28:15 42:10 45.15 112.14 132.19 196:22 197:8.25 200:6 201:1.3 taken (38) 13:17 21:25 23:12,22 32:5 34:25 46:15 47:7 49:25 54:20 56:25 63:3,9 66:15 72:2 77:12 80:9,13 91:25 107:8 108:8 128:17 135:5.14 150:17 153:21.25 155:10 158:10 159:11 176:20 177:8 180:6 182:17 187:2.22 188:7 202:25 takes (6) 39:19 64:8 72:15 106:6 169:12 209:22 taking (13) 2:5,22 32:16 85:9 92:5 101:10 124:13 134:3 145:13 171:16 173:7 180:2 206:12 talk (10) 18:15 29:5 32:18 64:11 146:19 151:14 152:18 173:23 205:18.18 talkbox (1) 71:4 talked (19) 29:22 40:3 56:5 58:17 66:16 74:24 82.24 25 105.13 19 126.19 134-12 137-12 139-20 161:20 177:23 190:7 200:12 206:23 talking (17) 21:10 51:4 52:24 94:20 96:10 97:20 118:1 138:4 150:24 154:16,21 160:2,3,5 185:1 205.5 206.6 talks (5) 44:4 82:22.23 146:22 205:18 tapsic (2) 170:8 172:17 target (5) 170:9,11,13,24 171:6 targets (1) 170:13 task (11) 13:18 104:3 116:21 139:23 143:2 157:1,2,9 163:19.23 189:4 tasked (14) 101:4.5 103:14 104:15 110:15 116:25 155:14 157:9 158:20 169:14 171:3 183:8,11 208:10 tasking (16) 16:21 99:13 103:16.18 105:25 111:20 114:19.19 120:21 121:11 141:1 165:14 169:15 181:18 182:3 189:5 tasks (2) 103:25 190:8 taught (2) 155:22 183:25 team (21) 2:6 18:4 52:6 53:14 59:22 66:8 69:19.24.24 70:20 74:1 80:24 87:6 89:3 92:1 121:1 128:1 151:8 188:20 190:24 204:22 teams (6) 64:9 69:5,16,20 71:5 181:5 technical (3) 2:8 53:17 120.24 technology (10) 87:9 88:3 115:5 120:8 176:5 180:10.16 191:25 206:22 207:1 telephone (1) 148:2 telling (2) 155:7 159:6 tells (1) 25:20 temporary (1) 162:11 term (3) 6:9 69:10 71:3 terminate (5) 184:8 185:6 193:19 200:19 204:11 terminated (5) 193:9 195:9 202:21 203:23 204:6 terminating (3) 196:10 205:16 206:10 termination (19) 185:1 192:6,21,25 195:6,13,19 196:3.8.15 197:6 198:6.11 200:4 201:22.23 202:12 205:1 206:2

terminology (4) 6:18 99:2 125-1 183-16 terms (82) 5:7 9:16 11:16 18:14 21:19 29:5.5 30:10 40:3 41:13.18 45:1 53:12 58:10,22,25 62:6 64:6,8,17 68:21 69:2.13 70:16 71:13 72:24 74:12 77:2 81:1 87:3 88:3 89:13 91:11 93:14 94:6 103:10 105:12 109:23 110:8 111:22 112:3 114:11 116:22 119:13.19 122:20 123:3 124:6 126:21 129:10 130:3 132:24 135:6,18,25 138:18 141:17,21 143:4 149:23 152:23 156:10 158:7 161:23 162:16 165:22 167:14 169:7 170.20 171.10 21 183.15 189:15 191:13 194:24 195:18 199:11 203:3 205:19 206:19,21 209:2 territorial (1) 197:17 territory (2) 23:1 197:4 test (2) 109:18 134:13 tested (1) 21:2 text (4) 15:17 147:15 160:22 161.1 thank (133) 1:11,17,20,23 2:22 4:12,18,21 5:3 6:21 7:18 8:21,22 10:21 13:15 14:21 15:8.17 18:22 19:21 20:20 22:4 23:3,11 26:25 31:25 36:8 38:10 45:4 46.17 48.3 21 49.21 50.6 51:24 53:1.25 54:3 56:5 57:19 62:25 71:19 72:10,24 73:10,13,14 78:19 79:4 80:1 87:14 88:8 90:9 91:4 93:13 94:16 96:6 97:19 100:19,21 105:24 106:23 107:4 108:15 110:8,17 111:6 114:2 117:18.21 118:17 119:2.15.18 120:13 121:7 122:3,12,24 126:2,16 128:24 130:6,10 133:11 135:2 136:14 138:19 143:17 144:10 145:4,20 146:4 149:23 150:8 151:25 155:17 156:1.11 157:20 160:11 162:23 165:2 168:9 169:12 170:5.7.23 175:14 176:9,19 178:21 180:17 182:11,25 185:10,20 187:21 188:16 191:9 192:4 193:23 196:20 201:18 204:18,21 205:24 206:8 207:6 209:12 210:7,9,11 thankfully (2) 134:13 136:7 thats (185) 1:16.19.25 2:21 3:1.6 4:20 5:21.23 6:3,3,5,12 7:2,2,8 8:4,14 9:5,8,12 11:6,22 12:13,22 13:3 14:4 16:6,25 18:19 19:12 22:1.11 24:8 25:9,12,20 26:2 27:14 29:19.20.36:17.20.42:14 46:24 47:19 48:6.12.14.18 49:18.20 50:5.18 51:7 52:25 53:10,15,19 54:12,14 56:14 59:6,6 60:20 62:12 64:12 65:24 67:24 69:10 73:3.4 76:13,20 77:22,23 79:7 80:11 82:4.16.18 83:2 84:9.18.25 92:25 93:12.23 94:20 96:14 99:4 100:20 101:7,7 103:3 105:10,20 110:13,16 113:25 118:16 119:11,17 120:25 121:1 123:2,9 124:13 125:16 127:12 128:20.23 129:4.13 130:7 140:1 141:1 142:12 143:16 145:16 147:19 150:18 151:1,4,21,22,22

152:14 153:16.24 154:21 155.7 12 23 23 158.21 161:4 162:15.19 163:20.25 165:1.16 166:10 167:10 168:4 169:6 172:15 173:8,23 177:4 178:6 179:21,23,24 181:11,21 183:12,12,25 184:10 186:16 187:2 188:4,11 189:20 190:11 193:23 194:9 196:19.23.25 197:9 198:15 201:12 204:20 205:5.23 206:7 207:17.25 208:19 209:21,23 210:5 theme (3) 122:16 136:14 162:23 themes (7) 23:2 30:4 34:24 63:11 132:19 192:5 207:7 theoretical (3) 108:1.2 109:4 thereafter (1) 167:24 therefore (37) 12:23 13:13 25:3 28:25 29:1 35:6 40:9.16 41:11.17 46:5 48:1 51:12 65:17 66:15 76:3 83:16 84:4 85:14 87:11 108:22 113:3 132:20 136-10 146-25 157-16 165.3 166.6 171.8 174.20 182:3 187:8 189:8 190:10 202:17 203:16 208:13 theres (32) 12:23 19:12 29:4 37:2 46:2 48:17 49:24 52:13 58:23 60:23 61:19 64:4,6 69:12 97:1,6 113-21 21 115-17 119-25 123:24 130:19 132:12.22 139:1 147:7 148:24 160:16,18 167:23 180:1 209:2 thing (17) 12:10 16:9 23:24 30:9 51:19 66:16 95:16 96:1 124:14 127:6 132:1,7 143:3 148:25 151:8 186:23 209:4 thinking (3) 40:10.13 105:12 third (12) 33:9 73:18 75:17 78:25 84:1 91:8 111:1 116:3 169:5 170:16 186:12.12 though (23) 14:22 23:24 26:10 31:18 33:21 61:7 74:19 77:6 80:7 105:12 122:4 127:21 137:8 154:2 166:24 170:20 185:17,21 186:23 187:14 197:5 206:2,5 thought (5) 70:8 125:18 156:2 176:8 203:9 thousands (3) 39:20 112:13 151:10 three (8) 8:17 30:8 70:5 78:20 89:4 110:24 159:3 183:4 threshold (2) 38:7 40:15 through (76) 2:5 5:4 8:4 9:13.13 13:6 18:14 19:6,6,11,15 20:5,8 22:6 23:23 24:14 26:9 28:7 29:2.16.25 32:11 36:1 42:2 44:10.17 49:6.6.9 52:13 53:13 54:23 58:10,12 69:14,17 72:13 73:23 75:19 90:22 95:21 97:8 102:16 103:7.25 104:2 107:25 111:10 118:10,25 124:9 128:24 133:20 140:25 148:9 150:9.9 153:15 154:23 160:17 164:1,1,1 172:23 177:1 180:13 190:5 197:16 198:20,25 199:1,18 200:9 202:14 207:1 209:18 throughout (12) 7:23 32:13 48:16 64:19 86:11 92:11.11 103:5 149:15 155:24,25 190:14

tier (4) 52:1 53:19 58:23 59:8 time (90) 2:8.22 6:24 8:22 14:3 21:17 22:21 26:3 27:2 33:19 34:20 36:6 38:9 39:22 40:7 41:9 43:21 44:3 45:9 46:9,13 50:14 55:10,13 56:1 57:12 66:21 67:3 71:25 72:3.24 73:5 80:16 84:3 87:11 95:20 97:4 98:22 99:23 100:8 101:22.22 104:18 105:24 106:18 107:4,11,11 108:16 109:14 111:14 112:23 118:13 122:13,24 123:5 126:3 128:17 131:7 132:8 137:19.22 138:8 139:11 141.9 142.24 143.5 145.20 146:13 149:25 150:23 151:9 152:11 153:3,7,16 156:4,5 161:13 179:19 181:4.22 182:21 191:5 192:20 193:1 194:1 199:15 202:19 203:19 timeframe (2) 14:15 181:14 timeline (2) 134:23 135:1 timely (2) 103:9 180:2 times (8) 14:24 17:21 18:15 19:8 108:1,2,3 118:7 timing (3) 32:18 77:3 80:19 tiredness (2) 18:1 21:7 title (2) 3:11 88:10 today (24) 3:14 4:18 13:4 28.9 43.14 45.14 64.4 83.5 85:14 96:22.23 112:11 118:3 122:25 123:15 124:16 137:12 160:12 161:23 176:13 206:18 208:8,15 210:11 todays (1) 140:2 together (16) 13:17,21 63:18 70:1 71:5 113:24 124:8,9 125:6 131:2.3.4 177:12 180:20 192:8 194:12 told (17) 30:7 45:20 67:2 91:15 129:19 131:14 134:19 142:16 154:18 156:23 163:12 167:7,21 172:8 182:5 185:11 187:11 tolerance (1) 68:9 tomorrow (1) 210:12 too (7) 16:1 53:2 68:23 87:1 120:24 168:3 185:18 took (23) 2:24 9:15 14:18 21:17 22:2 42:14,16 43:1 44:11 49:13 75:7 79:15 86:14 95:19 105:24 108:20 109:8 122:13 127:22 155:1 167:11 181:16.22 tool (11) 117:13 134:4.13.16 135:19 136:12 146:2.17 150:4 161:22 178:25 toolkit (1) 148:17 tools (4) 112:9 117:15 120:11 171:25 toolsets (1) 181:20 topic (12) 38:11 46:11 47:9 76:23 136:14 145:4 162:23 177:1 178:21 199:5.8.17 topics (1) 157:21 total (4) 42:4 97:5 110:20 118:13 totally (1) 149:4 touch (4) 30:11,12 55:17 95:17 touched (8) 16:25 48:4 86:10 87:20 111:17 129:17 152:10 194:9 towards (3) 71:8 101:9,19 toy (4) 105:4,13 107:20 168:18 toys (1) 105:18 track (11) 171:14 173:5,7 174:10.16.21 175:16.23.24 176:3 188:17

thus (2) 48:5 177:8

tracker (34) 16:6 19:3 21:9.11 22:15 87:15 102:5 136:16 137:12.20 139:8.10 140:6.16 141:18.18 143:20 144:12 179:3.4 182:19.23 185:22 186:2,22,24 187:3,14 190:16,22 191:3,6,17,17 trackers (5) 27:6 178:23 182:12.16 191:13 tracking (1) 138:5 traffic (3) 86:17 108:3 116:6 tragedy (1) 210:6 tragic (1) 209:18 tragically (2) 159:2 208:11 trained (5) 20:21 21:2 72:13 146:16 172:12 trainee (11) 78:20,23 79:1 83:13.22 84:9.19 85:3.9 86:1.4 trainees (1) 83:21 training (38) 2:6 11:12 12:14.17 14:7 18:4 53:9 56:19 69:11 73:23 74:5 83:16 84:14 126:25 130:15 131:1,6,10 132:25 133:4 147.20 155.18 20 24 160.19 172.13 23 183.25 194:20,22 198:22,25 199:1,2,4,6,14,16 transcript (3) 103:15 119:15 169:24 transcripts (2) 154:23 165:7 transfer (6) 43:11 110:20 111.3 25 112.22 113.6 transitioned (1) 134:16 translated (1) 161:3 translation (3) 146:3 147:15 160:22 translator (1) 145:25 transport (6) 32:24 33:5 34:21 61:21 62:9 128:11 trauma (2) 29:7 209:17 travel (1) 110:1 treacherous (1) 12:17 treat (1) 13:12 treated (2) 154:13 156:18 treating (1) 157:10 trend (3) 7:12 9:10 93:25 triage (2) 133:11 134:4 trial (10) 133:24 134:8.16.22.24 135:21 136:3.4.10.11 trials (1) 42:11 tried (3) 94:7 152:17 209:19 trigger (1) 66:10 triggered (1) 94:25 triggers (1) 93:8 trubshaw (3) 172:8 175:15 176:8 true (2) 157:5.7 truth (4) 27:5 179:12 182:15 190:11 try (8) 19:10 28:11 80:9 116:13 141:15 148:6 149:6 184-4 trying (11) 27:6 72:7 83:3 120:24 136:2 148:4 150:11 151:8 161:12 192:11 194:23 tuesday (1) 210:17 tug (1) 37:23 turn (11) 15:25 22:10 26:20 49:8 51:23 77:6 100:21 114:2 145:13 157:6 173:2 turnaround (4) 197:7 198:1 201:1.3 turned (1) 102:14 turning (5) 16:20 97:19 110:9 139:3 195:13 turnover (1) 97:8 twothirds (1) 75:24 type (1) 196:14 types (2) 11:18 38:25 typically (2) 146:8,18

				I		
U	upgrades (1) 207:1	visibility (5) 116:8 117:6	171:5 173:16	172:5 173:21 175:8,9	123 (1) 6:22	2excel (4) 115:14
	uplift (3) 43:16 44:13 45:1 upon (1) 177:18	142:12 174:23 176:11 visible (1) 143:11	whatsapp (5) 150:11 151:5 152:6.13 160:5	176:4 193:21	124 (2) 8:23 65:3	121:8,14,20
uk (37) 21:11 51:12 53:11	upon (1) 177:18 urgency (2) 165:24 166:4	vision (25) 56:16 70:23	whereas (5) 68:20 108:24	writer (1) 49:6 writing (1) 26:3	125 (1) 11:3 128 (1) 56:21	2excels (1) 141:22
64:1 69:22 71:8 80:21 94:1	used (24) 6:4,8 43:13 69:11	87:2,14 178:23,24	142:11 175:4 188:17	written (10) 45:25 105:18	13 (5) 106:23 116:2 186:8,12	
95:23 97:18 101:10,11,20 102:7,23 115:16 122:5	136:9 144:23,25 149:25	179:10,11,18 181:6,15,20	whereby (1) 147:25	123:6,22 124:3 133:25	193:2	3
102:7,23 115:10 122:5	150:2,15 152:11 157:22	183:1,4,17 185:22 187:13	wheres (2) 141:18,18	164:7 204:9,14,16	131 (1) 51:24	3 (15) 16:9 17:2 24:12 38:24
126:8 132:11 140:24	161:7 165:8,23 170:9	188:18 189:1,1,12 190:11	whilst (35) 18:13 19:14,23	wrong (7) 14:25 19:20 50:5	132 (1) 52:21	49:9 52:1 53:19 58:23 59:8
144:19,24 147:4 148:1,22	173:11 179:8 183:16	191:13,15,16	31:14 32:3 33:12 34:7,14	77:20 113:8 187:1 189:16	135 (1) 1:15	77:5 103:17 141:24 142:2
149:18 159:7,15,17 163:24	185:22 186:25 188:13	vital (2) 71:17 181:20	40:14 41:14 42:24 44:15	wrote (1) 25:24	135page (1) 4:13	197:18 202:6
179:4 197:16	193:21 205:1	voice (1) 166:2	54:20 57:10 66:9 74:4		14 (7) 48:7,23 73:3 74:11	30 (3) 33:6 83:16 86:5
Itimately (10) 24:25 57:4	useful (6) 68:25 72:3 77:12	volume (1) 24:3	81:19,24 82:5 83:8 100:9	X	78:8 79:3 81:18	31 (1) 118:4
82:11,13 83:3 84:13 96:20	84:3 134:2 148:20	voluntarily (1) 80:15	101:24,24 105:18 113:23		15 (3) 10:2 43:3 49:10	315 (1) 168:10
151:9 189:3 204:14	user (1) 161:8	voluntary (2) 29:16 76:14	115:1 136:8 145:25 148:22	x (1) 211:1	153 (1) 54:16	32 (1) 108:22
mbrella (1) 32:25	using (10) 68:18,19 88:5	volunteer (1) 2:15	156:24 165:8 171:5 183:25	Y	16 (4) 41:23 118:14 166:6,24	324 (1) 168:12
nable (19) 19:9 23:10 31:23	135:21 145:23 161:20	volunteered (1) 80:23	190:7 200:13		163 (5) 115:13,15 159:1	326 (1) 147:17
32:18 39:14 76:21 88:12	175:16 181:5 189:18	volunteers (1) 80:6	whole (9) 10:8 23:23 73:13	year (23) 1:15,18 3:2 5:25	169:1,13	328 (1) 146:6
91:18 114:8 115:8 125:23	197:23 usual (2) 33:20 93:25	vts (1) 86:15	125:8 150:19 151:18 191:19 193:16 208:3	8:8,13,15,24 9:1,4,14,18	17 (4) 1:17 22:24 25:25 38:11	35 (7) 38:23,25 67:10 74:24 79:23 81:15 164:10
135:23 137:22 138:18	usually (1) 80:20	W	wholeheartedly (1) 154:13	48:17 49:3 65:22 92:11	18 (4) 42:20 43:9 56:11	354 (1) 201:21
156:5 162:21 188:19	utilise (2) 84:7 117:14		whole (5) 44:15 47:4 67:22	93:19 110:22 111:1 127:10	136:4	3542 (1) 203:10
190:23 209:9	utilised (6) 71:2 146:3,8,18	waiting (4) 138:11,12,12	122:8 166:2	129:22 136:18 196:8	1800 (1) 94:10	381 (1) 152:22
navailable (2) 116:10 117:8 naware (2) 188:22 205:10	183:12 193:18	140:13 walk (1) 72:13	whom (1) 202:4	years (8) 2:14 5:14 7:1 55:14	19 (1) 22:25	384 (1) 153:24
ncertain (2) 135:25 156:21	utilises (2) 146:2 160:20	walk (1) 72:15 walking (1) 148:14	whos (1) 3:16	58:13 129:20 135:24		39 (1) 42:25
controlled (1) 42:25	utilising (10) 63:24 70:19	wanting (1) 148:14 wanting (2) 48:12 52:18	wide (1) 135:3	181:12	2	399 (1) 184:13
corrected (1) 190:13	73:7 83:1 84:16 85:13 88:3	wanting (2) 46:12 52:16 wants (4) 25:17,17 47:2	wider (4) 27:17 38:16 123:17	yellow (1) 27:9		
nderline (1) 102:11	171:25 181:15 191:16	89:10	199:25	yielded (1) 71:25	2 (14) 24:2 26:12,22 41:24	4
iderlying (1) 130:8		warning (3) 65:21 66:5 72:19	widespread (2) 154:3 157:16	yours (3) 33:3 36:14 59:13	42:21 49:9 50:7 98:7	
ndermined (1) 90:18	V	warnings (1) 28:2	width (9) 171:14 172:9	yourself (2) 4:14 139:2	117:20 128:9 141:24 194:3	4 (12) 15:19 16:13 17:17
nderpinned (1) 201:24		wasnt (45) 4:25 7:1,6 11:21	173:5,6,11,14 174:4,11,24	youve (1) 145:23	202:4,17	20:9 22:9,20 31:8 38:12
nderstand (18) 51:12 59:11	vacancies (1) 64:5	12:20 26:1 31:16,23 40:13	wight (1) 39:20		20 (2) 2:14 67:12	77:6 80:2 169:2 191:15
60:5 64:7 81:16 83:17 93:1	valiant (22) 100:25	41:15 43:24 67:6	willing (1) 140:18	Z	200 (1) 117:24	417 (1) 164:10
104:22 110:3 116:6 119:11	101:4,9,13 103:13 104:12	68:2,13,23 81:10,13 83:18	willows (1) 103:16	zone (7) 73:3 74:11 78:8	2010 (4) 1:24 2:4 124:20,23	428 (1) 210:15
135:19 140:13 155:4	105:16,24 107:5,12 108:17	87:4 88:15 89:1,21,25	wing (1) 114:11	79:3 81:18 87:4,10	2014 (1) 83:5	
160:15 191:4 207:20 208:5	109:8,14,16 110:4 139:24	90:16,17 91:15 92:21	winter (3) 8:1,6 67:20	zones (4) 73:1,2,6 74:11	2016 (1) 5:19	5
nderstandable (1) 16:16	168:16,24 169:3 183:5	93:20 94:3 95:15 102:25	wished (1) 54:9		2018 (10) 5:21 7:23 14:12,14	F (14) 0 17 15 04 17 0 00 10
nderstanding (32) 6:18	186:14 209:10	115:24 128:1 138:8 142:24	wishes (1) 62:1	0	36:11 44:18 64:14 105:6	5 (14) 2:17 15:24 17:9 22:18
16:19 33:7,24 34:13 38:4	valiants (3) 103:16 104:9	150:25 151:11 152:13	wishing (1) 23:23		122:21 163:6	27:10 51:23 79:4 98:8 173:13 181:15,20 191:16
51:10 52:16 56:20 73:19	169:7	157:24 158:11,15 184:24	withdrawn (1) 42:4 witness (5) 4:19 80:13	00 (4) 173:15 174:24 175:4,7	2019 (3) 6:23 42:5 182:7	195:3 196:20
79:11 95:21 97:4 122:23	value (10) 55:14 62:17	190:23 199:23 205:14	126:17 139:14 156:7	004135 (1) 142:2	2020 (10) 8:1,10 30:17 45:22	50 (2) 64:12 109:10
123:6,24,25 124:21,24	153:19,22,25 154:14	watch (8) 88:19 184:3,4	witnessed (1) 16:22	02 (2) 175:23,25	73:16 124:21,23 125:3,17	5000 (1) 9:2
125:3,18 128:10 129:23	155:2,10,23 194:25	185:24 187:11	witnesses (2) 48:5 111:19	0220 (1) 158:9	137:4	52 (1) 146:6
155:5 160:25 167:9,10,10 172:23 181:4 183:7 202:24	variables (1) 109:5 variations (1) 7:24	190:14,14,17 water (26) 92:5,6 93:2	wolf (1) 157:4	0221 (1) 158:9	2021 (24) 7:21 8:8 14:18 28:21 30:20 35:5 39:10	553 (1) 107:5
nderstands (1) 162:4	variety (1) 92:12	95:4,22 133:12 134:4	wonder (1) 18:18	0300 (1) 166:22	41:2 42:5 44:14,23 58:15	58 (4) 109:11 173:4 201:20
nderstood (4) 116:4 127:9	various (14) 2:5 12:23 13:16	95:4,22 133:12 134:4 154:18,24,24 155:6 169:18	wont (2) 125:13 147:5	0306 (1) 187:23	41:2 42:5 44:14,25 56:15 65:12 66:11 67:25 71:8	204:21
176:22 198:9	26:5 27:6 44:10 72:1 98:21	171:2,7,8,16,17,23,23	wood (1) 52:22	0312 (1) 187:23 0324 (1) 168:16	98:15 126:15 130:18 137:4	59 (1) 201:20
ndertake (6) 24:9 52:5 73:9	130:11,19 157:21 166:11	173:25 174:18,21,25 176:1	wording (1) 28:13	0357 (1) 189:18	144:4 145:8 161:11 205:10	
83:24 131:1 195:2	183:2 192:19	188:1 203:18	work (60) 3:17 4:1,7 24:3	0500 (1) 81:3	2022 (25) 9:15,17 31:13	6
ndertaken (13) 34:22 52:5	vast (3) 5:12 8:15 56:23	waters (5) 140:11 148:22	32:10 44:5,18,19 46:23	0630 (1) 19:4	41:13 44:6,13 45:1 56:11	
58:4 59:20 66:4 73:24	vehicles (3) 43:11 110:25	159:8 163:24 197:17	48:20 49:5 50:19 54:23	0645 (1) 204:12	64:20 65:5,16 66:2	6 (6) 10:20 54:1 80:21 101:2
85:16 113:22 121:20	118:25	wave (4) 112:20,22	57:19,23,23 58:19,21	064615 (1) 186:14	72:16,19 73:20 96:21	106:17 195:13
131:20,23 161:13 172:6	verbally (2) 92:4 189:9	113:10,13	59:1,4,20 60:24 64:12	07 (5) 173:11 174:4,17	99:25 100:4,20 118:10	60000 (6) 9:1,14 31:14 65:6
ndertaking (2) 53:23 81:18	verify (1) 22:11	way (43) 4:12 6:6 9:5 10:23	65:14 67:17 69:16 70:10	175:7,16	119:17 128:17 133:5 153:7	66:9,14
ndertook (1) 159:1	versed (1) 178:16	25:15 26:12 31:6,21	71:5,10 75:10,24 76:20	0730 (1) 93:24	206:3	6123 (1) 114:5
nderway (5) 44:25 51:17	version (7) 27:5,21 51:19	32:1,14 50:1 54:1,10,12	80:14 81:18 83:24	0835 (1) 190:18	2024 (3) 6:24 51:5 64:14	639 (1) 90:8
57:23 109:16 168:20	128:9,9 182:15 206:3	62:17 65:23 73:20 84:3	85:10,12 86:15,17 87:22		2025 (2) 1:1 210:17	64 (1) 152:22 642 (1) 91:7
nforecast (1) 10:9	versions (1) 181:6	86:7 87:25 95:23 114:16	99:23 113:20,24 119:7 123:18 124:8 125:6 128:22	1	20th (1) 99:12	645 (1) 94:16
nfortunately (7) 11:14	versus (2) 171:22 180:3	120:15 131:6 137:19,21	133:18,19 147:9,12 153:2		21 (34) 4:16 7:5 8:9,24 15:8	648 (1) 139:16
31:23 47:22 67:25 89:19	vessel (39) 2:17	150:11 152:10 156:19	133:18,19 147:9,12 153:2 162:15 181:21 191:23	1 (18) 1:14 6:7 16:7 24:22	23:5 27:25 28:8 31:12 32:5	649 (1) 140:23
133:10 135:1	11:7,8,8,14,20,25 12:4	165:5 167:8 170:24	198:20 209:20,24 210:5	25:8 26:21 27:22 37:3	34:1 42:25 48:22 56:12	67 (4) 167:1,14,21,25
nhelpfully (1) 170:1	16:24 17:4 86:17 92:5 101:5,10,24 103:18 104:14	179:17,18 183:21 185:23 186:10,24 187:1 188:13,14	worked (6) 42:18 47:5	39:16 46:4 86:21 107:8 112:22 155:22 170:7 202:3	63:16 66:5 70:7 71:22 96:21 97:25 110:21 111:21	68 (1) 184:13
nit (1) 170.6		100.10,24 107:1 100:13,14	.,	1 112.22 100:22 1/0:7 202:3		
			112:24 133:21 134:20			6metre (1) 174:1
nited (3) 59:19 60:22	105:7,8,16 109:16 113:6	201:4 203:21	112:24 133:21 134:20 209:20	211:2,2	126:3 127:10 138:9	6metre (1) 174:1
nited (3) 59:19 60:22 178:14	105:7,8,16 109:16 113:6 127:10 163:14,15	201:4 203:21 ways (3) 29:3 58:7 61:19		211:2,2 10 (10) 11:2 27:22 49:3	126:3 127:10 138:9 145:6,15,18 159:12 182:10	6metre (1) 174:1
nits (1) 154:12	105:7,8,16 109:16 113:6	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10	209:20	211:2,2	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2	
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21	201:4 203:21 ways (3) 29:3 58:7 61:19	209:20 working (34) 22:16 41:13	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25	126:3 127:10 138:9 145:6,15,18 159:12 182:10	
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4 nless (2) 175:1 202:21	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10 wears (1) 82:5	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18	7
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4 nless (2) 175:1 202:21 nlikely (2) 140:6,7	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12
nited (3) 59:19 60:22 178:14 nites (1) 154:12 niversally (1) 135:4 niess (2) 175:1 202:21 nikely (2) 140:6,7 manned (2) 32:12 118:25	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19	201:4 203:21 ways (3) 29:3 58:7 61:19 weath (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:16 82:32,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4 nikes (2) 175:1 202:21 nikely (2) 140:6,7 nmanned (2) 32:12 118:25 nquantifiable (1) 31:1	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4 neless (2) 175:1 202:21 nlikely (2) 140:6,7 manned (2) 32:12 118:25 nquantifiable (1) 31:1 rreliable (2) 145:10 193:17	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23
hited (3) 59:19 60:22 178:14 hits (1) 154:12 hiversally (1) 135:4 hess (2) 175:1 202:21 hikely (2) 140:6,7 himande (2) 32:12 118:25 rquantifiable (1) 31:1 retiable (2) 145:10 193:17 rsatisfactory (1) 205:15	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,33,15 162:16 200:13	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4 ness (2) 175:1 202:21 nlikely (2) 140:6,7 nmanned (2) 32:12 118:25 nquantifiable (1) 31:1 nreliable (2) 145:10 193:17 nsatisfactory (1) 205:15 nsuitable (1) 126:21	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25 112:5,11,18,22 127:4	201:4 203:21 ways (3) 29:3 58:7 61:19 weats (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21
nited (3) 59:19 60:22 178:14 niversally (1) 135:14 nikes (2) 175:1 202:21 nikely (2) 140:6,7 nmanned (2) 32:12 118:25 nquantifiable (1) 31:1 nreliable (2) 145:10 193:17 nsatisfactory (1) 205:15 nsuitable (1) 126:21 nsure (1) 111:5	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,320,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8	201:4 203:21 ways (3) 29:3 58:7 61:19 weath (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21 welfare (6) 20:11 21:5 27:2	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20.20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 world (4) 12:16 27:17 38:16	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4 nless (2) 175:1 202:21 nikely (2) 140:6,7 nmanned (2) 32:12 118:25 nquantifiable (1) 31:1 rreliable (2) 145:10 193:17 rsatisfactory (1) 205:15 nsuitable (1) 126:21 nsur (1) 111:5 nsurprisingly (1) 17:15 ntangle (1) 184:5	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8 196:23 203:15,16 vhf (1) 166:24 via (3) 35:17 146:25 180:25	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21 weifare (6) 20:11 21:5 27:2 29:6;24 66:25 went (11) 49:5,6,9 86:9 107:20 128:22 166:2,4	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 world (4) 12:16 27:17 38:16 107:22	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17 110 (2) 104:7 139:15 111 (1) 53:13	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22 2324th (1) 68:15 23rd (3) 9:24 81:1 94:8 24 (9) 1:1 30:18 50:14	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25 78 (2) 43:8 174:7
nited (3) 59:19 60:22 178:14 nits (1) 154:12 nitersally (1) 135:4 neless (2) 175:1 202:21 nlikely (2) 140:6,7 mmanned (2) 32:12 118:25 nquantifiable (1) 31:1 nrefiable (2) 145:10 193:17 nsatisfactory (1) 205:15 nsuitable (1) 126:21 nsurprisingly (1) 12:15 ntangle (1) 184:5 ntil (12) 51:15 86:20 94:10	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8 196:23 203:15,16 vhf (1) 166:24 via (3) 35:17 146:25 180:25 vicinity (1) 159:3	201:4 203:21 ways (3) 29:3 58:7 61:19 weath (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21 welfare (6) 20:11 21:5 27:2 29:6,24 66:25 went (11) 49:5,6,9 86:9 107:20 128:22 166:2,4 168:21 169:3 190:13	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 world (4) 12:16 27:17 38:16 107:22 worriss (1) 19:23	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17 110 (2) 104:7 139:15 111 (1) 53:13 1113 (1) 50:23	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22 2324th (1) 68:15 23rd (3) 9:24 81:1 94:8 24 (9) 1:1 30:18 50:14 96:13,25 97:1 168:9	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25
nited (3) 59:19 60:22 178:14 niversally (1) 135:4 ness (2) 175:1 202:21 nlikely (2) 140:6,7 nmanned (2) 32:12 118:25 nquantifiable (1) 31:1 nreliable (2) 145:10 193:17 nsatisfactory (1) 205:15 nsuitable (1) 126:21 nsure (1) 111:5 nsurprisingly (1) 17:15 ntangle (1) 184:5 ntil (12) 51:15 86:20 94:10 116:23 122:21 127:9	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,320,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8 196:23 203:15,16 vhf (1) 166:24 via (3) 35:17 146:25 180:25 vicimity (1) 159:3 victims (2) 174:15,19	201:4 203:21 ways (3) 29:3 58:7 61:19 weath (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weeks (1) 69:22 weight (1) 129:21 weifare (6) 20:11 21:5 27:2 29:6,24 66:25 went (11) 49:5,6,9 86:9 107:20 128:22 166:2,4 168:21 169:3 190:13 werent (9) 43:13 52:12	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 work (4) 12:16 27:17 38:16 107:22 worries (1) 19:23 worry (1) 32:21	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17 110 (2) 104:7 139:15 111 (1) 53:13 1113 (1) 50:23 112 (1) 149:17	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22 2324th (1) 68:15 23rd (3) 9:24 81:1 94:8 24 (9) 1:1 30:18 50:14 96:13,25 97:1 168:9 207:19 208:16	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25 78 (2) 43:8 174:7 79 (1) 7:17
nited (3) 59:19 60:22 178:14 niversally (1) 135:4 neless (2) 175:1 202:21 nlikely (2) 140:6,7 nmanned (2) 32:12 118:25 nquantifiable (1) 31:1 nreliable (2) 145:10 193:17 nsatisfactory (1) 205:15 nsuitable (1) 126:21 nsure (1) 111:5 nsurprisingly (1) 17:15 ntangle (1) 184:5 ntil (12) 51:15 86:20 94:10 116:23 122:21 127:9 139:8,11 140:9 174:14	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8 196:23 203:15,16 vhf (1) 166:24 via (3) 35:17 146:25 180:25 vicinity (1) 159:3 victims (2) 174:15,19 video (4) 69:18 118:15 119:9	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21 weifare (6) 20:11 21:5 27:2 29:6,24 66:25 went (11) 49:5,6,9 86:9 107:20 128:22 166:2,4 168:21 169:3 190:13 werent (9) 43:13 52:12 63:19 78:14 87:15 158:19	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 world (4) 12:16 27:17 38:16 107:22 worris (1) 19:23 worry (1) 32:21 worse (1) 65:22	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17 110 (2) 104:7 139:15 111 (1) 53:13 1113 (1) 50:23 112 (1) 149:17 1124 (1) 50:25	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 7:22 176:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22 2324th (1) 68:15 23rd (3) 9:24 81:1 94:8 24 (9) 1:1 30:18 50:14 96:13,25 97:1 168:9 207:19 208:16 245 (1) 174:7	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25 78 (2) 43:8 174:7
nited (3) 59:19 60:22 178:14 niversally (1) 135:4 niversally (1) 135:4 nikes (2) 175:1 202:21 nlikely (2) 140:6,7 nmanned (2) 32:12 118:25 nquantifiable (1) 31:1 nreliable (2) 145:10 193:17 nsatisfactory (1) 205:15 nsuitable (1) 126:21 nsure (1) 111:5 nsurprisingly (1) 17:15 ntangle (1) 184:5 ntil (12) 51:15 86:20 94:10 116:23 122:21 127:9 139:8,11 140:9 174:14 205:3 210:16	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8 196:23 203:15,16 vhf (1) 166:24 via (3) 35:17 146:25 180:25 victims (2) 174:15,19 victims (2) 174:15,19 victims (4) 69:18 118:15 119:9 160:23	201:4 203:21 ways (3) 29:3 58:7 61:19 wealth (1) 53:10 wearts (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21 welfare (6) 20:11 21:5 27:2 29:6,24 66:25 went (11) 49:5,6,9 86:9 107:20 128:22 166:2,4 168:21 169:3 190:13 werent (9) 43:13 52:12 63:19 78:14 87:15 158:19 159:7,21 200:17	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 world (4) 12:16 27:17 38:16 107:22 worris (1) 19:23 worrs (1) 32:21 worse (1) 65:22 worse (1) 8:6	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17 110 (2) 104:7 139:15 111 (1) 53:13 1113 (1) 50:23 112 (1) 149:17 1124 (1) 50:25 1136 (1) 173:6	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 7:6:2 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22 2324th (1) 68:15 23rd (3) 9:24 81:1 94:8 24 (9) 1:1 30:18 50:14 96:13,25 97:1 168:9 207:19 208:16 245 (1) 174:7 24th (8) 9:25 77:5 81:2	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25 78 (2) 43:8 174:7 79 (1) 7:17
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4 news (2) 175:1 202:21 nikely (2) 140:6,7 mmanned (2) 32:12 118:25 nequantifiable (1) 31:1 nretiable (2) 145:10 193:17 nsatisfactory (1) 205:15 nsuitable (1) 126:21 nsure (1) 111:5 nsurprisngly (1) 17:15 ntangle (1) 184:5 ntil (12) 51:15 86:20 94:10 116:23 122:21 127:9 139:8,11 140:9 174:14 205:3 210:16 nusual (1) 95:15	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8 196:23 203:5,16 vhf (1) 166:24 via (3) 35:17 146:25 180:25 vicinity (1) 159:3 victims (2) 174:15,19 video (4) 69:18 118:15 119:9 160:23 viewed (1) 127:4	201:4 203:21 ways (3) 29:3 58:7 61:19 weath (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21 welfare (6) 20:11 21:5 27:2 29:6,24 66:25 went (11) 49:5,6,9 86:9 107:20 128:22 166:2,4 168:21 169:3 190:13 werent (9) 43:13 52:12 63:19 78:14 87:15 158:19 159:7,21 200:17 week (1) 166:21	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 word (4) 12:16 27:17 38:16 107:22 worries (1) 19:23 worry (1) 32:21 worse (1) 65:22 worse (1) 8:6 worth (1) 181:23	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17 110 (2) 104:7 139:15 111 (1) 53:13 1113 (1) 50:23 112 (1) 149:17 1124 (1) 50:25 1136 (1) 173:6 115 (3) 10:20 53:13,15	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22 2324th (1) 68:15 23rd (3) 9:24 81:1 94:8 24 (9) 1:1 30:18 50:14 96:13,25 97:1 168:9 207:19 208:16 245 (1) 174:7 24th (8) 9:25 77:5 81:2 94:9,11 124:15 142:2	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25 78 (2) 43:8 174:7 79 (1) 7:17 8 8 (5) 5:16 10:12 38:22 80:21
nited (3) 59:19 60:22 178:14 nits (1) 154:12 niversally (1) 135:4 ness (2) 175:1 202:21 nlikely (2) 140:6,7 mmanned (2) 32:12 118:25 nquantifiable (1) 31:1 rreliable (2) 145:10 193:17 rsatisfactory (1) 205:15 nsuirfally (1) 126:21 nsurr (1) 111:5 nsurprisingly (1) 17:15 ntangle (1) 184:5 ntil (12) 51:15 86:20 94:10 116:23 122:21 127:9 139:8,11 140:9 174:14 205:3 210:16 nusual (1) 95:15 padate (2) 185:22 186:25	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8 196:23 203:15,16 vhf (1) 166:24 vis (3) 35:17 146:25 180:25 vicinity (1) 159:3 victims (2) 174:15,19 video (4) 69:18 118:15 119:9 160:23 viewed (1) 127:4 views (3) 135:12 136:5	201:4 203:21 ways (3) 29:3 58:7 61:19 weath (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21 welfare (6) 20:11 21:5 27:2 29:6,24 66:25 went (11) 49:5,6,9 86:9 107:20 128:22 166:2,4 168:21 169:3 190:13 werent (9) 43:13 52:12 63:19 78:14 87:15 158:19 159:7,21 200:17 were (1) 166:21 whatever (4) 46:6 68:10	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 works (3) 70:2 181:24 186:10 107:22 worrise (1) 19:23 worry (1) 32:21 worse (1) 65:22 worse (1) 18:03 worth (1) 181:23 worthy (1) 46:19	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17 110 (2) 104:7 139:15 111 (1) 53:13 1113 (1) 50:23 112 (1) 149:17 1124 (1) 50:25 1136 (1) 173:6 115 (3) 10:20 53:13,15 12 (3) 36:12 78:7 81:16	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 19:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22 2324th (1) 68:15 23rd (3) 9:24 81:1 94:8 24 (9) 1:1 30:18 50:14 96:13,25 97:1 168:9 207:19 208:16 245 (1) 174:7 24th (8) 9:25 77:5 81:2 94:9,11 124:15 142:2 164:24	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25 78 (2) 43:8 174:7 79 (1) 7:17 8 8 (5) 5:16 10:12 38:22 80:21 198:2
nited (3) 59:19 60:22 178:14 niversally (1) 135:4 neless (2) 175:1 202:21 nlikely (2) 140:6,7 nmanned (2) 32:12 118:25 nquantifiable (1) 31:1 nreliable (2) 145:10 193:17 nsatisfactory (1) 205:15 nsuitable (1) 126:21 nsure (1) 111:5 nsurprisingly (1) 17:15 ntangle (1) 184:5 ntil (12) 51:15 86:20 94:10 116:23 122:21 127:9 139:8,11 140:9 174:14	105:7,8,16 109:16 113:6 127:10 163:14,15 166:13,21,23 167:4,7,21 174:15 185:12 192:17 197:21 202:4,4 203:22 206:19 vessels (21) 10:22 16:14 110:20 111:3,3,20,23,24,25 112:5,11,18,22 127:4 140:24 166:12 172:5 195:8 196:23 203:5,16 vhf (1) 166:24 via (3) 35:17 146:25 180:25 vicinity (1) 159:3 victims (2) 174:15,19 video (4) 69:18 118:15 119:9 160:23 viewed (1) 127:4	201:4 203:21 ways (3) 29:3 58:7 61:19 weath (1) 53:10 wears (1) 82:5 weather (7) 8:5 31:3 68:5 115:8 119:21,22 120:2 wednesday (1) 80:6 weekly (1) 34:21 weeks (1) 69:22 weight (1) 129:21 welfare (6) 20:11 21:5 27:2 29:6,24 66:25 went (11) 49:5,6,9 86:9 107:20 128:22 166:2,4 168:21 169:3 190:13 werent (9) 43:13 52:12 63:19 78:14 87:15 158:19 159:7,21 200:17 week (1) 166:21	209:20 working (34) 22:16 41:13 43:18 46:12 48:24 53:14 65:1 68:23,23,24 69:5,20,20 71:2,15 75:14 76:7,19,22 87:25 105:5 113:18 120:17 123:12,15,19 125:13 130:10 131:2,3,3,15 162:16 200:13 works (3) 70:2 181:24 186:10 word (4) 12:16 27:17 38:16 107:22 worries (1) 19:23 worry (1) 32:21 worse (1) 65:22 worse (1) 8:6 worth (1) 181:23	211:2,2 10 (10) 11:2 27:22 49:3 50:22 86:13 108:19 185:25 186:18 210:12,16 100 (4) 104:10 105:14,18 139:12 101 (1) 114:4 102 (1) 117:22 106 (1) 207:8 109 (1) 90:9 10minute (1) 16:21 11 (1) 103:17 110 (2) 104:7 139:15 111 (1) 53:13 1113 (1) 50:23 112 (1) 149:17 1124 (1) 50:25 1136 (1) 173:6 115 (3) 10:20 53:13,15	126:3 127:10 138:9 145:6,15,18 159:12 182:10 192:9 199:17 207:22 208:2 22 (14) 2:23 6:23 7:21 8:18 9:1 42:6 57:22 72:21 76:25 107:9 119:16 175:21 182:10 197:17 220 (1) 2:18 222 (1) 119:18 23 (8) 3:24 4:16 7:22 19:4 42:7,8 50:4,22 2324th (1) 68:15 23rd (3) 9:24 81:1 94:8 24 (9) 1:1 30:18 50:14 96:13,25 97:1 168:9 207:19 208:16 245 (1) 174:7 24th (8) 9:25 77:5 81:2 94:9,11 124:15 142:2	7 7 (5) 10:20 43:4 54:1 80:21 93:24 712 (2) 56:9 207:12 719 (2) 30:23 96:9 72 (1) 164:8 73 (1) 106:23 731 (2) 49:17,22 735 (1) 56:21 77 (1) 205:25 78 (2) 43:8 174:7 79 (1) 7:17 8 8 (5) 5:16 10:12 38:22 80:21

9 (8) 8:22 11:2 21:14 36:13 65:3 77:5 106:20 202:1 90 (1) 107:4 93 (2) 73:12 116:2 95 (1) 113:1 957 (1) 189:20 959 (1) 1:2 98 (1) 50:9 999 (13) 16:23 74:2 146:25 147:22 148:3,9,10,17 149:17 159:7,16 160:3,6			