

# OPUS2

The Cranston Inquiry

Day 9

March 17, 2025

Opus 2 - Official Court Reporters

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1 Monday, 17 March 2025  
2 (9.59 am)  
3 MR GEORGE PAPADOPOULOS (affirmed)  
4 SIR ROSS CRANSTON: Well, good morning, everyone. Good  
5 morning, Mr Papadopoulos. In a moment, Rowena Moffatt  
6 has a few questions for you, but if you could first of  
7 all read the affirmation.  
8 A. Of course, yes.  
9 (Witness affirmed)  
10 SIR ROSS CRANSTON: Thank you very much.  
11 Ms Moffatt.  
12 Questions by MS MOFFATT  
13 MS MOFFATT: Could you please state your full name?  
14 A. Yes, my full name is George Papadopoulos.  
15 Q. Mr Papadopoulos, you made a witness statement dated  
16 31 October 2024, which is 38 pages long; correct?  
17 A. That's correct.  
18 Q. You are currently employed by HM Coastguard.  
19 A. That is correct.  
20 Q. You joined coastguard in 2015 as a MOO, maritime  
21 operations officer ; correct?  
22 A. Yes.  
23 Q. And you were promoted to senior maritime operations  
24 officer , or SMOO, in 2017; correct?  
25 A. Yes.

1

1 Q. You became a search mission co-ordinator in 2018;  
2 correct?  
3 A. Yes.  
4 Q. And in 2020, you were again promoted to team leader.  
5 A. Correct.  
6 Q. And then on 6 August 2021, you were promoted to channel  
7 operations tactical commander --  
8 A. Correct.  
9 Q. -- which is your current role.  
10 A. (Nods).  
11 Q. I understand that in November 2021, your role was also  
12 known as the small boat tactical commander; is that  
13 correct?  
14 A. Correct.  
15 Q. In terms of your current role, you talk about this in  
16 your statement. If I could have that on screen, please,  
17 at paragraph 14, so it is {INQ009632/5}. First line of  
18 paragraph 14, you say:  
19 "My appointment was to provide a designated lead in  
20 relation to migrant [search and rescue] due to the  
21 volume and concentration around Dover."  
22 And then, second line:  
23 "Further recruitment was envisaged but this has not  
24 yet come to fruition."  
25 So this has not come to fruition as at today,

2

1 17 March 2025?  
2 A. That is correct. If I do -- may put a bit of context  
3 behind it. So there was an intention to recruit  
4 a second role. However, that hasn't come to fruition  
5 and that's not the intention any more as well.  
6 Q. I see. So the initial intention was to create another  
7 one of you, essentially, two in the same role, is that  
8 right, or a different role?  
9 A. Yes, same role, to support due to the operational  
10 requirements at the time of my role, which obviously is  
11 not the case any more because my role is not  
12 operational.  
13 Q. Let's come on to that, then. So there is no longer any  
14 second role in the pipeline. That's now been dropped.  
15 A. Correct.  
16 Q. Now, a few weeks before your appointment in August 2021,  
17 the role was described in an email from Mike Bill, the  
18 divisional commander for division 2, including Dover, so  
19 let's put that on the screen, can I have {INQ003195/1}.  
20 Now, this is an email from 29 July 2021 and it is  
21 from Mike Bill, as I said, to the then chief coastguard,  
22 Peter Mizen, amongst others. Halfway down the page  
23 there, you can see a paragraph starting:  
24 "George will undertake ..."  
25 Do you see that one?

3

1 A. Yes.  
2 Q. So:  
3 "George will undertake a lead function for migrant  
4 operations across all watches. He will review and  
5 oversee Dover's response to migrant incidents ensuring  
6 [standard operating procedures]/Policy is understood and  
7 followed including washup/debriefing of identified  
8 incidents. Should policy change George will deliver  
9 training to all watches on updated SOP and ensure  
10 understanding. George will retain line management of  
11 his own team. George is happy to take on the role and  
12 wishes to remain operational still managing his watch."  
13 I understand things have changed since and we will  
14 come on to that, but does this describe the role as  
15 initially envisaged?  
16 A. Yes, I'd say it's an accurate summary of the role at the  
17 time, yes.  
18 Q. Then we know you were appointed on 16 August. Then in  
19 September, we can see another email from Mike Bill, so  
20 this one is {INQ008621/1}, please. So page 1 there at  
21 the bottom, we can see the email from Mike Bill. There  
22 is a lot of redaction there for data protection  
23 purposes, but it is to the team at Dover.  
24 The email starts -- go on to page 2, please,  
25 {INQ008621/2}:

4

1 "Good afternoon Dover team."  
 2 And then the first two paragraphs are introductory  
 3 and Mike Bill essentially thanks the Dover team for, in  
 4 his words, keeping the ship afloat and referring to  
 5 efforts made to bolster support for Dover and to  
 6 increase headcount. Excuse me.  
 7 He then turns to your role, third paragraph, and  
 8 starts :  
 9 "I'm advised ..."  
 10 Do you see that one?  
 11 A. Yes.  
 12 Q. So:  
 13 "I'm advised that there is some confusion over the  
 14 new role which George has taken on and hopefully I can  
 15 clarify :  
 16 "George's main function is to act as a tactical  
 17 commander in the Dover ops room on Red days when he will  
 18 release the network commanders from requirement to  
 19 oversee the migrant incidents and take over the RAG  
 20 function for those incidents."  
 21 So just pausing there, would you effectively become  
 22 the maritime tactical commander for Dover on red days?  
 23 A. Yes, that is correct. So the intention was for me to be  
 24 present on red and amber days as much as possible,  
 25 considering that I was a single person dedicated to

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1 small boat crossings at the time. So the intention was  
 2 for me to be readily available on red and amber days,  
 3 primarily looking at the time based on the volume of  
 4 incidents during the hours of day hours, so usually  
 5 a day shift start. However, I was also on—call, which  
 6 meant I could be contacted to be available when and  
 7 as — as required as well.  
 8 Q. We will come on to you being on—call, but just now,  
 9 since you have mentioned it, does that mean that — did  
 10 you have specific hours when you were on—call? Was  
 11 there a rota or were you just on—call whenever anyone  
 12 needed you?  
 13 A. So, again, the difficulty with being the single maritime  
 14 or small boat crossings tactical commander at the time  
 15 was I was on—call 24/7 as the single point of contact.  
 16 So, again, because it was quite early on, the role in  
 17 its creation, and this role was intended to be shaped  
 18 into — into the future around small boat crossings  
 19 anyways, so yes, I was on—call 24/7, along with me being  
 20 quite flexible to support the operational requirements  
 21 at Dover as a tactical commander.  
 22 Q. And as a result of you being there in the ops room  
 23 being — taking on essentially the tactical role, that  
 24 would then mean that the maritime tactical commanders at  
 25 the JRCC wouldn't need to oversee RAG review of any of

6

1 the small boat incidents; is that right?  
 2 A. That is correct. So the RAG function was coming on to  
 3 myself as a small boat crossings or migrant tactical  
 4 commander. As part of that function as well, obviously  
 5 I was supervising the teams at Dover in respect to  
 6 welfare and any further requirements. So if I did  
 7 identify or the team leader or the SMC identified that  
 8 we required further support from the network, it was my  
 9 duty to ensure that I contact the JRCC or the network  
 10 tactical commander to make sure that they take action  
 11 and they provide me and the team at Dover with that  
 12 support as well.  
 13 Q. Let's continue reading. So midway in that paragraph  
 14 that we were looking at, so it starts :  
 15 "Where this may change ..."  
 16 Do you see what?  
 17 A. Sorry, which paragraph?  
 18 Q. In the middle of the paragraph that starts :  
 19 "I'm advised ..."  
 20 A. Yes, yes.  
 21 Q. So we read up until "those incidents", so picking up  
 22 again at, "Where this may change". You have got that?  
 23 A. Yes.  
 24 Q. So:  
 25 "Where this may change is if George sees that the

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1 MRCC are struggling to handle the volume of incidents  
 2 due to low staffing and with no SMC and on those  
 3 occasions, if he considers it necessary, he may play  
 4 a more hands on role as the SMC handing back the  
 5 tactical command to the network commander."  
 6 So essentially where — due to low staffing or you  
 7 can see the staff are struggling in Dover, then you  
 8 would essentially hand the tactical role back to the  
 9 JRCC and you would become operational, taking on the SMC  
 10 role. That's what that suggests; is that right?  
 11 A. That is correct. So automatically, if there was no SMC  
 12 at Dover present, it would only make sense myself, as  
 13 SMC qualified as well, to take that role operationally  
 14 and let the JRCC tactical commander to maintain tactical  
 15 supervision of small boat crossings, so —  
 16 Q. Even if there was an SMC — for example, on the day,  
 17 24 November, there was an SMC in place, James Crane, but  
 18 you still handed back the Tactical Command. So even if  
 19 there is an SMC and there's too much work essentially,  
 20 you would still hand it back; is that right?  
 21 A. That is correct. So because I was still present at  
 22 Dover MRCC and we all know, and it's been highlighted  
 23 previously, that physical presence during those busy  
 24 days at Dover is critical and beneficial, so under those  
 25 circumstances, again, it will make sense that I hand

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1 over Tactical Command to the JRCC tactical commander and  
 2 myself become operational. Obviously, if there were no  
 3 SMC, I would be the SMC. If there was an SMC, like we  
 4 have discussed, it is quite evident I would — in my  
 5 capacity as mission co—ordinator, MC qualified, I would  
 6 take that role as well to support the teams.  
 7 Q. You said it is critical to be in Dover on those busy  
 8 days. In your view, how did being in Dover compare with  
 9 remote cover, for example, from the JRCC? Could  
 10 anything be missed if you were remote?  
 11 A. Again, if we look at the small boat crossings search and  
 12 rescue operations at the time and even more now, they  
 13 are a joint response in the sense that we rely on  
 14 partner agencies' assets to support such rescue  
 15 operations. So in short, yes, it's highly beneficial  
 16 that — to be present during those busy days at Dover  
 17 because of the information exchange that takes place  
 18 within the operations room. There is lots of  
 19 discussions, lots of interaction, which obviously it's  
 20 hard to duplicate if you are remote. And those live  
 21 conversations/interactions assist with further  
 22 decision—making to be quicker and more efficient, so  
 23 yes.  
 24 Q. Let's go back to the email, next paragraph, which  
 25 starts:

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1 "Where time allows ..."  
 2 Have you got that one?  
 3 A. Yes.  
 4 Q. So:  
 5 "Where time allows ..."  
 6 And it refers to you needing obviously some  
 7 work/life balance. You will also attend on likely busy  
 8 amber days and Mike Bill says:  
 9 "We are also looking at George going on to A&T so  
 10 that he could be called/recalled urgently if required.  
 11 George will work on the criteria for such a call out and  
 12 this will eventually be posted on CIP."  
 13 That's the intranet, isn't it, the Coastguard  
 14 Information Portal?  
 15 A. Correct, yes.  
 16 Q. Do you recall how often, if at all, you attended on  
 17 amber days in November 2021?  
 18 A. I would say quite often. Obviously the priority was on  
 19 those assessed red days, followed — followed by amber  
 20 days and subsequently yellow days as well, so obviously  
 21 I was prioritising my attendance based on that  
 22 Op Deveran assessment, the weather assessment, keeping  
 23 in mind as well that work/life balance and rest time.  
 24 Q. So we are referring to days here, but obviously there  
 25 were red and amber nights as well.

10

1 A. (Nods).  
 2 Q. Do the days actually include nights as well in this  
 3 email?  
 4 A. Correct. So by default, however, we all knew that it  
 5 was usually after a 7.30 start in the morning that the  
 6 workload started picking up because usually, that was  
 7 when the small boats were expected more or less to be  
 8 successful in crossing into UK search and rescue.  
 9 Q. Just so I understand that, you are saying on a day shift  
 10 after 7.30 in the morning, or did I mishear?  
 11 A. Yes, so in general, if you look into some stats and data  
 12 at the time, so small boats were aiming to cross through  
 13 into UK search and rescue region later on the day. So  
 14 that was usually between 6.00 — let's say 6.00 and  
 15 11 o'clock in the morning.  
 16 Obviously, with the crossings and the small boats  
 17 stacking up, let's say, and the workload increasing, it  
 18 was prominent that — it was during daylight hours that  
 19 we were becoming busier as a search and rescue  
 20 co—ordination centre because of the volume of vessels  
 21 coming closer to the median line, and that's where  
 22 obviously it's critical to make sure our response is  
 23 preplanned and in place to support the operations.  
 24 Q. So does that mean that generally, you would be there on  
 25 the day shifts?

11

1 A. Correct. So my intention was to aim for a 7.30 start.  
 2 Sometimes, again, I took it upon myself, and discussions  
 3 followed with my line manager and senior managers as  
 4 well, to start one or two hours earlier, so maybe like  
 5 a 5.30 or 6.30 start for my 12—hour shifts, but that was  
 6 quite dynamic and as — as required.  
 7 Again, me being on on—call roster, I could easily be  
 8 contacted to be asked to start earlier than, for  
 9 example, 7.30. So the capability was there for myself  
 10 to be asked to come in early, especially if it was  
 11 an observational requirement by the JRCC maritime  
 12 tactical commander or even the duty SMC.  
 13 Q. And that paragraph also refers to you going on A&T.  
 14 A. Mm—hm.  
 15 Q. Could you just tell me what that means?  
 16 A. Yes, A&T stands for the alerting and tasking software  
 17 platform, so that is the universal platform we are using  
 18 not just for tasking coastguard rescues teams and paging  
 19 teams, but also every single officer within HMCG that is  
 20 on an on—call roster is within this platform. So  
 21 I followed the same process like everyone else who is  
 22 on—call, and everyone has access to that A&T platform,  
 23 so anyone could have requested for me to be paged,  
 24 effectively.  
 25 Again, I see it's been mentioned. I did work

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1 through that criteria to make sure there is a clear  
 2 guideline. However, up until that criteria was drafted  
 3 and published, it was clearly communicated that if you  
 4 need me, call me or page me and we will see what I can  
 5 do to be available.  
 6 Q. So from August, you were, as you said, 24/7 and anyone  
 7 could call you.  
 8 A. Correct.  
 9 Q. And then you worked out a criteria for a call --  
 10 A. Correct.  
 11 Q. -- and that was posted on the Coastguard Information  
 12 Portal, was it?  
 13 A. Correct, along -- followed with, as you have previously  
 14 heard, like a hot topic or a hot update communication  
 15 that goes to all of the network within HMCG. Obviously,  
 16 and I can't recall, it will have been certainly an email  
 17 as well to enhance the communication and update as well.  
 18 Q. Do you recall when those criteria were put on the  
 19 intranet?  
 20 A. I can't recall, I am afraid.  
 21 Q. Next paragraph then, so the one that starts:  
 22 "Other than his role within the ops room ..."  
 23 Do you see that one?  
 24 A. Yes.  
 25 Q. This refers to two other functions of your role. So you

1 were to lead on training and familiarisation of staff  
 2 with updates on SOPs and policy relating to small boat  
 3 search and rescue; correct?  
 4 A. Correct.  
 5 Q. Then also, you were to represent coastguard --  
 6 HM Coastguard outside of the ops room in meetings  
 7 relating to small boat activity.  
 8 A. Correct.  
 9 Q. Correct?  
 10 And the final paragraph says that essentially, if  
 11 there are long periods where there is no small boat  
 12 activity, you would have a management role at Dover.  
 13 What did that entail?  
 14 A. So it's already been quite evident within one of the  
 15 emails that I will have line management  
 16 responsibilities. So previously to being offered this  
 17 position, I was a team leader, so I was team leader for  
 18 team 1 at Dover. Obviously me taking up that promotion  
 19 opportunity meant that potentially -- not potentially;  
 20 there was a gap of leadership within team 1, which was  
 21 compensated with myself still being the line manager for  
 22 team 1. So I was still line managing team 1,  
 23 effectively, at Dover whilst performing my -- that new  
 24 role as a tactical lead.  
 25 Q. I see. Now, I understand that red days can be back to

1 back. I am calling them days. Red shifts, let's say.  
 2 A. Yes.  
 3 Q. So you can have a red night watch followed by a red day  
 4 watch. How would you prioritise which one of those to  
 5 cover, bearing in mind obviously you couldn't work for  
 6 24 hours in a row?  
 7 A. Again, as a matter of principle, we will prioritise for  
 8 me to be available during the day shift of a red or  
 9 amber or yellow day, unless it was clearly identified  
 10 that I had to be available and present at Dover during  
 11 a night shift or with an earlier start other than 7.30.  
 12 Hence why the on-call capability was there for myself,  
 13 because it was easier for me being the single person --  
 14 not easier, but easier to manage to be available by  
 15 default during a day shift and if that requirement  
 16 changed because of, for example, becoming busier during  
 17 a night shift, so it was becoming evident that actually  
 18 my presence operationally at Dover was much suited for  
 19 me to start earlier during a day or into a night shift,  
 20 it was there.  
 21 But obviously, again, being a single person within  
 22 this -- this role and to ensure my welfare as well was  
 23 to be, by default, available for a 7.30 in the morning  
 24 start on a red, amber, yellow day, unless that changed  
 25 due to the volume of operations the preceding night.

1 Q. Was one person enough for the role in 2021?  
 2 A. It became evident a few months into the role that  
 3 one person was not enough, hence why there were  
 4 discussions and attempts to recruit for a second role.  
 5 Q. Do you know why that didn't come to fruition?  
 6 A. So there was one or two recruitments for this role  
 7 through the Civil Service. However, we --  
 8 unfortunately, we didn't have any successful applicants  
 9 through -- through the interviews. So it was an ongoing  
 10 effort to recruit. Obviously, applicants didn't meet  
 11 the required standard. Just to clarify, I wasn't part  
 12 of the recruitment process as well.  
 13 And by the time -- well, at some point in my career  
 14 with this -- within this role, there was an informed  
 15 decision made to come off operations and at that point,  
 16 obviously, the decision was also made that if --  
 17 "George, if you are not operational at this stage, we  
 18 don't believe there is a requirement to -- to have  
 19 a second person in this role", which obviously at the  
 20 time as well made sense.  
 21 Q. And let's then look at that. So let's go to your  
 22 statement paragraph 27, so this is {INQ009632/12}.  
 23 There we go. So here, just the fourth line down there,  
 24 you see.  
 25 "My role was reviewed in 2023 and is no longer

1 operational ..."

2 As you have just been telling us. So does that mean

3 that you are no longer playing the role or taking on the

4 role of the tactical commander on red days, or how has

5 it changed?

6 A. So that is correct. So one of the aspects is I am no

7 longer acting as a tactical commander for small boat

8 crossings. I no longer act as an SMC. I no longer act

9 as an MC. So there is no expectation from myself to be

10 operational in any shape or form.

11 Q. And do you think that there is no longer a need to have

12 someone who -- so a specific small boat maritime

13 tactical commander?

14 A. Sorry, is that a question of what I think or how things

15 have been communicated and decided?

16 Q. What you think. You had the role. You no longer have

17 that operational role. Is that something which you

18 think is no longer needed?

19 A. My -- my personal opinion on the matter is that we have

20 sufficient measures in place with the concept of network

21 within the coastguard, the wider network, to support me

22 coming off operations. As you probably know, at the

23 time, we were -- HMCG was struggling to have more than

24 one maritime tactical commander within the ops room.

25 Now, obviously, the headcount at the JRCC has increased

1 to three, I believe. So the capability is there and

2 it's -- it has been enhanced.

3 However, I do think that there is still merit in,

4 obviously, us with an SMC to be based at Dover and be

5 available for those busy days as well to have -- it will

6 have been beneficial, in my opinion, personal opinion,

7 to maintain Tactical Command at Dover as well,

8 especially now considering the fact that

9 Home Office/Border Force maritime, they -- they are

10 co-located, and looking into JESIP principles, into

11 co-operability, etc, it would make sense to maybe

12 consider maintaining that tactical presence on station

13 at Dover.

14 And that -- again, based on my personal opinions,

15 just before I was taken out, the operational aspect of

16 my role and working with the joint control room, again,

17 JCR, as we all know, based at Dover and their Tactical

18 Command, if I may say so, we did have really good

19 conversations and discussions dynamically at that

20 tactical level at Dover to again enhance that

21 decision-making and efficiency of response quite

22 quickly. It was quicker to resolve not difficult

23 aspects of the operations, but to reach an agreement

24 between ourselves and Border Force maritime and the JCR

25 to make sure that we were on the same page, effectively.

1 Q. So now the -- you said there are three maritime tactical

2 commanders at JRCC on shift at the same time,

3 presumably.

4 A. I think that's -- that's the goal. So each of the

5 four teams has three maritime tactical commanders, JRCC

6 network -- sorry, network commanders assigned, so you

7 are looking at 12 in total in rotation.

8 Q. So there's always someone to do the RAG reviews for --

9 A. Yes, I would say it is quite unlikely to have less than

10 two JRCC network commanders on duty at the same time.

11 Q. When you are saying "network commanders", is that the

12 maritime tactical commander?

13 A. Yes, the role has changed, but effectively, from

14 a tactical perspective, is the same.

15 Q. And you say that you are still on-call and you share

16 that role with Neal Gibson, who's now the rescue

17 co-ordinations centre manager; is that correct?

18 A. Correct. I am still on-call, but in a different

19 context, if I may explain or if there is --

20 Q. Please go ahead.

21 A. Yes, so at this stage, I am still on-call, which I share

22 with Neal Gibson to ensure that we cover 24/7 the

23 on-call element, and that's as the small boats tactical

24 adviser at this stage. So it's not an operational role,

25 but due to my experience and the role itself, I am

1 available as an adviser, whether that's an adviser to

2 the SMC or the network commander or the duty strategic

3 commander. And, again, there is a set of criteria that

4 has been revised and republished to support this.

5 Q. I want to turn now to resources at Dover.

6 We can take the statement down. Thank you.

7 In your statement, you say you had no concerns about

8 staffing on the day watch of 24 November 2021 --

9 A. (Nods).

10 Q. -- or more widely. You say you weren't aware of any

11 organisational concerns about low staffing at Dover.

12 We have already seen the email from Mike Bill about

13 your role, where he referred to keeping the ship afloat

14 at Dover and to efforts to bolster support and to

15 bolster headcount. So you must have been aware that

16 those above you were taking steps to increase staffing

17 at Dover in 2021; is that fair to say?

18 A. Yes, that's correct.

19 Q. Mike Bill has also provided evidence to the Inquiry

20 about his concerns about the staffing shortage at Dover

21 and staff welfare concerns as a result. Were you aware

22 of those?

23 A. I was aware of those as a team leader and initially as

24 part of my new role at the time. Obviously, that's

25 quite important to remember; that I transitioned from

1 being a team leader, operation team leader, into an SEO  
 2 senior management role. So obviously, as my role  
 3 evolved and I took up this opportunity, I had access to  
 4 senior leadership discussions, meetings and information,  
 5 so I was still enhancing my understanding around matters  
 6 and issues and how senior leadership considered and  
 7 tackled those.

8 Q. So you were aware about the staffing problems?  
 9 A. I was aware at the operational level and obviously,  
 10 within my new role as well, I was becoming aware of  
 11 other matters and concerns as well.

12 Q. And let's look at the week in question. This is the  
 13 week commencing Monday, 22 November 2021. You attended  
 14 what's called the red days meeting on that day.

15 Let's put the meeting notes on the screen, so this  
 16 is {INQ000206/1}, please, and we can see you there along  
 17 with various other people from coastguard: Pete Mizzen,  
 18 the then chief coastguard; Duncan Ley, strategic  
 19 commander; Mike Bill, your line manager at that stage,  
 20 was it?

21 A. Yes, correct.

22 Q. So page 1, we can see it took place 4.00 pm on Teams,  
 23 22 November.

24 Now let's go to page 4, please, under the heading  
 25 "Staffing" {INQ000206/4}. You see at the top there

1 "5. Staffing". At the top of the page, there's  
 2 discussion as to numbers in the network as a whole,  
 3 which are said to be healthy, above minimum to the JRCC  
 4 and it's said that support to Dover could take place  
 5 smoothly, presumably remote support.

6 Then there is a reference to numbers at Dover being  
 7 low. We see the first paragraph, three lines up:  
 8 " ... 2 ... on night ..."

9 Then underneath that, we see PM, which is the then  
 10 chief coastguard, says:  
 11 " ... Two SMCs at Dover on nights isn't enough ..."

12 It's understood, actually, that it should mean  
 13 two staff, not two SMCs at Dover.

14 So even knowing that there was remote support from  
 15 the JRCC, the chief coastguard then considered that  
 16 two staff at Dover was insufficient. Is that your  
 17 understanding?

18 A. Yes, that is my understanding, and it also made sense  
 19 that if we are expecting a busy night and day, having  
 20 two staff at Dover is not enough.

21 Q. You have already told us about the need to have people  
 22 on the floor of the ops room in Dover as opposed to  
 23 JRCC. Is that again reflecting those concerns around  
 24 the need to have people in the room in Dover?  
 25 A. Correct, one aspect of that, yes, yes.

1 Q. There is then a discussion of potential mitigation  
 2 options in the meeting. We can see you halfway down the  
 3 page. Do you see "GP"? That's you, isn't it?  
 4 A. Yes.  
 5 Q. You say there is:  
 6 "... No response locally for overtime, additional  
 7 action would be an A&T message to get interest from the  
 8 wider network."  
 9 So, again, that's referring to that on-call system,  
 10 is it, the A&T?  
 11 A. Correct. So, again, another capability that this system  
 12 offered was to contact operational staff, so maritime  
 13 operations officers, senior officers, SMOOs, for  
 14 example, and SMCs as well. If they have opted out to be  
 15 contacted through the system, we could have asked them  
 16 via a text, in an email, whether they were willing to  
 17 take up overtime.

18 Q. I see.  
 19 Then there is a discussion as to whether  
 20 Richard Cockerill, who was travelling to Dover to  
 21 provide support, could alter his hours, and we know he  
 22 started his shift on the 24th at 5.00 am, so a couple of  
 23 hours earlier than normal.  
 24 And then there is further discussion, which is the  
 25 last line on page 4, around high numbers of crossings

1 and the risk of earlier and large scale small boat  
 2 activity on amber days, which was a new thing, as  
 3 I understand it, developing around that time in 2021.

4 A. (Nods).

5 Q. And then page 5 {INQ000206/5}, top of the page, you see  
 6 there DL, Duncan Ley, asks if any staff can move from  
 7 days to nights. It is acknowledged there is not likely  
 8 to be volunteers for that.

9 So you would agree that you were aware of staffing  
 10 concerns in the beginning of that week, so the week  
 11 commencing 22 November?  
 12 A. Correct.  
 13 Q. Do you remember whether such discussions around staffing  
 14 at Dover were a feature of other red days meetings that  
 15 you attended?  
 16 A. I can't recall, but looking back on what the standard  
 17 for those meetings -- you know, the standing agenda was,  
 18 it will have most definitely been discussed, because it  
 19 is quite critical to ensure that we do have the response  
 20 and the response is not just the assets. It's also the  
 21 resource within the ops room.  
 22 Q. In that meeting, there was also a discussion about asset  
 23 availability and taskings.  
 24 A. (Nods).  
 25 Q. Who would be responsible for the search and rescue

1 planning, including asset taskings for each red day or  
 2 amber day?  
 3 A. So in relation to planning, I just need to clarify if  
 4 we're talking between -- so just to clarify if we are  
 5 talking about Border Force maritime assets and how they  
 6 are planned, obviously that was, at the time, for  
 7 Border Force maritime to plan accordingly, but also they  
 8 were obliged to tell us what potentially may be  
 9 available for us to request dynamically. It's already  
 10 quite known that the way it was working with the  
 11 Border Force maritime assets was we had to request those  
 12 through Border Force MCC over a phone call and those  
 13 assets were made available to us.

14 But, again, part of this meeting, planning meeting  
 15 and discussion, was to make sure that we convey the  
 16 requirement for as many assets, let's say, to be  
 17 available to us on the night or the day. Then if we are  
 18 talking about, again, RNLI assets, those are requested  
 19 dynamically again, but obviously being declared assets,  
 20 we need to make sure that we have a common picture of  
 21 what's available and what's not available to us.

22 And the same with aeronautical assets as well;  
 23 whether they are tasked proactively or reactively, just  
 24 to understand what we have got on paper available to  
 25 call upon.

25

1 Q. The Home Office should have been at this meeting, but  
 2 apologies were sent. Would that be a problem if the  
 3 Home Office didn't attend meetings in terms of search  
 4 and rescue planning, asset planning?

5 A. Again, because that was quite -- you know, you can  
 6 appreciate it was quite early on me accepting this role.  
 7 Me accepting the role in August up until November,  
 8 again, considering leave I have had over the summer,  
 9 I was still, let's say, finding my feet within this role  
 10 and make sure that -- my priority was that operational  
 11 support, so to be available.

12 So it will have been an issue? I'd say no, because  
 13 we will have expected for any lack of planning or  
 14 support from Border Force perspective to be clearly and  
 15 explicitly communicated to us. But the way it was  
 16 working with Border Force maritime and their assets at  
 17 the time was that, "We do have assets. You ask for it."  
 18 If it's not available, we have to consider obviously  
 19 RNLI and other methods of response. But I would say it  
 20 wasn't -- it wasn't safety critical, let's say, at the  
 21 time.

22 Q. I think you talk in your statement about the difference  
 23 between proactive tasking, so, for example, the  
 24 surveillance taskings done by 2Excel or the aerial  
 25 assets, and the reactive tasks, which -- I understand

26

1 RNLI would be in that category, but obviously you'd need  
 2 to know how many assets were available.

3 In terms of the proactive taskings, who would decide  
 4 what needed to be tasked? Would that be something you  
 5 would do or would it be something above you?

6 A. So at the time, again, trying to understand myself, my  
 7 role to be shaped into the best, best thing it could  
 8 become at the time and for me to provide was, at the  
 9 time, if we look at proactive tasking of aircrafts --  
 10 whether it is 2Excel or RVL, it doesn't really matter,  
 11 but if there was a requirement for proactive tasking of  
 12 aeronautical assets, at the time, it was something  
 13 that -- it was slowly coming my way.

14 So there was already a process in place for those  
 15 proactive taskings to go through. It was someone within  
 16 HMCG or JRCC, so the Joint Maritime Security Centre at  
 17 the time. We do have roles within that area of work, so  
 18 it was primarily the officers working within JMSC for  
 19 the coastguard looking into those obvious requests and  
 20 the assets to be tasked.

21 At the time, if I can recall correctly, I was in the  
 22 process of taking up that aspect, so for me as a single  
 23 point of contact to -- to proactively request and --  
 24 request those aeronautical assets.

25 Q. So it became part of your role, but perhaps at the time,

27

1 you were still developing --

2 A. It was still developing, but obviously, it will have  
 3 been no chance for it to be missed because, knowing me,  
 4 I was quite interested to know as a tactical  
 5 commander -- expected to be tactical commander know what  
 6 assets I had available and if I did identify any lack of  
 7 assets to, again, ask the question and make sure that  
 8 the requirement was clearly communicated for those  
 9 assets to be available to us.

10 Q. Thank you. We can take these notes down. Thank you.

11 I want to now talk about experience and training in  
 12 relation to small boats. Now, you said in your  
 13 statement that the issue of migrant crossings is not  
 14 a new concept to coastguard, to HM Coastguard. Do you  
 15 mean by that that it's not new since around 2018 or do  
 16 you mean that it went earlier than that?

17 A. I can't recall if it went earlier than that. Probably  
 18 did in a really smaller scale, but definitely from 2018  
 19 onwards, it was quite evident that it was an aspect of  
 20 search and rescue operations we needed to focus on and  
 21 make sure that we learned more about it to adapt as  
 22 a search and rescue authority.

23 Q. You have called it a defined category of the routine  
 24 search and rescue work undertaken. A subcategory of it?

25 A. As part of the search and rescue, you mean?

28



1 Q. Mm—hm.  
 2 A. Yes, because it still comes under search and rescue.  
 3 It's just small boat crossings search and rescue has  
 4 a few idiosyncrasies, obviously, the joint response  
 5 element being — being one of them and how busy it can  
 6 become quite — quite quickly, and the reliance on, for  
 7 example, information from the French coastguard and  
 8 aeronautical assets as well.  
 9 Q. Is HM Coastguard used to having subcategories of its  
 10 routine SAR work, or is that something which was  
 11 different in relation to small boats?  
 12 A. Not necessarily. In a sense, for example, if you think  
 13 search and rescue is anything and everything, it could  
 14 be, you know, people in the water, mass — mass casualty  
 15 event, it's still search and rescue, just that it's part  
 16 of — if you want to, you know, give it the title of  
 17 being a subcategory, it doesn't take any — anything  
 18 away from it. It's still search and rescue, just to  
 19 make sure that we highlight the requirement for further  
 20 development and adaptation into our response.  
 21 Q. Now, you have said in your statement that you didn't  
 22 receive any specific training on small boat crossings,  
 23 but you essentially learned on the job and had firsthand  
 24 experience from working at Dover.  
 25 A. Correct.

1 Q. As we have seen then, turning to your role in training  
 2 and development, this was one of your key  
 3 responsibilities as the — in your new role in  
 4 August 2021, developing training essentially and  
 5 policies in relation to small boats.  
 6 We have seen that you were appointed as the small  
 7 boat tactical commander on 16 August 2021 and you have  
 8 said in your statement that the first few months of your  
 9 appointment were primarily operational and dealing with  
 10 small boat activity. By this, do you mean that you were  
 11 filling gaps in the operations room, still deep in the  
 12 operational detail at that stage?  
 13 A. In essence, yes. So obviously myself, alongside my  
 14 manager and senior management at the time, we had to  
 15 prioritise what my role and what gaps potentially —  
 16 let's say gaps — what responsibilities I had to fulfil  
 17 as a matter of priority and, obviously, the priority at  
 18 that time was clearly identify that we had to make sure  
 19 that we enhance our operational response at Dover, the  
 20 presence and the capability as well.  
 21 So obviously, if you think about training, it's  
 22 a really important element of my role; still is,  
 23 obviously. But, obviously, operational aspects of my  
 24 role took priority at the time to fill in those gaps, up  
 25 until the point where we had that increased headcount at

1 Dover and that further capability in training.  
 2 Q. Understood.  
 3 I want to talk first about your role in developing  
 4 policies. You weren't involved in the original drafting  
 5 of the specific small boat policies; is that right?  
 6 A. So looking into some of the evidence I've seen as part  
 7 of my evidence proposal and some of the SOPs, I'd say  
 8 that is correct. I wasn't directly involved in their  
 9 creation, but I was fully aware of the intention of  
 10 those documents and I had, you know, visibility of those  
 11 SOPs and policies prior to their official —  
 12 Q. You were aware of —  
 13 A. — publication.  
 14 Q. You hadn't developed them yourself.  
 15 A. No, I hadn't developed them myself, no.  
 16 Q. Let's just put them on screen so we are sure what we are  
 17 talking about. So paragraph 26 of your statement,  
 18 please. 9632 is the Inquiry number {INQ009632/12}. We  
 19 see there you've listed three policies in force as at  
 20 24 November 2021. Is that what you are talking about?  
 21 A. Yes, if I am thinking about the documents, yes, as  
 22 I remember them, yes.  
 23 Q. Did every policy that would have been — or every  
 24 iteration of the policy that would have been published  
 25 after your appointment in August 2021, would that have

1 had your stamp on it, your input, or have you been  
 2 telling us that your heavy involvement in operational  
 3 detail in those initial months meant you weren't perhaps  
 4 heavily involved in policy development at that time?  
 5 A. I wasn't heavily involved in policy development at that  
 6 time, but as I mentioned, I had visibility of those  
 7 policies and SOPs. Obviously, as part of my role,  
 8 again, policy is quite big — a big part of my role and  
 9 at the time, I was — I was starting to have that aspect  
 10 of my role being developed by speaking directly to our  
 11 maritime policy lead, again a single point of contact  
 12 managing all of the maritime policies, including  
 13 obviously small boats at the time as well, and with  
 14 senior officers as well to make sure that I had a view  
 15 and clear understanding of the policies because  
 16 obviously, as part of my role, I needed to make sure  
 17 that those policies and SOPs were applied as well.  
 18 Q. Yes.  
 19 A. So yes, I was aware of them. I did understand them, but  
 20 I wasn't directly involved in their drafting and  
 21 creation.  
 22 Q. Has that changed since?  
 23 A. It has changed significantly. Now you could say that  
 24 policy potentially has my stamp in a sense that, again,  
 25 I am not the maritime policy lead, but I am working

1 quite closely with our maritime policy lead to take  
 2 advantage of their knowledge and skills. I've developed  
 3 my skills, as well my policy creation skills, let's say,  
 4 and drafting skills to make sure that everything and  
 5 anything we publish and create is appropriate as well.  
 6 Q. And since you stopped being operational in 2023, has  
 7 that policy and training element of your role become  
 8 even more important or even more —  
 9 A. It has become even more important. It's always been  
 10 important, but I have been focusing on it much more and  
 11 I have had the time to focus and develop it as well,  
 12 whether we are talking about training or continuous  
 13 development on watch — on watch training policy as  
 14 well.  
 15 Q. Let's just look at that second SOP on the list there,  
 16 which is {INQ000428/1}, the one called "Incidents  
 17 Involving Migrants". Page 1 says when this should be  
 18 used; when a report of potential or confirmed migrant  
 19 activity is received.  
 20 And then page 2, if we could turn to that, please  
 21 {INQ000428/2}, just above the heading "Distress Phase",  
 22 it says:  
 23 "All migrant vessels in the UK SRR are in grave or  
 24 imminent danger until credible evidence suggests  
 25 a distress response is not needed."

33

1 That, as I understand it, is HM Coastguard's policy  
 2 on small boats that are within UK waters; that all of  
 3 them are classified as distress until otherwise — until  
 4 credible evidence is received that it's not needed. Is  
 5 that — that's your understanding?  
 6 A. Correct, yes.  
 7 Q. Can you explain the reasoning behind the policy?  
 8 A. Again, at the time, I wasn't part of, you know, creating  
 9 and publishing that guidance and policy —  
 10 Q. Does it remain HM Coastguard's policy?  
 11 A. Correct. It only makes sense that it remains a policy.  
 12 Again, if you look into small boat crossing incidents  
 13 and the nature of notification, so initial information  
 14 received that — the people on those boats are not  
 15 mariners. They are desperate. They want to be rescued  
 16 as soon as possible, especially as soon as they cross  
 17 into UK search and rescue region, because their  
 18 intention is to cross into the UK search and rescue  
 19 region.  
 20 So it only makes sense that we treat those reports  
 21 and incidents as being in distress unless, ideally, we  
 22 have that credible information from reliable assets, so  
 23 our assets or Border Force assets or even French  
 24 coastguard assets, to indicate that grave and imminent  
 25 danger is not present as part of the distress, which

34

1 means it still requires search and rescue response and  
 2 timely response and adequate response anyways, but when  
 3 we are dealing with multiple incidents, we need to know  
 4 what the priority is, because if — and that's the  
 5 difficulty with being part of a search and rescue  
 6 authority.  
 7 Our training as coastguards is, you know, we need to  
 8 take information, validate that information, analyse the  
 9 information and be able to task the right asset to do  
 10 the right thing at the right time. And with the volume  
 11 of small boat incidents and crossings, that kind of  
 12 prioritisation of search and rescue response has become  
 13 even more evident.  
 14 It's different from dealing with a fishing vessel  
 15 sinking. We will throw everything and anything to this  
 16 incident as required, but we are talking about a single  
 17 incident. When you are looking into multiple reports,  
 18 and distress incidents, it's — ideally, you want that  
 19 enhancing information, that reliable information and  
 20 credible evidence to be able to prioritise the response  
 21 as well.  
 22 But if not, we are covered in the sense that it's  
 23 still distress. We can't change that, so we will treat  
 24 it as distress and task the resources that we need to  
 25 task.

35

1 Q. Throw everything at it like the fishing vessel or  
 2 slightly different?  
 3 A. Well, again, it depends on the information we have, how  
 4 big the vessel is, how much persons on board there is;  
 5 a plethora of information we have to attempt to  
 6 gather/assess. So whatever I say, it won't be valid  
 7 because I can't speak for every different —  
 8 Q. Each case is different?  
 9 A. — type of crossings and — correct.  
 10 Q. Yes. Let's look at your role and training.  
 11 We can take that down now. Thank you.  
 12 When did you first become involved in training for  
 13 small boats?  
 14 A. I can't really give you a date or a timeframe, but I do  
 15 remember roughly. I would say it was definitely within  
 16 2022 at that point when I started delivering some  
 17 training in the sense of, for example, going to the JRCC  
 18 and providing some training in the form of  
 19 a presentation, Q&A and discussion with the teams there,  
 20 but online sessions as well. I wouldn't necessarily  
 21 class it as training, but it was part of continuous  
 22 development to make sure that we enhance our operational  
 23 capability at the time.  
 24 Q. And do you recall, prior to your appointment in 2021,  
 25 had there been training on small boats? Not by you, but

36

1 from others, presumably.  
 2 A. There was definitely some form of training and  
 3 development being -- going around as part, for example,  
 4 of small boats, around termination of search and rescue  
 5 as well, if you look at the Operation Sommen to make  
 6 sure --  
 7 Q. I will come on to that in a minute.  
 8 A. -- yes, we have a clear understanding.  
 9 Q. Let me show you this first. So it is {INQ008914/1}. Do  
 10 you recognise these training slides? They are dated  
 11 17 August 2021, so just a day after you were appointed,  
 12 not your name on them.  
 13 A. If you just go through some further slides, I will be  
 14 able to answer the question.  
 15 Q. So they are not very long, but they essentially --  
 16 A. Yes, I do remember this, yes.  
 17 Q. Do you know who this training was given to?  
 18 A. It was definitely given to everyone at Dover MRCC, as  
 19 far as I can recall.  
 20 Q. The Inquiry has heard evidence from several  
 21 HM Coastguard staff at Dover that they don't recall  
 22 attending any small boat training before November 2021.  
 23 Do you know why that might be?  
 24 A. I wouldn't be able to answer that really because, again,  
 25 delivery of training wasn't my priority and focus at the

1 time. It was the operational aspect of it. So things  
 2 in relation to training and development were still kind  
 3 of managed between the MRCC commander at the time and  
 4 the clandestine operations liaison officer as well and  
 5 the other on-station SEO management and managers as  
 6 well.  
 7 So it was a joint effort at the time and that was  
 8 something that I would like to say was led by the MRCC  
 9 commander at the time with me potentially starting  
 10 picking up later on some elements of it.  
 11 Q. Also in relation to training, let me show you  
 12 {INQ003294/1}. So we can see here this is an email from  
 13 then deputy chief coastguard division 4 network  
 14 commander, Helen McCaffery, to a number of Border Force  
 15 and HM Coastguard staff, including you. We see your  
 16 name on the distribution list.  
 17 It is setting up a meeting on 13 August 2021 to, as  
 18 she says in the email, as we see there towards the  
 19 bottom of the page:  
 20 "... to ensure that [HM Coastguard] and [Border  
 21 Force] maintain a dovetailed approach to training in  
 22 preparation for implementing the small boat protocols  
 23 and SoPs in September."  
 24 You have already referred to Operation Sommen. Is  
 25 that -- the small boat protocols and SOPs, is that

1 referring to Operation Sommen, the go-live date?  
 2 A. I wouldn't be able to answer that question based on this  
 3 email, really, whether the intention was to deliver  
 4 training due to Operation Sommen coming into effect.  
 5 Q. When she is talking about implementing the small boat  
 6 protocols and SOPs, what do you understand those to  
 7 refer to?  
 8 A. As I read this, training to support small boat crossings  
 9 at the time, and like I have mentioned, training and  
 10 development and policy making at the time was not  
 11 something I was directly involved. So Helen, for  
 12 example, was one of those people that were directly  
 13 involved in pushing forward that training and  
 14 development and appropriate meetings as well at the  
 15 time.  
 16 Q. And were you aware of training around Operation Sommen  
 17 in summer and August?  
 18 A. I was aware of it, yes.  
 19 Q. Would it be fair to say that that was the focus of  
 20 training around that time, summer/autumn 2021?  
 21 A. I wouldn't be able or confident to answer that question  
 22 whether that was the priority for delivering training at  
 23 the time, but it was definitely one of the priorities  
 24 because we had to clearly agree on the protocols of  
 25 terminating search and rescue. In order to proceed into

1 the Op Sommen internal tactics, we had to be confident  
 2 as a search and rescue authority that we had enough  
 3 reassurances to pass over that responsibility and  
 4 co-ordination back to Border Force maritime, so it was  
 5 definitely one of the priorities.  
 6 Q. Finally on training, the Inquiry has heard evidence last  
 7 week from a MOO at Dover that there was no formal  
 8 training on small boats when he joined in March 2021.  
 9 He referred to several what he called standard practices  
 10 that happened at Dover that maybe weren't in standard  
 11 operating procedures or policies, but apparently  
 12 everyone did. So one example of these is telling  
 13 callers from small boats to hang up and dial 999 to try  
 14 and get a position in that way; telling callers if they  
 15 were not connecting to UK 999 calls, they were still in  
 16 French waters.  
 17 Were you aware of either or both of these, what he  
 18 called standard practices?  
 19 A. Well, as I mentioned, I was by that time -- at that  
 20 time, I was a team leader at Dover. Again, just to give  
 21 a bit of a background, I was initially a single maritime  
 22 operations officer, an SMC, at the JRCC at the time. So  
 23 one of the difficulties as well was -- with me taking up  
 24 a promotion as a team leader at Dover meant that I was  
 25 still kind of trying to understand what the small boats

1 crossings search and rescue meant and how I could best  
 2 respond as an SMC and team leader to those search and  
 3 rescue operations.  
 4 So there were standard actions and procedures we  
 5 followed as part of being a learning organisation,  
 6 search and rescue authority, of doing whilst the  
 7 operations were live. Yes, some of them, if not all of  
 8 them, were not part of a standard operation procedure,  
 9 but because those operations were led, one way or  
 10 another, by Dover, we knew how we were -- you know, it  
 11 was most appropriate to deal with those instances.  
 12 And obviously, again, we and senior leadership was  
 13 in the process of trying to collect the information,  
 14 understand the information, how and what we do  
 15 operationally and whether that was appropriate at that  
 16 tactical and statistical level when we are trying to  
 17 create SOPs and training. So things were changing.  
 18 Some of the things were actually good practice and up  
 19 until today are part of our policy and standard  
 20 operation procedures as well.  
 21 Q. So is it fair to say that things on the ground  
 22 essentially moved too fast for the procedures or things  
 23 were going more quickly on the operating room's floor  
 24 than the procedures could catch up with?  
 25 A. Again, I wouldn't be confident in saying this because

1 I wasn't 100% sure how senior leadership and our policy  
 2 area of work was dealing with small boats at the time,  
 3 especially if we are talking about March 2021. I am not  
 4 sure whether we are trying to catch up or whether we're  
 5 still in the process of prioritising guidance at the  
 6 highest strategic level and then moving downwards  
 7 towards the operational level to make sure what makes  
 8 sense strategically and within policy is appropriate to  
 9 filter through down to operational.  
 10 SIR ROSS CRANSTON: But what about those two specific points  
 11 that Ms Moffatt put to you; "Call 999, don't hang up on  
 12 999". Did you know about those?  
 13 A. So are you referring to, let's say, the -- if you ring  
 14 999 and we can't get a position, ring again to try  
 15 and --  
 16 MS MOFFATT: So the first one was telling a caller to hang  
 17 up the call and to dial 999. That might give  
 18 a position, for example.  
 19 A. That is, I can only assume, in case they haven't rang  
 20 999, but we got the call through another emergency  
 21 service. So, again, we will attempt -- again, because  
 22 there were no specific operational procedures at the  
 23 time and I can only speak for myself if we are talking  
 24 about March 2021, if we are talking about that kind of  
 25 timeframe --

1 Q. March--November 2021.  
 2 A. So we will endeavour, as far as I understand, and in my  
 3 role as a tactical lead at the time -- it's our  
 4 responsibility to get as much information as we can  
 5 before going down the route of, "Hang up now and call  
 6 999". So we will attempt -- because, as you know,  
 7 maintaining a call connection is really difficult in the  
 8 Channel, so I will expect everyone to gather as much  
 9 information as possible whilst that call is active, even  
 10 if it means asking questions like, "What can you see  
 11 around you? Any vessels?" Anything that can assist us  
 12 in locating the vessel.  
 13 Q. Giving a WhatsApp number, for example --  
 14 A. Exactly, giving WhatsApp.  
 15 Q. -- to get a location that way.  
 16 A. And, again, it was really difficult. We got -- it was  
 17 not unusual to be provided with a number and that number  
 18 was invalid, for example, or wasn't available on the  
 19 WhatsApp platform. But I will have expected to gather  
 20 any information possible prior to making the decision to  
 21 ask the caller to hang up and call 999, because  
 22 I wouldn't be confident that that 999 call will come  
 23 after that call was hung up.  
 24 Q. Because you didn't always get a position from a 999 call  
 25 because --

1 A. Exactly.  
 2 Q. -- of where they were in the Channel.  
 3 A. So it was a consideration for the SMC and anyone  
 4 being -- supervising those operations to potentially  
 5 consider and ask for.  
 6 Q. Just the other point just to close that off then,  
 7 telling callers that because they weren't connecting to  
 8 a UK 999 network, they weren't in UK waters, is that  
 9 something that you told callers from small boats?  
 10 A. Personally, no, it's not something I will have been  
 11 instructing someone to do. It is a consideration and  
 12 potentially for something to pass co-ordination over to  
 13 the French coastguard, but, again, as part of either  
 14 agency and, you know, cross search and rescue  
 15 co-operation, I will have expected for us to gather  
 16 again any information we can gather in order to assist  
 17 the French authorities with a response; if we were able  
 18 to get a rough position or a definite position of that  
 19 vessel and it was still within French search and rescue  
 20 region, for example, or French waters.  
 21 It will have been our priority to plan for  
 22 a response, a UK response, but the French, as  
 23 a co-ordinating authority, they will have to take  
 24 primacy and co-ordination of this incident and make sure  
 25 that they are content with what we have planned and

1 whether they would like us to proceed and assist.  
 2 Q. And connecting to or not connecting to a UK 999 network,  
 3 would that be a reliable indicator of geographical  
 4 location, in your view?  
 5 A. Based on my understanding and training, I wouldn't say  
 6 that I would be 100% confident to take that as  
 7 a definite factor, no.  
 8 MS MOFFATT: Sir, I don't know if it's a good time now to  
 9 have a break. It is 11 o'clock.  
 10 SIR ROSS CRANSTON: Yes, sorry, it is. Let's have  
 11 10 minutes.  
 12 (11.01 am)  
 13 (A short break)  
 14 (11.11 am)  
 15 SIR ROSS CRANSTON: Yes, Ms Moffatt.  
 16 MS MOFFATT: Before I move on to communication with small  
 17 boats, I just want to pick up on something that you said  
 18 this morning. What I understood you to be saying was  
 19 that from data at the time, your view was that most  
 20 small boats would cross the median line into UK waters  
 21 in the morning, so in your morning shift, essentially,  
 22 after 7.30 am; is that right?  
 23 A. Yes, that's my understanding and opinion at the time,  
 24 yes.  
 25 Q. The Inquiry heard evidence from Dominic Golden, who was

1 the aerial tactical commander at the time in  
 2 November 2021, and he said that he was working on  
 3 an assumption that data showed that it was around  
 4 3.00 am that small boats would cross the median line.  
 5 Are you able to explain why there was a difference  
 6 in views as to when small boats were due to pass?  
 7 A. I wouldn't be able to explain. I explain that --  
 8 I mean, it might be that, thinking now how the -- and it  
 9 hasn't changed that much, I think, but definitely the  
 10 crossings will have started around that time --  
 11 Q. Around?  
 12 A. If you look at the -- around 3 o'clock in the morning,  
 13 2 o'clock in the morning, yes. But obviously, those  
 14 fluctuate depending the season, the tides, the weather  
 15 as well, and the risk appetite from the facilitators on  
 16 the French side, when they want to send the boats over.  
 17 Q. Let's move on to communication with small boats, then.  
 18 So the Inquiry has heard about the difficulties in  
 19 communicating with those on board small boats, and  
 20 I want to discuss some of these with you.  
 21 First, language problems. Would it be right to say  
 22 that there were frequently difficulties in -- with the  
 23 language barrier communicating with those on board small  
 24 boats?  
 25 A. Yes, definitely the language barriers was one and it

1 still is, in a lesser degree, a difficulty we were  
 2 faced -- faced with. That was not only because it was  
 3 quite difficult for the people on board to understand  
 4 what we were asking them, but also what they were saying  
 5 back to us, quite difficult. We did have and we still  
 6 have a capability to mitigate that language barrier  
 7 which is -- it's been discussed -- LanguageLine.  
 8 Whether it was the best method at the time to deal with  
 9 this, that is questionable and dependent on each  
 10 incident and how long we could maintain that caller on  
 11 the other side of the phone as well in order to activate  
 12 that capability through LanguageLine.  
 13 Q. We have heard about the difficulties of calls cutting  
 14 off. Despite that, did you and your team use  
 15 LanguageLine in November 2021?  
 16 A. I can't remember personally if I have used that --  
 17 Q. You can or can't, sorry?  
 18 A. Sorry?  
 19 Q. You can or you can't?  
 20 A. I cannot.  
 21 Q. You cannot.  
 22 A. I cannot remember whether I have used the capability,  
 23 but I was fully aware and confident and trained to  
 24 utilise that.  
 25 Q. I want to also ask you about whether you recollect

1 a proposal for a temporary migrant operations telephone  
 2 operator role for Dover in late 2021. Do you remember  
 3 that?  
 4 A. Yes, I do remember that. I wasn't part of making the  
 5 decision for that capability in my role at the time.  
 6 I was -- I was aware of the intention from certain  
 7 senior officers to -- to implement that capability.  
 8 Q. Was this someone who was a dedicated telephone operator  
 9 for any small boat calls? Was that the aim?  
 10 A. In essence, the expectation was to train people up to  
 11 the required standard to take 999 calls. Whether they  
 12 are, you know, small boat crossing--related or not, you  
 13 wouldn't be able to filter through that 999 call if you  
 14 are logged into, you know, the Dover search and rescue  
 15 zones. If there is a 999 call, you would answer that  
 16 999 call. But the focus was on answering and  
 17 collecting, gathering the data and the information from  
 18 a 999 call, but also focusing on small boat crossings  
 19 calls.  
 20 Q. So this was someone who has had specific training  
 21 potentially to answer calls from small boats?  
 22 A. Any -- they were able to answer any 999 call --  
 23 Q. Yes.  
 24 A. -- and gather the information they required, with  
 25 a particular focus to small boat crossings.

1 Q. And do you know what the reasons were for this proposal?  
 2 A. Again, it was -- I believe one of the reasons or the  
 3 main reason for going the route -- down the route of the  
 4 emergency call handlers was to mitigate that staffing --  
 5 the staffing issues we had at Dover and the lack of  
 6 trained operators in order to physically be present at  
 7 Dover to answer 999 calls and gather information in  
 8 order to enable the SMC and the team leaders to decide  
 9 on the appropriate response.  
 10 Q. So from what you are saying, it suggests that you're  
 11 saying it was more another pair of hands rather than  
 12 suggesting perhaps that people at Dover needed help with  
 13 how they answered 999 calls to small boats.  
 14 A. Yes, I do not believe that one of the reasons of  
 15 implementing that function was that there was lack of  
 16 confidence or we weren't having the required standard to  
 17 answer those 999 calls. I don't believe that was  
 18 a consideration whatsoever for that capability.  
 19 Q. Do you recall what happened to the proposal? Did it go  
 20 ahead or --  
 21 A. Yes, it did go ahead. I did play some part in its  
 22 development and implementation, but it was mainly our  
 23 technical training department coming up with the  
 24 appropriate training for that really specific role to  
 25 make sure that they're fully trained and capable in

1 answering any 999 calls.  
 2 Q. And this will be someone with a communications ticket,  
 3 as it's been described, presumably.  
 4 A. In essence, yes, but just focusing on 999 calls, not  
 5 necessarily VHF.  
 6 Q. Do you still have that in place in Dover?  
 7 A. No.  
 8 Q. And why was it stopped?  
 9 A. It was stopped, as far as I understand, because we have  
 10 reached that stage where we were confident in our  
 11 staffing levels at Dover and, again, there is always  
 12 two sides on a coin. At that point, given the training  
 13 and staffing we had at Dover, that extra additional  
 14 function wasn't necessary at this stage and had nothing  
 15 more to offer.  
 16 Q. I want to turn now to talk about the evidence the  
 17 Inquiry has heard about exaggeration from callers from  
 18 small boats, both from you in your statement and also  
 19 others in their oral evidence.  
 20 Would you agree that a belief that callers from  
 21 small boats would exaggerate was one that was generally  
 22 held within HM Coastguard in 2021?  
 23 A. Yes, that's correct.  
 24 Q. The Inquiry has heard evidence from those working on the  
 25 frontline with small boats that exaggeration happened

1 nine times out of ten, almost every call. Is that your  
 2 understanding?  
 3 A. Well, personally I wouldn't be able to say nine out of  
 4 ten or put a percentage to it, but it was not uncommon  
 5 to subsequently, after search and rescue operation has  
 6 concluded and given the evidence we have had from the  
 7 assets that recovered and rescued a specific vessel and  
 8 its occupants, that, you know, the follow-up information  
 9 potentially -- not potentially; indicated that some of  
 10 the information the caller has provided us with was  
 11 incorrect, especially around, you know, the status of  
 12 the vessel or even, you know, any medical requirements  
 13 of any of the casualties that we have recovered.  
 14 Q. And in terms of the difficulties around  
 15 reconciliation -- so you send a boat out to find small  
 16 boat A, but you find small boat B. Small boat A has  
 17 said that it's got women and children on board and small  
 18 boat B just has men. Could that not account for some of  
 19 the exaggeration?  
 20 A. So, again, we will take everything into consideration.  
 21 Again, I can't talk -- I can't say what the overall best  
 22 practice was, but we will take everything into account.  
 23 So, again, ideally, we will have had a phone number, so  
 24 we will be able to call that number back and see if  
 25 someone we have rescued -- that phone number actually

1 rings, or if we had the name of the caller, ask for the  
 2 Border Force crews or the RNLI crews whilst having the  
 3 crews on board to check from that specific name and  
 4 whether they called 999.  
 5 Again, it depends on how busy it is on the day. If  
 6 we had one or two small boats that we were aware of  
 7 being out in the water and we recovered two, for  
 8 example, again, there will have been some form of  
 9 consideration around these prior to potentially saying  
 10 that there has been an element of exaggeration, we are  
 11 confident that it is coming from this incident, this  
 12 specific vessel, and based on those grounds, potentially  
 13 we are not looking for anything else.  
 14 But, again, it depends on aerial coverage, which --  
 15 again, everyone has highlighted how important it is in  
 16 creating that nighttime picture where we can actually  
 17 say with confidence that there is only two small boats  
 18 there. "We have recovered two small boats. Yes, we do  
 19 have, for example, five incidents open, but there is  
 20 elements between all those incidents to indicate that  
 21 there is -- has been a level of exaggeration, if it was  
 22 present, or other factors to kind of close down  
 23 incidents as duplicates, for example."  
 24 Q. So you rely on the aerial coverage to --  
 25 A. Ideally --

1 Q. -- mitigate the problems around reconciliation?  
 2 A. Ideally, we rely on that and, obviously, information as  
 3 well from the French coastguard.  
 4 Q. The Inquiry has heard evidence that it sounded as if  
 5 small boat callers were reading a script, presumably  
 6 from organised criminal groups. Did you also consider  
 7 or was it considered that these people, not being  
 8 mariners, being on overcrowded and unseaworthy vessels,  
 9 may also have a genuine subjective fear?  
 10 A. Yes. Again, it's quite personal how you perceive, for  
 11 example, a danger and how grave that danger is. For  
 12 someone who is not a mariner, just waves splashing  
 13 over -- over the sponson and water coming in, for them,  
 14 it might be that they believe that they are sinking.  
 15 Again, that was and still is part of consideration  
 16 when we are responding to incidents and we can't not  
 17 consider that type of information, but it's definitely  
 18 part and was part of the consideration towards our  
 19 response at the time.  
 20 Q. The language barrier as well, presumably.  
 21 A. Language barrier as well, one of those. Again, we are  
 22 not -- we are an emergency service, so we need to  
 23 respond in a timely manner. So we have only got so much  
 24 time to assess the information, but the safety -- let's  
 25 say our safety is the fact that we will treat everything

1 as distress unless we have information to indicate  
 2 otherwise.  
 3 Q. (Overspeaking) the policy.  
 4 In your statement, you address HM Coastguard's  
 5 response to exaggeration. I am just going to read out  
 6 what you say. You say {INQ009632/21}:  
 7 "It is not the role of the [HM Coastguard] to  
 8 investigate the truth of what is being said, and our  
 9 operatives do not seek to do so. The concept of  
 10 exaggeration forms no part of our assessment in relation  
 11 to any emergency call received, be that from a potential  
 12 migrant or any other person in distress."  
 13 To me, it sounds like there is a cognitive  
 14 dissonance there. You believe that a small boat is,  
 15 nine times out of ten -- let's say the frontline  
 16 operator believes that nine times out of ten, a small  
 17 boat is in less danger than claimed, but you have to  
 18 ignore that belief for the purposes of your job and  
 19 treat all the information at face value.  
 20 Would you agree that it is something which is  
 21 cognitively difficult to do on a daily basis?  
 22 A. Based on the training every single operational staff  
 23 receives within HMCG and the nature of our work,  
 24 I wouldn't say personally that is, you know,  
 25 a challenge. At the end of the day, we are there to do

1 a job and quite significant job, which is to save  
 2 people's lives. So we will take any personal  
 3 assessments and beliefs even if we know it's quite  
 4 common for exaggeration to be part of it, but we will  
 5 not -- yes, we will not make decisions based on that  
 6 belief, even though it is quite widely known that such  
 7 exists. So based on our training and our overall  
 8 behaviour and, you know, attitude and professional  
 9 development within the coastguard --  
 10 Q. It's not difficult --  
 11 A. -- I don't think it's difficult.  
 12 Q. To your knowledge, did HM Coastguard, perhaps also  
 13 including you in your role as the small boat tactical  
 14 commander, ever consider the potential impacts of this  
 15 very widely held belief on the decision-making  
 16 operatives or potentially whether it could negatively  
 17 impact on search and rescue response?  
 18 A. I think it was identified. I can't remember, but there  
 19 was some training around bias as well that was delivered  
 20 within coastguard.  
 21 Q. Let's look at that. I think it might be what I am about  
 22 to show you. So {INQ000362/1}, please. So these are  
 23 training slides from June 2021. The title is  
 24 "Confirmation Bias & Human Factors". Is that what you  
 25 are referring to?

1 A. Yes.  
 2 Q. So you have seen these previously?  
 3 A. Yes.  
 4 Q. And have you taken this training?  
 5 A. Going through the slides, I can definitely -- they  
 6 definitely look familiar to me.  
 7 Q. We can just flick through so you can just take a view  
 8 and look at them. To me, it doesn't suggest that -- we  
 9 can keep going, if that's okay. It doesn't suggest to  
 10 me, looking at the content of these slides, that they  
 11 were tailored to small boats; is that fair to say?  
 12 A. It was tailored for search and rescue operations,  
 13 which -- small boats is search and rescue.  
 14 Q. So generic search and rescue?  
 15 A. Search and rescue. I wouldn't agree with the term  
 16 "generic".  
 17 Q. Search and rescue?  
 18 A. Yes.  
 19 Q. If we could then just go to page 3 {INQ000362/3} of the  
 20 slides, so it says there:  
 21 "... the tendency for appraisers ..."  
 22 It's defining what confirmation bias is:  
 23 "... to believe something and search for  
 24 confirmation of what they already believe. When  
 25 appraisers jump to premature conclusions, or are biased

1 in a certain direction , they do not wait until all the  
 2 pertinent market facts have been gathered and  
 3 objectively analyzed. They try to interpret everything  
 4 to justify their conclusions."  
 5 So as far as you are able to say, why -- what  
 6 particular reasons did HM Coastguard identify for  
 7 needing this training on confirmation bias?  
 8 A. I wouldn't be able to answer that question because  
 9 I wasn't part of making the decision for this training  
 10 or any shape or form, I wasn't involved in this  
 11 training.  
 12 Q. And in relation to small boats, do you think there was  
 13 a potential problem around this cognitive dissonance, as  
 14 I have called it , between believing that small boats are  
 15 exaggerating and also needing to treat them as in  
 16 distress? Do you think that training was needed on  
 17 confirmation bias in relation to that?  
 18 A. Yes, my personal opinion is based on that information  
 19 that, yes, training on confirmation bias would have been  
 20 highly beneficial , recognising the fact that, you know,  
 21 we don't want to reach the conclusions because, for  
 22 example, it has been confirmed we followed up -- follow  
 23 up evidence that exaggeration was quite common in  
 24 relation to small boat crossings.  
 25 Q. So would it be fair to say that or would you consider

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1 that believing nine times out of ten that a small boat  
 2 would exaggerate could cause operators on the frontline  
 3 to, using the words here on this slide , jump to  
 4 premature conclusions or be biased in certain  
 5 directions?  
 6 A. It will have -- definitely be a risk, yes.  
 7 Q. And this, as you said, is the slides relating to search  
 8 and rescue. You don't want me to call it generic search  
 9 and rescue, but not specifically tailored to small  
 10 boats.  
 11 Do you think that in the role that you had in 2021,  
 12 or that you were developing, it would have been useful  
 13 to have had specific confirmation bias training in  
 14 relation to exaggeration from small boat callers?  
 15 A. At the time around November, personally I wouldn't have  
 16 said that it will have been critical to have that  
 17 training , again, because of the training we have by  
 18 default is to take everything to face value and not --  
 19 it 's not for us to make assumptions and potentially  
 20 think about considering downgrading the response to  
 21 a search and rescue incident unless we have that  
 22 credible information. So based on our training, no one  
 23 will have taken that kind of risk to downgrade  
 24 an incident potentially , not plan for the appropriate  
 25 search and rescue response based on the actual facts.

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1 Q. You need to have the credible evidence or the reliable  
 2 evidence --  
 3 A. Exactly, and that is a big, big part of our training at  
 4 all levels , especially mission co-ordinator and above as  
 5 well.  
 6 Q. Let's come back to the idea of reliable evidence and  
 7 what that means in a minute, but insofar as you know,  
 8 who would have taken this training? Would it have been  
 9 everyone at Dover, for example?  
 10 A. Well, looking at the training slides , I will have  
 11 presumed that it will have been a training rolled out to  
 12 everyone or at least Dover and flank station as well , so  
 13 that will have been Humber and JRCC, if the focus was  
 14 around small boats.  
 15 Q. So the slides don't suggest a focus around small boats?  
 16 A. No, they don't. They do not.  
 17 Q. They don't?  
 18 A. So I will have expected that to have been an on watch  
 19 training for --  
 20 Q. I'm sorry, I missed that.  
 21 A. I would expect, based on the contents of this  
 22 presentation, for this training to have been an on watch  
 23 training --  
 24 Q. On watch?  
 25 A. -- to everyone, yes.

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1 Q. Everyone within coastguard network?  
 2 A. Operational staff , yes.  
 3 Q. Okay. Thank you. We can take that down now, please.  
 4 Now, before I turn to your role on 24 November,  
 5 I want to look at the HM Coastguard tracker. You know  
 6 what I am talking about?  
 7 A. Yes.  
 8 Q. Yes. So the Inquiry has heard significant evidence  
 9 about the coastguard tracker and that shortly before  
 10 23 November, Border Force gained access. Is that your  
 11 understanding?  
 12 A. That's my understanding based on some of the evidence  
 13 I've seen, yes.  
 14 Q. Yes. Let's call that up. So {INQ010650/1}, please.  
 15 This is an email from someone at HM Coastguard to  
 16 a number of Home Office and coastguard recipients,  
 17 including you, confirming that Border Force, including  
 18 the MCC, have access. We can see the date there,  
 19 22 November.  
 20 When they gained access, was it your understanding  
 21 that they could amend and update the tracker or that it  
 22 was a read-only access?  
 23 A. I can't say for definite because I believe at the time,  
 24 it was the MRCC commander that initiated actions with  
 25 granting access to partner agencies like Border Force

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1 maritime and the JCR, which, again, I later picked up on  
 2 to make sure -- to ensure that continuity of access and  
 3 guidance as well subsequently.  
 4 Q. What was the aim of them gaining access?  
 5 A. The aim of them was to have access and able to amend  
 6 specific columns and areas within that spreadsheet.  
 7 Q. So would it be fair to say that if they were given  
 8 read-only access, it would be defeating the purpose of  
 9 granting access?  
 10 A. Not necessarily. It would have still benefited them  
 11 because they will have -- they will have had access,  
 12 read access, to the initial information of creating  
 13 small boat crossing incidents. You go through every  
 14 single line.  
 15 Q. It wouldn't need to be emailed across.  
 16 A. Exactly.  
 17 Q. So there would be a benefit, but not the full benefit.  
 18 A. Yes, exactly.  
 19 Q. Let's put on the screen then an email from James Crane  
 20 from 26 November. This is {INQ003735/1}. This is  
 21 an email you have probably seen in preparing your  
 22 statement when he discusses the events of  
 23 24 November 2021. We can see there the date. It's  
 24 actually your response to him at the top.  
 25 So let's go down on to page 3 {INQ003735/3}, please,

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1 where we can see his point (3). Perhaps we can zoom in  
 2 on that. I am not sure we can. There we go. So middle  
 3 of page 3, see his point (3) there, where he says:  
 4 "This is really a minor point ..."  
 5 So he says:  
 6 "... a minor point and strictly operationally  
 7 relevant, but the Home Office now have got access to the  
 8 shared migrant tracker, and it was my understanding that  
 9 they would be filling in statistics and numbers for us.  
 10 This was not done and left us asking questions about 'M'  
 11 numbers and incident feedback, as well as final  
 12 numbers."  
 13 Then let's just quickly look at your response which  
 14 is actually on page 1, later on the same day,  
 15 26 November {INQ003735/1}. So you see your response to  
 16 his point (3) there in the middle:  
 17 "We are holding a meeting today to clarify who is  
 18 responsible for completing which sections in the  
 19 tracker. An email will be sent out to confirm the  
 20 outcome."  
 21 So from this, we know that as at 24 November,  
 22 Border Force had access, but there had been no  
 23 clarification as to what they should be filling in;  
 24 correct?  
 25 A. Apparently so.

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1 Q. Then let's look at an email you sent next day,  
 2 27 September. This is {INQ010346/1}, please, and you  
 3 can see this is an email from you on 27 November to  
 4 a mixture of HM Coastguard and Home Office and  
 5 Border Force recipients. Can you see towards the  
 6 middle/bottom of the page the heading:  
 7 "Which agency is populating what sections and when?"  
 8 A. Mm-hm.  
 9 Q. And under that heading, we can see that Border Force  
 10 were supposed to fill in the black section, which you  
 11 say includes the UKBF ref column, column G.  
 12 It might just help to look at an example of that so  
 13 we can actually see what we are talking about it, so  
 14 let's look at {INQ006843/1}, please. It is going to  
 15 take a little minute to bring this up. This is  
 16 an iteration of the tracker, when it comes up, at 9.09  
 17 on 24 November.  
 18 So if we just scroll to the right, we can see those  
 19 black sections. Is that what you are referring to?  
 20 A. Based on the email, yes, including the UK Border Force  
 21 reference.  
 22 Q. Let's scroll back. Thank you. Column G we can see  
 23 there. Column G, "UKBF Ref". So that was also what  
 24 Border Force was meant to be filling in; is that right?  
 25 A. As per my email instruction, yes.

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1 Q. So one column in the coastguard section and then all the  
 2 Border Force column, yes.  
 3 Just pausing there, coastguard was responsible for  
 4 determining to which incident a small boat that had been  
 5 located was attributed, so which phonetic alphabet  
 6 incident the M number would be attributed to; is that  
 7 right?  
 8 A. So we wouldn't decide -- so just to clarify, if there  
 9 was a specific incident, let's say Bravo, and we had  
 10 confirmation of Border Force assets being tasked to that  
 11 incident, then it was Border Force's responsibility to  
 12 issue their own reference, which is the M number.  
 13 Q. Correct, yes.  
 14 A. Yes, and their own responsibility as well was to input  
 15 that M number within the tracker.  
 16 Q. But they would need to know from you which was the  
 17 incident -- which was the coastguard incident to put --  
 18 which row to put it in.  
 19 A. Correct, yes, and one indication will have been by us  
 20 telling them which incident we required this asset to  
 21 proceed to, and also it will have been another  
 22 indication on the tracker itself by inputting the  
 23 assets, for example Valiant, under incident Bravo. So  
 24 that that was an instant indication, I want to believe,  
 25 for -- that Border Force had access to this tracker

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1 that — yes, an additional confirmation is that they  
 2 were talking about this incident, as per telephone  
 3 conversation, for example.  
 4 Q. So whilst Border Force was meant to be adding/inputting  
 5 the information manually, would it be fair to say that  
 6 they would need to liaise with coastguard in order to  
 7 understand which row they were adding it to, which  
 8 incident it was allocated to?  
 9 A. They would have to be aware of which incident we were  
 10 requesting specific Border Force assets to be tasked to.  
 11 Q. And not only that, because, as you can appreciate, if  
 12 a Border Force asset is tasked to a specific incident,  
 13 it may in fact locate another incident.  
 14 A. Correct.  
 15 Q. And then you can imagine how there would be scope for  
 16 errors if Border Force were not in contact with  
 17 coastguard, who would be ultimately the entity who would  
 18 be deciding which incident this boat related to.  
 19 A. Correct.  
 20 Q. Let's turn now to your role on 24 November.  
 21 So we can take that tracker down. Thank you.  
 22 So I understand that you worked the day shifts both  
 23 of 23 November and 24 November.  
 24 A. Well, based on the watch bill information I can see,  
 25 that's correct.

1 Q. And you weren't there on night shift of the 23rd to  
 2 24 November, but you would have been on—call.  
 3 A. Correct.  
 4 Q. I just want to look at the Operation Deveran weather  
 5 assessment from 23 November, so this is {INQ000150/1}.  
 6 It is quite hard to see, but if we can just try to look  
 7 at that column which says "Date and time", I just want  
 8 to understand the timings of the assessment.  
 9 The "Date and time" column, I am not sure you can  
 10 work that out, but can you see it? It seems to be  
 11 suggesting a period of time for a block of eight hours  
 12 at a go, so 22.00 hours on 23 November to 06.00 hours on  
 13 the 24th, so nighttime essentially .  
 14 A. Mm—hm.  
 15 Q. And that was the amber rating at the top there.  
 16 And then we can see the same block of time for the  
 17 next day, 22.00 hours until 06.00 hours, again  
 18 nighttime, and that was a red day or red rating. That  
 19 was a red night, essentially .  
 20 So where is the rating for the daytime of 23 and  
 21 24 November, so essentially, a timeframe between  
 22 06.00 hours and 22.00 hours on the 24th? Because that  
 23 would have been the day shift you worked, wouldn't it?  
 24 A. Yes, it will have been. Well, I can't answer that  
 25 question because that's a — that's a Home Office

1 product, working with the Met Office to produce this.  
 2 So from looking at this, my understanding was they were  
 3 purely focusing on the assessment and the condition of  
 4 the French beaches for launches.  
 5 Q. I see.  
 6 A. So if — when I am reading this, from 10 o'clock to  
 7 6 o'clock in the morning, in the assessment, you can see  
 8 again it is more enhanced information at the top  
 9 indicating small boat launch condition at midnight. So  
 10 the colouring and the assessment is summarised in front  
 11 of us based on looking at the midnight at 00 UTC and the  
 12 actual coastal area of the French beaches or western,  
 13 central and northeast beaches.  
 14 So obviously, that assessment is how favourable it  
 15 is for small boats to launch from the French coast.  
 16 Hence why I have mentioned the fact that when we get  
 17 busy from our side, from UK search and rescue  
 18 perspective, it is later on the day when those boats  
 19 have transited for like between four, six or even  
 20 eight hours or even longer than that, depending on where  
 21 from they launched, that's when we get busy, which most  
 22 likely is during daylight hours.  
 23 Q. I suppose I am trying to work out why coastguard —  
 24 I appreciate this is a Border Force document, but why  
 25 did HM Coastguard identify the 24th daytime as a red day

1 whereas it looks here — well, there is no box for that  
 2 time period and the red day only starts at 10.00 pm on  
 3 the 24th, if you are looking at the times here. Are you  
 4 able to explain that?  
 5 A. Well, I can only presume that because we know it's  
 6 really favourable, let's say — well, it is really  
 7 favourable and there is high risk of launches. That  
 8 means that it will be a busy day from our perspective.  
 9 So the easiest way to put it down is that it is going to  
 10 be a red day for us from search and rescue perspective  
 11 and response and planning. So it's us interpreting —  
 12 interpreting that and understanding that data and how  
 13 that data we can take forward from our perspective to  
 14 plan accordingly —  
 15 Q. I see, so coastguard —  
 16 A. — and that was the overall general understanding and  
 17 consensus at the time as well.  
 18 Q. So coastguard used the Border Force or Met Office table  
 19 and then created its own rating for the days that didn't  
 20 cover the time periods?  
 21 A. Yes, aligned with that information there —  
 22 Q. Aligned with that.  
 23 A. — and that's one of the reasons that it has changed  
 24 since then as well. This product is completely  
 25 different if you look at it nowadays.

1 Q. On the evening of 23 November, the SMC at Dover,  
 2 Neal Gibson, called the maritime tactical commander who  
 3 was on duty, David Jones, and asked if you were around  
 4 that night and David Jones said, "Give him [you]  
 5 a call".  
 6 A. (Nods).  
 7 Q. Do you recall speaking to Neal Gibson at the start of  
 8 that shift?  
 9 A. No, I can't recall being paged or called.  
 10 Q. Is it fair to say that in an ideal world, Neal Gibson  
 11 would have wanted you there during that shift?  
 12 A. I think in an ideal world, based on the evidence  
 13 I've seen, I will have expected to be contacted. Now,  
 14 whether it was feasible for me — given my working hours  
 15 around that time of the night, whether it was  
 16 feasible — you know, feasible and safe for me to have  
 17 an earlier start, it is another matter, but I will have  
 18 expected at least to have a conversation and  
 19 understanding around it.  
 20 Q. With David Jones, perhaps?  
 21 A. It will have been an agreement between themselves who is  
 22 going to do — who is going to make the call, but from  
 23 the moment that they were both in agreement or at least,  
 24 you know, their intention was for me to be contacted, it  
 25 will have made the difference.

1 Q. The — are you aware that each version of the tracker  
 2 has a — well, it is a SharePoint index, essentially —  
 3 A. Yes, I am aware.  
 4 Q. — which lists the change author of each iteration and  
 5 also a time.  
 6 A. (Nods).  
 7 Q. This shows that you made a change to the tracker at  
 8 1.00 am on the night.  
 9 A. Yes.  
 10 Q. Do you recall doing that or do you have any recollection  
 11 of that now?  
 12 A. No, I can't recall. Given the fact that I was resting  
 13 to come in for a 7.30 start — well, it will have been  
 14 me logged in and ready to go earlier than 7.30  
 15 anyways — I can't imagine why I will have been awake  
 16 going through the tracker 1 o'clock, so I am unable to  
 17 recall really me going on the tracker at that time. In  
 18 hindsight, it wouldn't have made sense for me to be  
 19 awake at this time of the night.  
 20 Q. Now, in terms of the operational situation at the start  
 21 of your shift, you say — and let's turn up your  
 22 statement, please, actually now, so {INQ009632/16},  
 23 paragraph 38. So we see there you say:  
 24 "I do recall that whilst there were some open  
 25 incidents, there were no concerns, focus on any

1 outstanding boats, or any Mayday Relays, as these would  
 2 have been specifically mentioned (Mayday relays are the  
 3 highest priority). I reviewed the on-going SAR plans  
 4 and did not have any concerns."  
 5 We know that incidents that had been identified as  
 6 embarked by Border Force asset were still open at the  
 7 start of your shift. Was that normal?  
 8 A. Yes, it was common practice, especially on those really  
 9 busy days, because closing down an incident completely  
 10 involves some certain degree of admin, administration,  
 11 purely administration behind it, which — obviously, if  
 12 we are busy, we are focusing on search and rescue  
 13 response, so it would have been sufficient to class or  
 14 input a comment quickly within the incident stating, or  
 15 even the tracker as well, that this incident has been  
 16 closed, but actually within VISION is still present, the  
 17 incident itself. So it was not uncommon. It was  
 18 probably more common on those busy days.  
 19 Q. And you say there was no mention of any outstanding  
 20 boats or any Mayday Relay in paragraph 38, but you were  
 21 aware that a Mayday Relay had been broadcast for small  
 22 boats the previous night.  
 23 A. That's correct.  
 24 Q. And the Inquiry has heard evidence that in  
 25 November 2021, a Mayday Relay for a small boat was

1 something very unusual. Do you agree with that?  
 2 A. Yes, in certain degree, I do agree. It was quite  
 3 unusual to broadcast a Mayday Relay for small boat  
 4 crossing incidents, unless the duty SMC had concerns  
 5 regarding the safety of those people that rendered  
 6 immediate response, which — obviously the Mayday Relay  
 7 will assist with that immediate response in one way or  
 8 another.  
 9 Because it's really important to remember if we  
 10 have — had issued a distress relay, Mayday Relay, for  
 11 every single open incidents, small boat incident, that  
 12 is classed as distress, we would have probably created  
 13 lots of issues because we have to broadcast those relays  
 14 on channel 16, so we would have overwhelmed channel 16  
 15 by issuing multiple relays. Hence why we had — you  
 16 have probably seen another means of broadcasting to make  
 17 sure that traffic within the Channel was aware of small  
 18 boat crossings, so, "Keep a sharp look out and report  
 19 anything relevant to us".  
 20 Q. The broadcast action as opposed to the Mayday Relay?  
 21 A. Correct. Again, it's all about prioritising when we  
 22 should take relevant action and making sure that we help  
 23 ourselves and the casualties' best interest of when to  
 24 take specific actions, including a Mayday Relay.  
 25 Q. Would you have considered it relevant to know that

1 whilst the Mayday Relay had been terminated, none of the  
 2 small boats picked up by the Border Force asset during  
 3 the night shift were in fact in a state of imminent  
 4 danger or sinking?  
 5 A. So can you repeat that question again, please?  
 6 Q. So it was relevant for you to know that there was  
 7 a Mayday Relay that had been broadcast presumably, or  
 8 was it?  
 9 A. Given that the incident was already closed and the  
 10 Mayday Relay ceased --  
 11 Q. It was open.  
 12 A. It was open, but based on the SMC's entry, it was their  
 13 belief that the small boat related to that Mayday Relay  
 14 incident was one of the boats that were recovered by  
 15 Valiant.  
 16 Q. When you say the SMC's entry, are you referring to the  
 17 Charlie ViSION log?  
 18 A. Yes, so that will have been the night duty SMC, Neal.  
 19 Q. And which entry are you referring to? Would it help to  
 20 look at it?  
 21 A. Yes, if I recall correctly, yes, and the entry  
 22 I remember.  
 23 Q. Well, let's put the log up. So I think it is  
 24 {INQ000237/1}, and let's go down to -- so if we could go  
 25 down to page 11 {INQ000237/11}. So we can see there

1 3.50, Neal Gibson, night watch SMC:  
 2 "Valiant on scene with unlit migrant vessel."  
 3 And then we get the Mike number.  
 4 And then page 12 {INQ000237/12}, 4.36. See that at  
 5 the top? Records:  
 6 "All migrants disembarked ..."  
 7 Now, that's on the Charlie log because, as  
 8 I understand it from the evidence we have heard, Valiant  
 9 was tasked to the Charlie, so everything that the  
 10 Valiant did with any small boat would be on the Charlie  
 11 log. Is that your understanding?  
 12 A. Yes, so obviously all the comments and -- there has been  
 13 evidence around this. If an asset is tied up to  
 14 a specific incident or multiple incidents, all the  
 15 entries you make within that resource will automatically  
 16 be pasted into the incidents or incident they are  
 17 assigned to.  
 18 Q. Then 4.45, it is recorded by Stuart Downs, the MOO at  
 19 Dover on night watch, Valiant proceeding to position  
 20 from the R163 helicopter, new small boat. And then  
 21 5.21:  
 22 "... engaging migrant vessel ..."  
 23 So, again, the information about the second small  
 24 boat still recorded on the Charlie log.  
 25 And then 6.07, Stuart Downs, down bottom there:

1 "Third tasking ... "  
 2 So Valiant is going to a third small boat in the  
 3 Southwest Goodwin area.  
 4 Then page 13 at the top {INQ000237/13}, 06.31, again  
 5 Stuart Downs. You see the Mike number there, M959.  
 6 Then 6.46, I think this might be what you are  
 7 referring to when you say that the SMC had marked it  
 8 as --  
 9 A. Just to clarify, yes, maybe that's not the incident  
 10 because it will have probably been one of the other ones  
 11 where there was a clear statement from Neal Gibson that  
 12 he believed that this is one of the small boats  
 13 recovered.  
 14 Q. I think you're referring to Incident Lima where he  
 15 did --  
 16 A. Potentially, yes. So I am not seeing what I was  
 17 expecting to see right now in this -- this log.  
 18 Q. No.  
 19 A. Yes.  
 20 Q. In the Charlie log, I think you would agree with me  
 21 there is no statement that any of these small boats are  
 22 Incident Charlie. It is just recorded in there.  
 23 A. Correct, but it will have been as part of the handover,  
 24 obviously, but we'll probably come to a handover  
 25 question.

1 Q. Yes, you weren't -- from your statement, you say you  
 2 can't recollect anything. You weren't present at the  
 3 Dover handover. You might have spoken to James Crane;  
 4 is that right?  
 5 A. Correct, so the -- what I can remember right now was,  
 6 and I always remembered was, that there was information  
 7 to indicate that there was a distress Mayday Relay in  
 8 relation to one of the incidents overnight. However,  
 9 the general belief and part of the handover, the  
 10 understanding I had through James Crane was that we do  
 11 not believe we have anything outstanding in relation to  
 12 Charlie, for example, Incident Charlie.  
 13 Q. You were told there was a Mayday Relay. Would it have  
 14 been relevant to have been told that, "There was  
 15 a Mayday Relay, that the small boat was taking on water  
 16 and need of immediate assistance, but actually, we  
 17 didn't find any small boats that were taking on water  
 18 and in need of immediate assistance. The small boats we  
 19 found were actually fine"? Would that have been  
 20 important information for the oncoming watch?  
 21 A. My personal opinion is that it could have been handed  
 22 over, the reasoning potentially for closing and ceasing  
 23 the Mayday Relay. It would have potentially been useful  
 24 information, but I don't think it will have changed  
 25 anything in respect to any further action or ongoing

1 search and rescue.  
 2 We rely on the SMC's assessment, training and final  
 3 decision—making. So if — a Mayday Relay has been  
 4 ceased and the incident has been concluded even though  
 5 it was still open within VISION, but within the tracker,  
 6 it was concluded as well, I believe based on the  
 7 evidence.  
 8 Q. The tracker was open when you started your watch.  
 9 A. So Charlie was still showing as open?  
 10 Q. Open, yes.  
 11 A. Okay.  
 12 Q. Everything was showing as open.  
 13 A. But it was handed over that there was no further  
 14 concerns.  
 15 Q. So it would have all been verbal —  
 16 A. The handover is always verbal and there is, as we know,  
 17 an ever—changing document supporting the handover.  
 18 Q. Just going back to this, I just want to just point  
 19 something out to you because 06.46, you'll see there  
 20 Stuart Downs saying that Valiant is assigned to incident  
 21 041401. That's Incident November.  
 22 A. Okay.  
 23 Q. That's the gen number for Incident November. And 04.46  
 24 [sic], Valiant is clear from incident 041384, that was  
 25 Incident Charlie.

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1 So if you knew that it was Charlie that was being  
 2 cleared from, would that have meant to you that the  
 3 incident had been resolved, just that note that it was  
 4 clear?  
 5 A. No, I will have expected, first of all, to be briefed on  
 6 any open incidents as part of the handover anyways and  
 7 I will have expected to — someone, especially the duty  
 8 SMC, to go through the incident itself to confirm that  
 9 within the incident, there is some formal entry or  
 10 belief that this incident has been concluded.  
 11 Q. And the Mayday Relay, the fact it had been terminated,  
 12 what would that have meant to you?  
 13 A. To me, it would have meant —  
 14 Q. That the incident was resolved?  
 15 A. Sorry, apologies for cutting you off there.  
 16 Q. Sorry, no, it was my fault. That the incident was  
 17 resolved; would that — is that what it would have meant  
 18 or ...  
 19 A. It will have meant that, or potentially that the vessel  
 20 will have been located and distress wasn't the  
 21 appropriate response, potentially. There was credible  
 22 information to indicate a lesser degree of danger. But  
 23 obviously that wasn't the case. The belief was that the  
 24 Mayday Relay was ceased because they recovered all the  
 25 small boats they could recover at that time of the

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1 night.  
 2 Q. Well, just going back to where the Mayday Relay is  
 3 ceased in this Charlie log, so if we could go back to  
 4 page — I think it's page 11 {INQ000237/11}. Let's try  
 5 there. So we see there an entry at 03.39 from  
 6 Christopher Barnett, who was the remote SMC helping out  
 7 at Dover from JRCC on the night. He says there:  
 8 "No requirement for Mayday Relay ..."  
 9 After discussion with Neal Gibson:  
 10 "... as Valiant in the area investigating targets."  
 11 So that was actually before the Valiant had come  
 12 alongside any small boat. Does that surprise you, that  
 13 it was terminated at that point?  
 14 A. Personally, it does. It does a little bit. I will have  
 15 expected for the Mayday Relay to have been ceased at  
 16 a time whereby the SMC will have had enough information  
 17 to conclude that, "I believe that one of the multiple  
 18 incidents — small boats recovered is — is Charlie, so  
 19 on those grounds, I terminate."  
 20 Q. So the credible information, reliable information, that  
 21 wouldn't have been it, in your view?  
 22 A. That — that's my view, but, again, it could have been  
 23 that he decided to conclude the Mayday Relay because he  
 24 believed that he had sufficient resource on scene in  
 25 order not to request any commercial or vessels in the

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1 area to proceed and assist because the maritime and  
 2 aeronautical resource on scene was sufficient for the  
 3 SMC to decide that, "I don't need that Mayday Relay  
 4 broadcast". So that's another mitigating factor  
 5 potentially for ceasing it.  
 6 Q. Let's just look at the SOP again, 000428 {INQ000428/1},  
 7 the incidents involving migrants again, on page 7  
 8 {INQ000428/7} of that under the heading  
 9 "SAR Termination" halfway down the page. We have  
 10 already talked about this in relation to credible  
 11 information. This one says "reliable information",  
 12 essentially :  
 13 "[Search and rescue] can be terminated where  
 14 reliable information is received that the emergency no  
 15 longer exists."  
 16 This might be a hard question to answer, but what  
 17 does "reliable information" mean in practice?  
 18 A. Again, in practice, reliable information, first of all,  
 19 I would look — the way I interpret this sentence is —  
 20 for that source of information to be a reliable asset.  
 21 So that will have been a search and rescue asset,  
 22 maritime asset, aeronautical asset, a co—ordinating  
 23 authority such as the French coastguard, someone who's  
 24 confident in the quality of that information coming  
 25 through to us.

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1 Also, secondly, is the degree of confidence for that  
 2 information that is passed on to us. So if that  
 3 information potentially is provided to me by a passing  
 4 by pleasure yacht, I wouldn't treat it the same  
 5 degree --  
 6 Q. (Overspeaking) --  
 7 A. -- as if it was from a fishing vessel which I know the  
 8 master and everyone on board is quite experienced  
 9 mariners. So there is various factors on how much  
 10 confident -- how confident I would be on the level of  
 11 that reliable information.  
 12 Q. What about the fact that, as a hypothetical, a sinking  
 13 small boat has not been found within an initial search  
 14 when you have got information that, at face value,  
 15 a small boat is sinking? Would that be reliable  
 16 information, an absence of evidence essentially  
 17 following an aerial search?  
 18 A. Yes, it depends, again. I wasn't there. It depends on  
 19 the quality of that aerial search, what kind of search  
 20 they have effected, what their belief on the quality of  
 21 their search was. So what does the captain of  
 22 Rescue 163, for example, think the quality of the search  
 23 was? Could they see, for example, seagulls sitting on  
 24 the surface of the water? Because that indicates to me  
 25 they could have easily picked up people in the water or

1 debris. So, again, it depends on the quality of the  
 2 search and the quality and the confidence of the asset.  
 3 Q. So you would need to speak to the person captaining the  
 4 search asset essentially to say, you know, do you  
 5 think -- or you need to interrogate them as to how good  
 6 their search was and whether they think they could have  
 7 found something that they were --  
 8 A. Yes, exactly. We need to ask for that search  
 9 effectiveness, what we called, and get the information  
 10 for that search effectiveness so the SMC can assess how  
 11 confident they are with the searches and the quality of  
 12 the searches.  
 13 So as far as I am concerned, there was policy and  
 14 SOPs in place back then, and still are, in relation to  
 15 search effectiveness and asking for the relevant  
 16 information from a search asset on scene and extract  
 17 that information, interpret that information, so the SMC  
 18 can make the appropriate decision.  
 19 Q. In general terms, not just related to small boat work,  
 20 if the coastguard does not find a sinking vessel when it  
 21 is searching for a sinking vessel, would search and  
 22 rescue need to continue until the outer limits of  
 23 survivability are reached?  
 24 A. That is a significant factor. It is one of the factors.  
 25 Survivability, upper limits of survivability, is one of

1 the considerations we are looking at. But, again,  
 2 remember it says "upper limits of survivability". So we  
 3 know what the maximum limit is for that search, but we  
 4 have other factors we need to consider that potentially  
 5 will adjust the reality of it. So, for example, type of  
 6 clothing, nature of the casualties, so how physically  
 7 competent they are, type of LSA they have got on board.  
 8 So there are other factors to consider in order to --  
 9 alongside the upper limits of survivability.  
 10 Q. Yes, it is not just an outer rigid number. You have to  
 11 actually factor in --  
 12 A. Exactly, and it depends on whose -- you know, on the  
 13 SMC. It depends on the tactical commander. It is  
 14 a really thorough conversation you have to have with  
 15 that SMC and tactical level in order to make a joint  
 16 decision on how long we are going to keep searching for,  
 17 and most likely it will involve duty strategic commander  
 18 as well --  
 19 Q. But you would need to think about survivability. If you  
 20 don't find the asset you are looking for, the sinking  
 21 boat --  
 22 A. It is one of the considerations and factors, upper limit  
 23 of survivability, definitely.  
 24 MS MOFFATT: Sir, I don't have that much longer. Are you  
 25 happy for me to continue?

1 SIR ROSS CRANSTON: Yes, of course, yes.  
 2 MS MOFFATT: You started the watch as the small boat  
 3 tactical commander, but due to the volume of incidents,  
 4 at around 8.00 am, as I understand it, you handed back  
 5 Tactical Command to the JRCC.  
 6 A. Correct.  
 7 Q. And you took on the role of a mission co-ordinator. Is  
 8 that essentially similar to the MOO role?  
 9 A. In essence, yes. I wouldn't put the title of the role,  
 10 so maritime operational senior, but in my capacity as  
 11 a mission co-ordinator and my competency and my  
 12 training, yes, you could say -- generalise it and say  
 13 that, yes, at the same level of maritime operation  
 14 officer or a senior maritime operation officer with no  
 15 SMC qualification.  
 16 Q. I see, but you worked under James Crane as the SMC for  
 17 that watch.  
 18 A. Correct. As normal practice, there is only one SMC who  
 19 is responsible, hence even though I was SMC, as with  
 20 Rich Cockerill, we were working under James Crane.  
 21 Q. Yes, but you say you also provided further advice and  
 22 engaged in discussion as part of your day-to-day duties  
 23 as the migrant SAR commander. So were you still  
 24 effectively wearing two hats? Perhaps you had handed  
 25 back Tactical Control for the RAG review, but you were

1 still playing a slightly different role than a usual  
 2 mission co-ordinator.  
 3 A. No, I wouldn't say so. So what we do as a coastguard  
 4 with the teams we are doing it, so operational teams, it  
 5 is always a joint effort. It's not one person's work.  
 6 It is a team effort. So any information, any, you know,  
 7 experience we can take advantage of during those  
 8 operations in any search and rescue operations is always  
 9 beneficial to make informed decisions.  
 10 So obviously me, due to the nature of my role and  
 11 experience, I was able to have conversations with  
 12 James Crane to support or maybe, let's say, enhance his  
 13 decision-making. So I was -- it wasn't me, let's say,  
 14 influencing his decisions. It was me providing him with  
 15 all the information and knowledge I had to support his  
 16 role as a duty SMC on the day.  
 17 Q. And you have said that you don't recall taking a break  
 18 on a 12-hour shift.  
 19 A. I can't recall. It was -- again, like many mentioned,  
 20 on those busy days, I will have opted out with taking  
 21 a break, but I was still having my comfort breaks and --  
 22 Q. Was it common in Dover in 2021 not to be taking breaks?  
 23 A. Yes, it was quite common, yes. It wasn't encouraged  
 24 whatsoever, but if people opted out for it, they will do  
 25 it. But obviously, mental well-being is everyone's

1 consideration at the time, so even if some people wanted  
 2 to keep doing what they are doing, if someone observed  
 3 that was taking a toll on them, we will have been  
 4 advising otherwise.  
 5 Q. So we know you handed back the Tactical Command to JRCC.  
 6 A. Correct.  
 7 Q. We know from the Charlie ViSION incident log later in  
 8 the morning than the bit we looked at that it was  
 9 George Close, one of the maritime tactical commanders at  
 10 the JRCC, who RAG reviewed Charlie at around 10.00 am.  
 11 Presumably that was why he did it and not you, because  
 12 you had already handed back the Tactical Command.  
 13 A. Right.  
 14 Q. You are identified as making an amendment to the tracker  
 15 at 9.09. We looked at that version, but we didn't look  
 16 at your amendment in particular, but it was marking  
 17 Incidents Lima and November as resolved and James Crane  
 18 had marked Incident Charlie as resolved.  
 19 Are you able to say what sources of information you  
 20 would have used to mark those incidents as resolved on  
 21 the tracker?  
 22 A. Well, it will have been information within its -- within  
 23 the incident itself.  
 24 Q. Within the ViSION log?  
 25 A. Within the ViSION log, obviously, yes. So we all know

1 ViSION log is the primary recording platform for  
 2 information and response to search and rescue. So  
 3 I will have looked into the ViSION logs and obviously  
 4 I will have spoken to James Crane to make sure that he  
 5 was aware and content with marking incidents closed,  
 6 especially within the ViSION log.  
 7 Q. Because he was the SMC?  
 8 A. Correct.  
 9 Q. So it wouldn't be -- I am not talking about marking  
 10 incidents as closed here. I am talking about the  
 11 tracker --  
 12 A. Yes.  
 13 Q. -- you know, with the "R" rather than the "O" in that  
 14 column.  
 15 A. Yes, yes.  
 16 Q. Yes.  
 17 A. So yes, for example, if it was quite clear within ViSION  
 18 that the incident was concluded, I wouldn't have asked  
 19 necessarily James Crane's or the SMC's permission to  
 20 mark it as closed to the tracker because --  
 21 Q. Resolved on the tracker?  
 22 A. Resolved, yes, because we follow what's on ViSION at  
 23 that stage, at that stage of the operation. So if it's  
 24 concluded within ViSION, we will resolve it within the  
 25 tracker as well.

1 Q. Is it possible that you could have looked at the tracker  
 2 itself and seen that there were M numbers for Lima and  
 3 November, for example, and as a result of that, just in  
 4 and of itself, looking at the face of the tracker, put  
 5 the "R" against Lima and November? Would that have been  
 6 enough, the M number?  
 7 A. No. It will have been enough -- again, I will have  
 8 looked into the ViSION log. I wouldn't have just  
 9 closed/resolved an incident within the tracker because  
 10 it has an M number. It can have an M number and the  
 11 incident will still be ongoing. For example, we've  
 12 recovered the casualties, but there is a requirement for  
 13 ongoing medical attention. It could be helicopter  
 14 winching, so still tasking their asset to perform  
 15 a casualty extraction, for example, or render further  
 16 search and rescue support.  
 17 So an M number wouldn't be a consideration or the  
 18 sole factor of resolving an incident whatsoever.  
 19 Q. So would it be fair to say that it would be an unsafe  
 20 action to mark something as resolved on the tracker just  
 21 due to the information on the tracker itself? Would you  
 22 need to always look at the ViSION logs to be sure?  
 23 A. Correct.  
 24 Q. I want to just then look at your involvement in closing  
 25 incidents on 24 November. In your statement, you say

1 that before closing incidents where telephone numbers  
 2 were available, that the MOOs would be directed to call  
 3 them.  
 4 A. Well, that's what I will have expected if I was in  
 5 charge --  
 6 Q. Yes.  
 7 A. -- for the team, yes.  
 8 Q. And you would expect them to record it on the log if  
 9 they did it?  
 10 A. Correct.  
 11 Q. The ViSION log, I mean.  
 12 A. Correct.  
 13 Q. You have told the Inquiry that to the best of your  
 14 knowledge, you weren't involved in the closure of  
 15 Incident Charlie, and that's again reflected in the  
 16 ViSION log. Your name isn't there. But you were  
 17 involved in the formulation of a standard paragraph for  
 18 the closure of certain incidents on the day watch.  
 19 A. Mm--hm.  
 20 Q. I just want to look at that. So {INQ010349/1}, please.  
 21 This is an email chain between you and James Crane. We  
 22 actually need to go to page 2 for the start of it  
 23 {INQ010349/2}. So we see his email to you at 17.12:  
 24 "George,  
 25 "This is the generic statement I [came] up with back

1 in August ..."  
 2 And you see the generic statement there at the  
 3 bottom, and he says that it's used -- for use with  
 4 leftover incidents. What does that mean, "leftover  
 5 incidents"?  
 6 A. So to explain this, because it can be quite misleading,  
 7 that wording and that classification saying "leftover  
 8 incidents". So that's, for instance, as far as I am  
 9 concerned, trying to make it a bit, you know, more  
 10 professional based on the action which we are taking  
 11 was, I will have expected to be incidents that are still  
 12 open, unattributed and not having enough information to  
 13 render any further search and rescue action from our  
 14 perspective --  
 15 Q. There's no clear specific conclusion, so it doesn't say,  
 16 for example --  
 17 A. Yes --  
 18 Q. -- "embarked by the Border Force asset".  
 19 A. Yes, there is insufficient evidence to support further  
 20 search and rescue action.  
 21 Q. It sounds from this email as if this generic message  
 22 wasn't used between 21 August, when it was last used,  
 23 and 24 November. Is that your understanding? Did you  
 24 use a generic message in between those times?  
 25 A. I can't really say for definite .

1 Q. Was 24 November the first time you used a generic  
 2 message or do you not recall?  
 3 A. I can't recall .  
 4 Q. Let's look on page 1 {INQ010349/1}, which is your reply  
 5 in the second half of the page. Effectively, you just  
 6 slightly amend the text and your version is the one  
 7 that's used for the incident logs on the 24th. We see  
 8 at the bottom, it says:  
 9 "After the cessation of multiple migrant incidents  
 10 during today. No further calls have been received for  
 11 this incident or further confirmed sightings. Areas of  
 12 interest have been searched with nothing untoward found.  
 13 With this in mind, it is being closed pending further  
 14 information."  
 15 Then we see this text being used by James Crane.  
 16 Let's just finish the email chain, so {INQ010351/1},  
 17 please. We see there an email from James Crane slightly  
 18 later in the day on the 24th to some of his team  
 19 members, including the trainee, who we know on the day  
 20 closed lots of the incidents. He says there:  
 21 "... for use on as many of the [open, it should say]  
 22 migrant incidents as we can before the [end of the  
 23 shift ]."  
 24 You say in your statement that this wasn't a blanket  
 25 application to all incidents.

1 A. (Nods).  
 2 Q. Would you agree that on the 24th, it in fact was used  
 3 perhaps more widely than it should have been?  
 4 A. It depends on whether this -- first of all, this  
 5 summary, this closing statement, was at the time  
 6 a considerate action. It wasn't, let's say, a quick way  
 7 of us just closing down the incident. So we took into  
 8 consideration all the information we had, because it was  
 9 a number of incidents having the same kind of lack of  
 10 information. So there were similarities between several  
 11 unattributed open incidents, but at the time, this  
 12 closing statement seemed to be the most appropriate way  
 13 to justify closing down physically, doing the admin for  
 14 closing down incidents as well.  
 15 Again, this message highlights the importance of air  
 16 surveillance and having the maritime picture. Also, if  
 17 there are any further ongoing calls, 999, coming  
 18 through, we will have closed open incidents because it  
 19 could have been potentially one of those, but still we  
 20 will have created new incidents based on 999 calls.  
 21 And we also relied on the French information. So if  
 22 we knew that the -- and we will have most likely known  
 23 that if the French coastguard had no further ongoing  
 24 small boat crossing activity, again, that was another  
 25 consideration to believe that there is no ongoing small



1 boat crossings at this stage.  
 2 So at the time, it seemed to be an appropriate  
 3 closing statement, a considerate closing statement, for  
 4 more than one unattributed open incidents.  
 5 Q. We know that it was used on Incidents Lima and November,  
 6 the ones that had been embarked by the Valiant, so would  
 7 you agree that those were — it was an incorrect use in  
 8 relation to those incidents where there was information  
 9 that those small boats had been embarked by  
 10 a Border Force asset?  
 11 A. I — again, I want to believe that — you might be able  
 12 to help me with this. I believe that within those  
 13 two incidents, there was information from the night SMC  
 14 to indicate his belief that one of the small boats  
 15 recovered was part of that incident.  
 16 Q. Certainly in relation to Incident Lima, it was on the  
 17 ViSION log and also in the tracker that had it been  
 18 recovered by the Valiant.  
 19 A. Correct. So what will have happened on a really busy  
 20 day, again, we will have looked at that information and  
 21 we will have taken that at face value. So the night  
 22 duty SMCs state that their belief is that incident is  
 23 concluded because it might have been most likely one of  
 24 the multiple vessels recovered.  
 25 However, when we went through, let's say, the end of

1 day assessment of the incidents, we thought at the time  
 2 that this closing statement was an enhancing factor for  
 3 closing down those incidents even though the previous  
 4 SMC's assumption was, or belief, that the incident is  
 5 concluded because we rescued that small boat.  
 6 So from that perspective, in our heads, in the SMC's  
 7 head, the tactical commander was, "Listen, the SMC's  
 8 belief was this that incident is concluded, most likely  
 9 related to a small boat we have rescued", but with this  
 10 additional closing statement, we have taken into  
 11 consideration further searches, no further 999 calls.  
 12 So it's not us closing the incident just based on that  
 13 belief. It is an additional justification.  
 14 Whether it was inappropriate — I wouldn't say  
 15 inappropriate; probably incorrect because we have  
 16 evolved since then and personally, I have created  
 17 a specific standard operational procedure around closing  
 18 unattributed incidents which is really specific, and the  
 19 guidance is quite strict on this to make sure we cover  
 20 all angles.  
 21 MS MOFFATT: Thank you, Mr Papadopoulos. I don't have any  
 22 further questions for you.  
 23 Sir, I don't know if you have any.  
 24 Questions by SIR ROSS CRANSTON  
 25 SIR ROSS CRANSTON: I am wondering: do we have that

1 guidance, that recent guidance?  
 2 MS MOFFATT: We can certainly request it.  
 3 SIR ROSS CRANSTON: It would be helpful if we could have  
 4 that.  
 5 Look, I just want to take you back to the issue of  
 6 the time that the small boats or most small boats arrive  
 7 in UK waters, and I am still a bit unsure about this.  
 8 And I know you said it depends on the tide and the  
 9 weather and, of course, there is a variation, but are  
 10 you saying that they — that most of them arrive in the  
 11 early morning after 5.00 am rather than 3.00 am? Is  
 12 that when most of them arrive, or is it difficult to  
 13 say?  
 14 A. It is difficult to say. That's my impression as of now.  
 15 It can be that it is a bit misleading because I have  
 16 been doing this job for quite a while and you know —  
 17 SIR ROSS CRANSTON: I think you said there wasn't any  
 18 difference between 2021 and today.  
 19 A. There is a difference.  
 20 SIR ROSS CRANSTON: There is a difference?  
 21 A. There is a difference.  
 22 SIR ROSS CRANSTON: Ah.  
 23 A. There is certainly a difference on when we get the  
 24 majority of crossings nowadays. Back in the day of  
 25 2021, they were a bit earlier than they are today, based

1 on the data and the stats I can recollect.  
 2 SIR ROSS CRANSTON: I see.  
 3 A. But it has definitely changed, and it's an ever-changing  
 4 factor based on risk appetite, weather conditions and  
 5 another factors as well.  
 6 SIR ROSS CRANSTON: Yes, yes. Well, thanks very much for  
 7 your statement and also for the evidence,  
 8 Mr Papadopoulos. It's been very helpful.  
 9 I understand Professor Tipton is here, so if it is  
 10 convenient, we will have a 10-minute break and then  
 11 continue with him. Thanks very much again.  
 12 A. Thank you.  
 13 (The witness withdrew)  
 14 SIR ROSS CRANSTON: Right.  
 15 (12.18 pm)  
 16 (A short break)  
 17 (12.29 pm)  
 18 PROFESSOR MICHAEL TIPTON (called)  
 19 SIR ROSS CRANSTON: Welcome, Professor Tipton. Thank you  
 20 for your report and also the statement. Sarah Le Fevre  
 21 has got some questions for you, but first of all, could  
 22 you read the affirmation?  
 23 A. Yes, sir.  
 24 (Witness affirmed)  
 25 SIR ROSS CRANSTON: Thank you.

1 Yes.  
 2 Questions by MS LE FEVRE  
 3 MS LE FEVRE: Thank you very much, Chair.  
 4 Mr Tipton, would you give the Inquiry your full  
 5 current professional job title?  
 6 A. Professor of human and applied physiology at the extreme  
 7 environments laboratory, University of Portsmouth, UK.  
 8 Q. Thank you.  
 9 You have been instructed by the Inquiry to produce  
 10 an expert report relating to survivability in relation  
 11 to the victims and survivors of those involved in the  
 12 incident of 23 and 24 November 2021, which, as you know,  
 13 this Inquiry is charged with investigating; is that  
 14 right?  
 15 A. That's correct.  
 16 Q. You have produced a report on 8 December of last year in  
 17 response to that question, which ran to some 32 pages.  
 18 A. Correct.  
 19 Q. Thank you.  
 20 Can I turn up on our screens, please, {INQ010283/2}.  
 21 At paragraph 1.1 of your report, you have set out some  
 22 of your expertise and roles past and present in this  
 23 field. It's right, I think, that you have specialised  
 24 in thermal physiology for some 40 years now.  
 25 A. Correct.

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1 Q. You are widely published in this and associated areas;  
 2 yes?  
 3 A. Correct.  
 4 Q. Your current roles include -- is this right -- you are  
 5 a council member of the RNLI?  
 6 A. Yes.  
 7 Q. And a consultant adviser to the medical director of the  
 8 RNLI.  
 9 A. Correct.  
 10 Q. What other relevant roles do you hold presently?  
 11 A. I have just taken over as chair of the National Water  
 12 Safety Forum.  
 13 Q. Thank you. And what is that body?  
 14 A. That's a body that was constituted in 2004 following  
 15 a Government initiative to over -- be the overarching  
 16 body for groups trying to work in drowning prevention in  
 17 the UK, so the RNLI, the coastguard, Surf Life Saving GB  
 18 and lots of other organisations are all members of the  
 19 National Water Safety Forum. It's an attempt to  
 20 co-ordinate and integrate the approach to drowning  
 21 prevention in the UK.  
 22 Q. Thank you. And you have just taken the position as  
 23 chair of that forum.  
 24 A. In November, yes.  
 25 Q. Thank you.

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1 We can take that off the screen, please.  
 2 You were provided with and directed to a range of  
 3 material for the purpose of preparing this report. That  
 4 included the report published by the Marine Accident  
 5 Investigation Branch last year; is that right?  
 6 A. That's correct.  
 7 Q. You were directed to the accounts given by a survivor,  
 8 Isa Mohammed Omar --  
 9 A. Yes.  
 10 Q. -- both in writing and orally to this Inquiry on  
 11 4 March, and directed to accounts in relation to  
 12 occupants of the boat, both those who are known to have  
 13 died and those who remain missing following these events  
 14 as well; is that right?  
 15 A. That's correct.  
 16 Q. Thank you.  
 17 You have, through your report, extracted the  
 18 information relevant to your assessments and expertise  
 19 from those sources of information; is that correct?  
 20 A. Correct.  
 21 Q. And those include your extraction of a timeline --  
 22 A. Yes.  
 23 Q. -- of the equipment or information about the equipment  
 24 with which the boat occupants were provided --  
 25 A. Correct.

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1 Q. -- the condition, insofar as could be established, of  
 2 those occupants --  
 3 A. Correct.  
 4 Q. -- and the weather conditions.  
 5 A. Yes.  
 6 Q. Are all those relevant to your work in assessing  
 7 survivability and the questions to which you were  
 8 directed?  
 9 A. Yes, they are.  
 10 Q. Thank you.  
 11 Can I have on screen then, please, again  
 12 Professor Tipton's report, {INQ010283/8} at page 8,  
 13 please, and (xvi). That's the timeline you derive,  
 14 I think, from the accounts of and in relation to the  
 15 boat occupants. It's very similar to the timeline  
 16 extracted from the MAIB report.  
 17 We can see the events begin at 21.00 on 23 November  
 18 with the numbers of persons including 13 women and  
 19 eight children who boarded the inflatable boat, and ends  
 20 at 13.00 the following day when bodies were sighted in  
 21 the water by a French fishing vessel; yes?  
 22 A. That's correct, yes.  
 23 Q. And you have timestamped or included timestamps between  
 24 those two points in time when the boat began to take on  
 25 water at about 01.00, the boat, Charlie boat, reaching

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1 UKSAR at 01.30, the timing when the boat became swamped  
 2 and occupants began to enter the water, and the timing  
 3 of sunrise; yes?  
 4 A. Correct.  
 5 Q. Over the top of that timeline, we might insert two other  
 6 timestamps that you refer to at various places in the  
 7 report. Firstly, 03.24, that's the time when the  
 8 Valiant Border Force vessel arrived at a set of  
 9 co-ordinates provided to it by HM Coastguard and those  
 10 co-ordinates provided a little earlier that evening;  
 11 yes?  
 12 A. Yes.  
 13 Q. And the timing of 07.03, that being the time when that  
 14 same Valiant Border Force vessel informed HM Coastguard  
 15 that it was returning to Dover.  
 16 A. Correct.  
 17 Q. Thank you.  
 18 Can I look next at page 4 of this same Inquiry  
 19 reference, please {INQ010283/4}, and paragraphs (xvii)  
 20 and following.  
 21 That's your extraction -- is this right -- of  
 22 information about the equipment with which those  
 23 occupants of the boat were provided on 23 November? Do  
 24 you see that?  
 25 A. That's correct, yes.

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1 Q. So you note that it had been variously reported that  
 2 14 occupants or, conversely, all occupants had been  
 3 provided with life jackets.  
 4 A. Correct.  
 5 Q. The construction of the flotation devices and the level  
 6 of support they provided wasn't -- hadn't been available  
 7 to the MAIB investigation; yes?  
 8 A. Correct.  
 9 Q. And that no information was available to the MAIB or  
 10 otherwise as to whether any of those flotation devices  
 11 had been fitted with lights.  
 12 A. Yes.  
 13 Q. Did you come to some understanding of the quality of the  
 14 flotation devices that had been provided to boat  
 15 occupants on that night?  
 16 A. I did, supported by subsequent statements that I've seen  
 17 that the provision of life jackets provided were of poor  
 18 quality.  
 19 Q. Thank you.  
 20 Next, I want to ask you a little about the  
 21 information you mined about the condition of those  
 22 occupants. Can we turn to page 6 of this same document,  
 23 please {INQ010283/6}, and we can see, to the foot of  
 24 that page, you looked at the statements from family  
 25 members to derive the information that you could derive

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1 about their experiences prior to boarding the boat; yes?  
 2 A. Correct.  
 3 Q. And their ability to swim and their build. Why are  
 4 these features important to you?  
 5 A. We know that your ability to survive cold water  
 6 immersion is dependent on things like your size, your  
 7 body shape. Subcutaneous fat, for example, has the same  
 8 thermal characteristics as cork, so it is a good  
 9 insulator. People who are thin and tall will cool more  
 10 quickly than people who are short, stockier and fatter.  
 11 We also know that things like reduced blood sugar  
 12 will impair your ability to defend your deep body  
 13 temperature to a challenge of cold water, so  
 14 hypoglycemia, and we also know that with, you know,  
 15 fatigue and exhaust, that can also have an impact.  
 16 Now, the situation in which many of the individuals  
 17 found themselves prior to this particular voyage was  
 18 living in a cold, wet, tented village. Many reported  
 19 being hungry and cold. And then on the evening of the  
 20 event, they -- the voyage, they walked for two hours to  
 21 get to a starting point, so that was in cold and wet  
 22 conditions. So these all preset the likelihood of you  
 23 being able to defend your deep body temperature and stay  
 24 warm when eventually you end up in the cold water.  
 25 Clearly, being a non-swimmer is an important component

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1 in that.  
 2 So there were -- there was nothing really in the  
 3 status of individuals prior to the event that was of any  
 4 help whatsoever to them in terms of surviving a cold  
 5 water immersion. In fact, all of the -- pretty much all  
 6 of the conditions they found themselves in were going to  
 7 negatively impact on their survivability.  
 8 Q. Thank you.  
 9 Can we complete this section and turn to the next  
 10 page of the report, to page 7 {INQ010283/7}, please.  
 11 You continue with your information mining, if I can put  
 12 it that way --  
 13 A. Yes.  
 14 Q. -- looking to establish what people were wearing; is  
 15 that right?  
 16 A. Yes.  
 17 Q. Again, the observation about life jackets and the  
 18 quality of the life jackets, the general physical health  
 19 of those involved; yes?  
 20 A. Yes.  
 21 Q. And then whether or not there was any reference to  
 22 motion sickness having been experienced. Why was that  
 23 important?  
 24 A. We know that people who become seasick cool more quickly  
 25 than those that don't, largely because they don't

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1 actually shut down their peripheral blood flow, which  
 2 is — the way the body defends against the cold is to  
 3 withdraw the blood centrally to make the most of the  
 4 subcutaneous fat, the fat around the skin.  
 5 The other point about the clothing is that although  
 6 people were wearing, in some cases, fairly heavy normal  
 7 clothing, unless it's specialist protective clothing  
 8 against cold water, it pretty quickly gets swamped,  
 9 saturated and offers little in the way of insulation.  
 10 It would okay during the period when individuals were in  
 11 air, but as soon as that air is replaced with water on  
 12 immersion, the insulative value of the clothing just  
 13 about disappears.  
 14 Q. Thank you.  
 15 All right. Can I take you now to page 3 of the same  
 16 document, please, for the information gathered about  
 17 weather conditions {INQ010283/3}. It may be very  
 18 obvious to you, but why is it important to you to  
 19 understand what the weather conditions were?  
 20 A. Thermoneutral air temperature for a human is around  
 21 about 26 to 28 degrees Celsius, and that's somebody who  
 22 is wearing very little clothing. Thermoneutral water  
 23 temperature is 35 degrees Celsius. So on — at the time  
 24 of this particular incident, the air temperature was  
 25 2 degrees Celsius, so there was a large gradient for

1 cooling pre-immersion, so people may well have entered  
 2 the water already pre-cooled.  
 3 Against that is that the boat was crowded. People  
 4 were wearing heavy clothing. Some people were working  
 5 hard to try and maintain the buoyancy of the boat. So  
 6 I think that's somewhat debatable, but I suspect that  
 7 some people were pre-cooled if only in the sort of  
 8 extremities, which would affect things like their  
 9 ability to hold on to things, to grip things, as opposed  
 10 to a fall in deep body temperature where they are moving  
 11 towards hypothermia.  
 12 And the sea temperature, at 13 degrees Celsius, is  
 13 well below thermoneutral water temperatures of 35 that  
 14 I have mentioned and establishes a fairly significant  
 15 gradient for heat loss. We will presumably come on to  
 16 talk about some of the responses evoked by that water  
 17 temperature, but cold shock, for example, would normally  
 18 be at its peak in water between 10 and 15 degrees  
 19 Celsius.  
 20 Q. Thank you.  
 21 A. So this was a challenging environment both in air and  
 22 water.  
 23 Q. Thank you.  
 24 And to complete your observations, at (iii), you  
 25 comment on the sea state, and at (ii), you comment on

1 the wind direction and force. The significance of those  
 2 two factors, please?  
 3 A. We can talk about cooling according to the thermal  
 4 gradient, but if you are in a sea state that is  
 5 particularly severe, the chances of you drowning just  
 6 simply because of, you know, the ongoing challenge to  
 7 the airway of waves is fairly high. So in that  
 8 situation, you would expect people to succumb very  
 9 quickly simply because of the rough sea state.  
 10 Where — wind adds to the wind chill factor, so it  
 11 increases the convective heat loss of people sitting in  
 12 air and would, as I say, increase the thermal challenge  
 13 in air. Not so much in water, of course. In water, it  
 14 is going to be the movement of the water which is the  
 15 challenge.  
 16 Q. Thank you.  
 17 The sea state at the time with which we are  
 18 concerned you describe as smooth near the coast, slight  
 19 offshore, so not particularly turbulent.  
 20 A. Not particularly turbulent, although there are some  
 21 witness statements which talk about large waves at some  
 22 stages later in the event.  
 23 Q. Thank you.  
 24 All right. I am going to ask you now some  
 25 questions, and you foreshadowed them already to some

1 extent, about the physiological and pathophysiological  
 2 responses to immersion in cold water, and you deal with  
 3 this at part 3 of your report at page 8 and following  
 4 {INQ010283/8}.  
 5 If we can go to page 8, please, you say that this is  
 6 ground covered by the MAIB report and that you agree  
 7 with the position in the MAIB report, I think,  
 8 effectively because the MAIB report is based on your own  
 9 prior research; is that right?  
 10 A. That's correct, yes.  
 11 Q. Thank you. So that's true of this general topic of  
 12 immersion?  
 13 A. Correct.  
 14 Q. Thank you.  
 15 You have identified for us three relevant phases to  
 16 immersion: initial or cold shock, the short-term  
 17 immersion and then long-term immersion; is that right?  
 18 A. Correct.  
 19 Q. Thank you.  
 20 If we pick up, please, at page 9 then {INQ010283/9}  
 21 your observations about initial impression at 3.2.  
 22 Thank you. This is the immediate reaction to immersion  
 23 in cold water; is that right?  
 24 A. Correct.  
 25 Q. You tell us through the report that the magnitude of

1 that reaction or shock varies and depends on a number of  
2 factors. You pick that up at page 9 in  
3 paragraph 3.2(ii). What are those factors?

4 A. So the cold shock response is evoked by a sudden fall in  
5 skin temperature, which would normally be at an average  
6 of about 33 degrees Celsius and very quickly becomes  
7 clamped at whatever the water temperature is, because  
8 water is very effective at taking heat away from the  
9 body.

10 That rate of change of skin temperature evokes  
11 a dynamic response in cold receptors, which are about  
12 0.18 mm below the surface of the skin, and that dynamic  
13 response evokes a gasp, which is between 2 and 3 litres,  
14 and then uncontrollable hyperventilation; an increase in  
15 the work of the heart, as I have already mentioned,  
16 a shutdown in blood flow to the extremities in  
17 an attempt to conserve heat.

18 It's -- those two things obviously put up blood  
19 pressure and it's -- we called it cold shock back in the  
20 1980s not because of the medical definition of shock,  
21 but simply because it is a shocking experience. And  
22 that the -- in the UK, as an example, roughly 60% of  
23 those that die on an annual basis, die from this  
24 response, the gasp response of 2 to 3 litres is larger  
25 than the average volume required to cross the lethal

1 dose for drowning, which, for a 75kg individual, is  
2 about 1.5 litres. So it's possible with the first  
3 breath in to have crossed the lethal dose for drowning  
4 on immersion of cold, but I make the point that that's  
5 somebody who's taken from warm comfortable air and put  
6 into very cold water.

7 The things that vary that cold shock response are  
8 things like fitness. It's slightly smaller in fitter  
9 individuals. It still exists, however. The clothing  
10 worn, if the clothing can -- the cold shock response  
11 shows both temporal and spacial summation, and what that  
12 means is the larger the surface area of the body exposed  
13 and the quicker the rate of fall of skin temperature,  
14 the larger the response, although, as I have mentioned,  
15 it peaks somewhere 10 and 15 degrees Celsius. So if you  
16 are wearing clothing that covers the body and slows the  
17 rate of skin temperature, then you will reduce the cold  
18 shock response.

19 Habitation to cold; if you have been in cold  
20 repeatedly, cold water immersion repeatedly, as few as  
21 five two or three minute immersions can halve the cold  
22 shock response.

23 And, finally, pre-cooling. I mean, obviously, the  
24 gradient between the skin temperature prior to immersion  
25 and its temperature on immersion is the driving force,

1 but if you are already cold, if you have been  
2 pre-immersed because, for example, a boat is sinking and  
3 you are slowly being cooled prior to going into the  
4 water, then I wouldn't expect to see a very large cold  
5 shock response. You will see the largest cold shock  
6 response, as I say, going from dry air into cold water.

7 Q. Thank you.

8 You go on to say -- we don't need to turn it up now,  
9 but it is at paragraph 4.11 of your report. You go on  
10 to observe that there was an apparent slow rate of  
11 immersion in this present case and so from that, you  
12 draw the observation that the initial immersion is not  
13 or would not have been as significant a hazard as it  
14 might have been, for example, with a sudden capsizing.

15 A. Correct.

16 Q. Thank you.

17 This is a response, this initial response, which  
18 peaks, you tell us, in minute one of the immersion and  
19 attenuates in the first two or three minutes of  
20 immersion; that's right?

21 A. That's correct.

22 Q. Thank you.

23 So from there, the next phase is what you describe  
24 as short-term immersion; yes?

25 A. Yes.

1 Q. Up to 30 minutes or so.

2 A. Yes.

3 Q. If we can move on to page 10 of the report  
4 {INQ010283/10} and it is paragraph 3.3 that you pick up  
5 short-term immersion. What is it that you mean by that  
6 and what are the associated risks?

7 A. So the next tissues to cool after the skin, which has  
8 provoked the cold shock response, will be the  
9 superficial nerves and muscles of the body and  
10 particularly in the limbs, because limbs are separate to  
11 cooling because they are cylinders, thin cylinders, with  
12 a high surface area to mass ratio and they have nerves  
13 and muscles running fairly close to the surface of the  
14 body. Roughly half the tissues of the body are within  
15 about 2.54 centimetres of the surface.

16 Once those tissues cool, then the neural function  
17 and the muscle function is impaired and we know that  
18 when muscles get down to about 27 degrees Celsius, you  
19 suffer from physical incapacitation. Nerves will fire  
20 less effectively as they cool and as a consequence of  
21 which -- I mean, the practical consequence that people  
22 will have experienced is you lose things like manual  
23 dexterity. You lose grip strength. You are unable to  
24 hold on to things.

25 So your functional capacity is impaired. That

1 becomes critical if that functional capacity is  
 2 important to do things like hold on to flotation , to  
 3 board things, to open things, to tie things together.  
 4 This is just an impairment particularly of manual  
 5 dexterity .  
 6 It also impairs swimming ability. People lose the  
 7 ability to co-ordinate swimming. They classically move  
 8 from a long, slow stroke in a horizontal position to  
 9 a much more upright position where they are now treading  
 10 water, desperately trying to keep the airway clear of  
 11 the water.  
 12 So all of that is not a hypothermic response. At  
 13 this stage, the individual is not hypothermic. It is  
 14 pretty much a physical impossibility for an adult human  
 15 to become hypothermic in less than 30 minutes in the  
 16 most severe conditions. So quite a lot of what you see  
 17 before that in terms of that physical incapacitation is  
 18 this cooling of the neuromuscular function of  
 19 particularly the extremities .  
 20 Q. Thank you, with its impact on the performance of  
 21 essential survival functions?  
 22 A. Correct.  
 23 Q. Thank you.  
 24 The third phase you identify for us is what you term  
 25 long-term immersion, a period, any period, over

1 30 minutes; is that right?  
 2 A. Yes.  
 3 Q. Thank you.  
 4 It's now that the first risks of hypothermia arise;  
 5 is that right?  
 6 A. That's correct .  
 7 Q. Deep body temperature continuing to drop and the risk  
 8 that the casualty becomes unconscious, you explain to  
 9 us; is that right?  
 10 A. That's correct .  
 11 Q. Thank you. And, again, the ongoing associated risk of  
 12 drowning.  
 13 A. Yes. So as you call, hypothermia is defined as a deep  
 14 body temperature below 35 degrees Celsius, where normal  
 15 body temperature is 37. And I have shown in my report  
 16 the stages of hypothermia and the associated clinical  
 17 features, as well as the signs and symptoms.  
 18 Q. Yes.  
 19 A. Probably the most important is, as with many other  
 20 extreme environments, the brain is amongst the first  
 21 major organs to be affected. So people suffer from  
 22 amnesia. They lose focus, lose concentration, and as  
 23 deep body temperature drops towards 33 to 30 degrees  
 24 Celsius, unconsciousness can intervene. Before that,  
 25 there may well be semi-consciousness where people drift

1 in and out of consciousness.  
 2 When they become unconscious, if they don't have  
 3 a decent way of maintaining their airway clear of the  
 4 water, they will drown. So if they are requiring to  
 5 swim, to keep their airway clear of the water, obviously  
 6 that stops with unconsciousness. If they are trying to  
 7 hold on to something, so any purposeful physical  
 8 activity to keep their airway clear of the water, then  
 9 that will cease with unconsciousness.  
 10 The important point about that is the  
 11 unconsciousness occurs as a result of deep body cooling,  
 12 but it occurs before you would die as a direct effect of  
 13 deep body cooling. So it essentially shortens your  
 14 survivability if you haven't, at that point of  
 15 unconsciousness, got some method of having your airway  
 16 maintained clear of the water, such as an effective life  
 17 jacket .  
 18 Q. Thank you.  
 19 Can I ask you about a particular point that you make  
 20 at page 11 and paragraph 3.4ii {INQ010283/11}. You tell  
 21 us there — or you comment on the impact of swimming or  
 22 attempting to swim in cold water. Is that an activity  
 23 that in and of its own right accelerates deep body  
 24 cooling?  
 25 A. Yes, it does. It is a common misconception because

1 people know that if they exercise in air , they stay  
 2 warmer. Well, water is quite a different fluid .  
 3 Thermal conductivity and volumetric specific heat are  
 4 much greater. So what happens when you exercise in  
 5 water starts at around about 25 degrees Celsius, but it  
 6 is very apparent below 15. If you exercise, you now —  
 7 although you generate more heat, you also increase the  
 8 movement of the water around yourself, so you increase  
 9 convective heat loss .  
 10 And I have already mentioned that when you stay  
 11 still in cold water, the body will withdraw blood from  
 12 the extremities, decreases skin blood flow, decreases  
 13 muscle blood flow, and about 70% of your total body  
 14 insulation then comes from unperfused muscle and about  
 15 30% from fat. Now, the unperfused muscle is variable  
 16 insulation . The subcutaneous fat is constant because  
 17 it's always there .  
 18 Q. Yes.  
 19 A. But the problem with exercising in water is you will now  
 20 send blood into the muscles to support the muscle  
 21 function, and that destroys that insulation . So you now  
 22 have people who are swimming. Although they have  
 23 increased their heat production, they have more than  
 24 increased their heat loss by destroying the muscle  
 25 insulation and by stirring the water around the body.

1 So we know from studies, lots of studies that we  
 2 have done, originally Bill Keating did in the 1960s,  
 3 that you're better off staying still in cold water than  
 4 you are trying to exercise to stay warm.  
 5 Q. Thank you.  
 6 And you introduced your comments by saying that that  
 7 is counter ---  
 8 A. Intuitive .  
 9 Q. --- intuitive for many people. All right.  
 10 I want to ask you some questions about prediction of  
 11 survival time in cold water now and we are talking in  
 12 this terrain , I think, about long-term immersion, that  
 13 period over 30 minutes. This is --- is this right --- and  
 14 you pick this up at paragraph 3.4iii of your report,  
 15 an exercise which informs decision-making in search and  
 16 rescue operations?  
 17 A. That's correct.  
 18 Q. And, in particular , setting and establishing and  
 19 determining the duration of search and rescue  
 20 operations; is that right?  
 21 A. Correct.  
 22 Q. How to decide, effectively , how long to maintain the  
 23 search and rescue function?  
 24 A. Yes.  
 25 Q. There have been a number of models developed to

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1 estimate/predict survival times in cold water; yes?  
 2 A. Yes, that's correct .  
 3 Q. You tell us through the report --- and we will come back  
 4 to those models. You tell us through the report that  
 5 this is an inexact science; yes?  
 6 A. Yes, correct .  
 7 Q. Again, we will come back to that.  
 8 Is it right that it's because of that inexactitude  
 9 and variability that authorities responsible for search  
 10 and rescue typically extend search times beyond that  
 11 period for which you can reasonably expect and forecast  
 12 survival?  
 13 A. Yes, I mean, historically , the search and rescue times  
 14 were based on the survivability predictions that come  
 15 from various sources. One, for example, was Molnar's  
 16 work following the Second World War where the estimated  
 17 survive time, 50% survival time, for water at 5 degrees  
 18 Celsius was about an hour, 10 degrees Celsius about  
 19 two hours, 15 degrees Celsius about six hours.  
 20 And what search and rescue organisations have tended  
 21 to do is to multiply that time by anything between two  
 22 and six to have some kind of margin for search. So  
 23 that's the kind of --- that was the kind of yardstick  
 24 that people went by in terms of how long you should  
 25 survive.

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1 We did the work which underpins the IAMSAR curve,  
 2 which is in my report at figure 2, which was based on  
 3 a combination of the UK National Immersion Incident  
 4 Survey, a database of immersion incidents, and the US  
 5 equivalent. We worked with the US coastguard in  
 6 producing this curve, and it ends up being based on  
 7 12 survivors who represent the extremes of survivability  
 8 in water between 2 and 27 degrees Celsius.  
 9 Q. Yes.  
 10 A. So --- and interestingly, when you look at the curve,  
 11 it's not that far off of the old yardstick of  
 12 multiplying the 50% survival time by a function of  
 13 between two and six.  
 14 Q. I see.  
 15 A. So people were about right.  
 16 Q. So just to finish that point, I think at page 12  
 17 {INQ010283/12} of your report, paragraph 3.4vii is this  
 18 where you tell us that historically , the yardstick was,  
 19 for search and rescue operations, three to six times the  
 20 predicted median survival time, that being the time for  
 21 which 50% of people were expected to survive.  
 22 A. Correct.  
 23 Q. Not the case now because the maths is calculated  
 24 a little differently ; is that right?  
 25 A. The --- yes. Well, maths is done slightly differently

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1 because the maths is now based on models of the human  
 2 thermal regulatory system.  
 3 Q. I see.  
 4 A. Having said that, the numbers are reasonably good, which  
 5 is encouraging, and they seem to support each other.  
 6 But that --- that survival curve in the IAMSAR curve  
 7 is --- really should be regarded as, you know, the  
 8 extreme survivability capability .  
 9 Q. Yes, thank you.  
 10 We will come back to the particular models shortly,  
 11 but just so I am clear, that description you give of the  
 12 calculation of three to six times the predicted median  
 13 survival time being about the length of time you expect  
 14 a search and rescue operation to continue, is that  
 15 historic or does that remain a reasonable yardstick?  
 16 A. It's historic , but as I say, when we have used actual  
 17 data ---  
 18 Q. Yes.  
 19 A. --- of people's survival and looked at the extremes of  
 20 those --- survival, then you come up with the curve, the  
 21 IAMSAR curve ---  
 22 Q. Thank you.  
 23 A. --- and it's not a million miles away from, you know,  
 24 two hours times six is 12, so at 10, you would be saying  
 25 15.

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1 Q. Thank you.  
 2 A. Two times six is 12, so ...  
 3 MS LE FEVRE: Sir, it is 1 o'clock, just after. I probably  
 4 have about another 25 minutes or so, I think, with this  
 5 witness, so ...  
 6 SIR ROSS CRANSTON: Well, do you mind continuing?  
 7 A. I am very happy to continue, sir.  
 8 SIR ROSS CRANSTON: Any problem? No, okay. Thanks very  
 9 much.  
 10 MS LE FEVRE: Thank you very much.  
 11 All right. Inexact science. You pick this up at  
 12 paragraph 3.4i. Why is the exercise of predicting  
 13 survival times an inexact science?  
 14 A. Because there is a whole host -- I think I have  
 15 mentioned some of them. There is a whole host of  
 16 variables to do with the environment and to do with  
 17 physiology that mean that it's not possible to predict  
 18 exactly. So some of those variables would be: is  
 19 somebody wearing a functional life jacket? If you  
 20 weren't, then you are probably going to drown when you  
 21 become unconscious. If you are, then you go on further  
 22 and you are unconscious but alive, until the point where  
 23 you would die as a result of the direct effects of  
 24 hypothermia.  
 25 Knowing what clothing people are wearing, knowing

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1 exactly what kind of water conditions they are in;  
 2 knowing whether they're hypoglycemic, not hypoglycemic;  
 3 whether they have incurred any injury; whether they have  
 4 got any habituation, you know, all of this -- I mean,  
 5 most of the information that search and rescue  
 6 organisations will get is that there are people in the  
 7 water and the water temperature is this, and that's one  
 8 of the reasons why the IAMSAR curve is just based on  
 9 water temperature.  
 10 Q. Thank you.  
 11 A. But we think we can go -- do better than that as we get  
 12 more information about a particular incident.  
 13 Q. All right. Well, let's move on to those models and the  
 14 first is the model you have referred to a number of  
 15 times, the IAMSAR curve. You have referred to your  
 16 figure 2. We can look at that. It is at page 13 of  
 17 your report at paragraph 3.4.viii {INQ010283/13}.  
 18 What this curve provides or sets out -- is this  
 19 right -- is the realistic upper limit of survival time  
 20 for people in the water who are wearing normal clothing  
 21 from the time of entry into the water?  
 22 A. Yes, that needs to be qualified because, as I said, it's  
 23 the -- it's really based on 12 of the longest survival  
 24 times across the 2 to 27.8 degrees Celsius range. The  
 25 curve wasn't based on people wearing just normal

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1 clothing. Indeed, that's a mistake in the report. It's  
 2 based on people wearing different clothing.  
 3 There is also -- when the US coastguard made this  
 4 calculation based on some of our data, they added  
 5 a safety margin of -- a prediction interval safety  
 6 margin.  
 7 So this is, I would argue, the very upper limit of  
 8 survivability, and the reason it went ahead was because,  
 9 you know, it errs on the side of caution. The chances  
 10 of leaving somebody alive in the water following this  
 11 curve is very slim. There is -- only one person  
 12 exceeded this curve and that was somebody wearing  
 13 specialist protective clothing, an experienced diver.  
 14 You know, it's -- although it's there as a line, it's  
 15 not one that you would expect many people to or pretty  
 16 much anybody to get to, but it's a safety margin.  
 17 And at the time of producing it, it was reasonable,  
 18 but as you get more information than water temperature  
 19 in, you -- we think you can do better than that curve.  
 20 Q. Thank you.  
 21 This is -- the curve that you help us with is the  
 22 curve that is relied on in the MAIB investigation  
 23 report; is that right?  
 24 A. Yes, that's right.  
 25 Q. It plots, as you have said, water temperature against

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1 survival time and so for a water temperature such as  
 2 extant on 23 to 24 November 2021, 13 degrees, gives  
 3 an upper estimate survival time of about 20 hours.  
 4 A. (Nods).  
 5 Q. You have sounded various notes of cautions about  
 6 20 hours. Do you think that this curve then is in fact  
 7 a realistic upper survival time for casualties in this  
 8 present incident?  
 9 A. No.  
 10 Q. And is that for all the reasons and the notes of  
 11 cautions you have already set out for us?  
 12 A. Absolutely.  
 13 Q. The second model you refer to us through your report  
 14 is -- I think I have this name right -- the Cold  
 15 Exposure Survival Model?  
 16 A. Correct.  
 17 Q. CESM. And we can see you help us with this at  
 18 pages 17-18 of your report at paragraph 4.4,  
 19 {010283/18}.  
 20 What is this model? What does this do for us?  
 21 A. So this is a biophysical model of the -- of a human.  
 22 It's only a model of a -- it's only a model of the torso  
 23 of a human and the reason for that is, as I have already  
 24 mentioned, that actually there is very little heat  
 25 exchanged between the environment and the body when you

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1 are in cold water because the limbs have essentially  
 2 been shut down.  
 3 So this model is a cylinder, which then includes  
 4 a ring of fat tissue, muscle tissue and then clothing  
 5 and environment.  
 6 That's by way of describing the biophysical aspects  
 7 to it. That model can then mathematically be used to  
 8 calculate heat exchange with the environment and that,  
 9 that model does that. It's then validated against  
 10 laboratory studies and real life incidents as  
 11 a consequence of which it's used by roughly 12 --  
 12 I think it's probably more than that -- search and  
 13 rescue organisations around the world, it was developed  
 14 in Canada by Dr Peter Tikuisis and it's used by the  
 15 Canadians.  
 16 Q. Thank you.  
 17 A. And it's the basis of establishing an estimated survival  
 18 time in -- specifically for cold water immersion.  
 19 Q. Thank you. So we can see as we look at the table what  
 20 it does, is this right, is that for given populations  
 21 divided by gender and for given circumstances,  
 22 environment and personal, so the sea state and the state  
 23 of fatigue, the percentage of any given population that  
 24 is likely to survive for a particular period of time, is  
 25 that right?

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1 A. That's correct, yes.  
 2 Q. Thank you. So from this we could take a set of  
 3 predicated median survival times, that being the 50%  
 4 column, and that would be the median survival time for  
 5 any one of those given populations, yes?  
 6 A. Correct.  
 7 Q. Now, we can see in this table that lines have been  
 8 highlighted. But if we take an unhighlighted line, the  
 9 top line, a male in a light sea state, not fatigued, the  
 10 median survival period estimated at 10.9 hours, but the  
 11 range running all the way from 6.1 to 19.4, is that  
 12 right?  
 13 A. That's correct.  
 14 Q. And is that figure of 19.4 as the longest figure  
 15 reflected in this table, is that in fact about the same  
 16 as the upper point of the IAMSAR curve?  
 17 A. Yes.  
 18 Q. Thank you. Do you accept that you can't know whether  
 19 any particular occupant of the boat was or wasn't  
 20 fatigued, tired or in a state of exhaustion?  
 21 A. No, I can only base that on the statements that I have  
 22 read and, and knowing what people had been through prior  
 23 to boarding the boat.  
 24 Q. Thank you. Considering that there are a number of  
 25 unknown variables, and that we know that two individuals

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1 survived for 10 hours at least thereabouts, do you think  
 2 it's possible that some occupants might have survived  
 3 for up to 20 hours, that 19.4 figure?  
 4 A. I don't think that. I think that actually it's a fairly  
 5 remarkable achievement to have survived the 10 hours.  
 6 The other point to make about the table that we are  
 7 talking about is the population that this was designed  
 8 from and for is a high-income western population where  
 9 people are, tend to be fatter in that respect.  
 10 And so even those numbers, when you compare it to  
 11 individuals, just taking the simple metric of body fat  
 12 are less fat, are likely to be higher than you would  
 13 expect, than you would expect with the, you know,  
 14 thinner individuals.  
 15 Q. Thank you.  
 16 A. So I think that that's a rather optimistic -- as  
 17 I mentioned actually in the report that you would, for  
 18 all of the reasons I mention in the report, not least of  
 19 which the population on which those data are based,  
 20 I think you would be looking much more likely at the  
 21 95-75% survival times as a realistic estimation.  
 22 Q. Thank you. If I were to push you a little on that.  
 23 That's the realistic estimation. What do you think the  
 24 possible upper survival limit was?  
 25 A. It's -- it's difficult to say because you are talking

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1 about -- the nature of the information you have got is  
 2 just as a group. You could look at individuals and  
 3 that's another way you can use this model, but we didn't  
 4 have anything like enough information to go down to the  
 5 individual level.  
 6 Q. I see.  
 7 A. So you have to look at it as a cohort. You are looking  
 8 at statistically or as a probability. I -- I suspect  
 9 having read the statements that the 10-hour survival was  
 10 right on the limit.  
 11 Q. Thank you. I am going to ask you this, you have told us  
 12 about the apparent slow rate of immersion and its  
 13 relevance to immediate or cold shock. In your opinion,  
 14 what bearing, if any, would a slow immersion have had on  
 15 an upper survival time in relation to this incident?  
 16 A. I don't think it has any direct implication. What it  
 17 does mean is that fewer people than one would normally  
 18 expect will die from the initial immersion.  
 19 Q. I see.  
 20 A. Although there are comments in various statements about  
 21 people struggling very quickly on immersion and that --  
 22 but that may well be due to an inability to swim and  
 23 a poor life jacket.  
 24 So there is -- it's not just cold shock; it's  
 25 actually just an inability to swim. There are also

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1 statements about people being washed away from the --  
2 from the boat that they were holding on to. Well,  
3 that's the short-term immersion problem. They may be  
4 able to find their way back to the boat but that will  
5 happen repeatedly.

6 So that really the major impact of not having as  
7 many immediate cold-shock related drownings is more  
8 people move on to the next stages of short-term and  
9 longer-term immersion.

10 Q. I see. Thank you. There is a third model you refer to  
11 in your report, it is the PSDA, the Probability of  
12 Survival Division ... Aid?

13 A. Decision Aid.

14 Q. Decision Aid, thank you. And that's a model, is this  
15 right, that predicts the cold functional time. What  
16 does that mean?

17 A. That's -- that's pretty much the same as we have been  
18 talking about in terms of your ability to do things.  
19 Sometimes that's predicted by an impact on peripheral  
20 temperatures. Sometimes it's predicted by an impact on  
21 levels of consciousness and cognitive capability to help  
22 yourself. But it's inevitably short.

23 The problem with the models and the way we have to  
24 use them, had to use them is because of the lack of  
25 information needed to feed into doing a more individual,

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1 individual assessment is the functional time in the Cold  
2 Exposure Survival Model can only be based on the 50%,  
3 the 50th percentile, and one of the reasons why some of  
4 the survival times I am suggesting are less than the  
5 functional times is because the functional time is only  
6 based on the 50%.

7 Q. I see.

8 A. But generally if you want to work out what the  
9 functional time is, it's around about 50 to 75% of the  
10 survival time --

11 Q. Thank you.

12 A. -- whichever one you pick. And we also know, because we  
13 and others have done studies, that the time taken for  
14 the peripheral neuromuscular temperatures to fall to the  
15 levels where you get incapacitation in water at, say  
16 13 degrees Celsius could be as less as, as short as  
17 20 minutes.

18 Q. I want to just look briefly at this model as well. It's  
19 page 18 of your report {INQ010283/18} and at  
20 paragraph 4.6, you explain to us it is a different  
21 mechanism a different prediction tool.

22 Can I ask you this question. In this model, the  
23 figures for women, for their predicted median survival  
24 time, seem to be significantly higher than those for  
25 men, is that right?

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1 A. Yes. So females have about a 10% higher, on average,  
2 body fat content and they also have a -- their surface  
3 area to mass ratio is relatively bigger but their body  
4 fat advantage is the major difference.

5 Q. Thank you. So is that the explanation for that  
6 inconsistency as between these two models --

7 A. Yes. The Cold Exposure Survival Model does have an  
8 ability to put in a body fat content but of course we  
9 didn't have that.

10 The PSDA, which is a slightly different model, based  
11 on six cylinders rather than one, but we won't need to  
12 go into that, assumes a body fat content but that again  
13 is based on a western, a western population.

14 Q. I see.

15 A. Which means that even if you put in lean -- and I think  
16 I mentioned this in the report as well -- even if you  
17 put lean into that model it's still pretty fat.

18 Q. All right, thank you. Let's take both those models off  
19 the screen. And you have referred to this a number of  
20 times now, the major limitation in applying any of these  
21 models to any particular set of circumstances is  
22 information or lack of information, is that right?

23 A. The more information you can get the more precise  
24 obviously your, your prediction will be.

25 Q. And with limited information, that limits your ability

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1 to be precise or specific about timings or individuals,  
2 is that right?

3 A. Yes. I mean, the models -- having said that, the models  
4 were in general agreement in that the model, the  
5 modelling -- I mean, remember, I was undertaking this in  
6 the context of a 20-hour proposal for survival and we --  
7 and the models came up with for males between 2.9 and  
8 5.3 hours and for females between 3.1 and 6.6 for the  
9 reasons we have discussed, slightly longer.

10 The time that individuals were in the water before  
11 dawn, when variously the reports say there were eight,  
12 10 and 15 people still alive was between three hours and  
13 53 minutes and four hours and 14 minutes. So -- and  
14 then it was -- it has been mentioned several times that  
15 at that time either between a half and two-thirds of the  
16 individuals in this incident were dead.

17 So to some extent there is a reverse validation of  
18 the model in that the model would predict -- those  
19 models would predict exactly that; that some people will  
20 have died before dawn because of those timings.

21 Q. Thank you. All right. In relation to those individuals  
22 who remain missing, you were asked by the Inquiry to  
23 consider whether it was possible or probable that any of  
24 those survived this incident. Your views are, what?

25 A. My views are that they would have been at the shorter

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1 end of the predicted survival times. The reason for  
 2 that is that I have -- that if you, if you look at their  
 3 data all of them were reported to be slim build, thin  
 4 and quite tall, ie not the short stocky individuals that  
 5 you would expect to be able to do well.  
 6 The other common factor of the ones that I could  
 7 find information on, which was three of them, was they  
 8 were all regarded as good swimmers and one of them had  
 9 indeed said that he thought that he could swim it if --  
 10 if it came to that.  
 11 So I suspect that these three individuals were  
 12 attempting to swim. One of them had been told by his  
 13 parents to swim away from the boat anyway. So if you  
 14 add those two things together, the likelihood that these  
 15 individuals were swimming and that they were young and  
 16 thin and tall, with one of them actually being reported  
 17 to be average build, I -- I suspect that that puts them  
 18 into the area of a relatively short survival time.  
 19 Q. Thank you. You have told us already or given us the  
 20 figures for your upper and lower estimates according to  
 21 the modelling of how long individuals probably survived.  
 22 Are you able to give us an idea of how long  
 23 possibly, the top estimate of the possible survival?  
 24 A. Of these particular individuals?  
 25 Q. Yes.

1 A. Of the ones swimming?  
 2 Q. Yes.  
 3 A. Well, I would have -- I would have thought they would do  
 4 well to get, because of their, as I say the fact they  
 5 are swimming and their -- their body fat content they  
 6 would do well to achieve anything approaching 50%  
 7 population. But I mean that's, that is really stepping  
 8 a fairly long way along the speculative branch.  
 9 Q. Thank you. Well, I won't push that question any  
 10 further.  
 11 You tell us at paragraph 4.10 of the report, at  
 12 {INQ010283/20}, that you believe that the majority of  
 13 the boat occupants were alive at 03:24 hours, is that  
 14 right?  
 15 A. That's -- yes.  
 16 Q. That you think that some may have died by 07:03 hours?  
 17 A. Which is essentially what we have just been discussing  
 18 in terms of predictions and times.  
 19 Q. Thank you. And thereafter, it's those figures that you  
 20 take from the models as your best estimates?  
 21 A. Yes. And those, some of those figures from the models,  
 22 best estimates actually cover the time to sunrise.  
 23 Q. Thank you. You were asked by the Inquiry to comment, so  
 24 far as you were able to, on the mechanism and cause of  
 25 the deaths of those who are known to have died.

1 You respond to that request primarily at  
 2 paragraph 4.3 of your report at {INQ010283/17}. You  
 3 tell us that some, but not the majority, may have  
 4 succumbed to cold shock on immersion and drowned.  
 5 Others may have drowned due to a lack of swimming  
 6 ability and the absence of a source of buoyancy and most  
 7 will have died when due to peripheral local cooling they  
 8 could no longer hold on to a boat or exercise to keep  
 9 their airways above water, having no functioning life  
 10 jacket, or may have lost consciousness due to  
 11 hypothermia?  
 12 A. Correct.  
 13 Q. And others may have cooled to the point of cardiac  
 14 arrest again due to hypothermia?  
 15 A. Correct.  
 16 Q. Is that the best evidence you can give in respect of the  
 17 mechanism cause of death?  
 18 A. Yes.  
 19 Q. Thank you. I want to ask you now finally a little about  
 20 recommendations and improvements. You know that this  
 21 Inquiry is charged with identifying recommendations  
 22 liable to minimise the repeat of such accident.  
 23 At paragraphs 4.12 and 4.13 at {INQ010283/21} of  
 24 your report, you talk about the provision of information  
 25 or advice which you consider might have been helpful to

1 those on board the boat, yes?  
 2 A. Correct.  
 3 Q. You note that this is a list of information that wasn't  
 4 passed to callers in the calls to which you had access?  
 5 A. Correct.  
 6 Q. How easy do you think it would have been to pass  
 7 information, this detail, to callers from this boat?  
 8 A. Almost impossible.  
 9 Q. Is it possible --  
 10 A. Verbally I mean.  
 11 Q. Verbally, yes. You do raise the possibility at  
 12 paragraph 4.13 of providing this information by text,  
 13 text message and translated as appropriate. Is that  
 14 something useful at least for the future, do you think?  
 15 A. I think -- I think so. I mean, just people being aware  
 16 of some of the things I list, and I am not going to go  
 17 through them, but I mean for example staying still, not  
 18 swimming, putting on as much clothing as possible,  
 19 making sure that, you know, you've -- things like  
 20 ditching the engine, which is essentially pulling the  
 21 boat under and is serving no purpose. Some of these  
 22 things may help, I mean ...  
 23 Yes, it's, I mean, but it's just a remarkably  
 24 difficult situation. These might make small, small  
 25 differences and be of benefit and I hope that they

1 would.  
 2 Q. Thank you.  
 3 A. Yes.  
 4 Q. This, I suspect, is taking you squarely back into the  
 5 realms of speculation, but I will ask the question. Had  
 6 those on board this particular boat received this  
 7 advice, is it possible to say how it might have altered  
 8 their behaviour?  
 9 A. Well, I think that those that -- again, as you say, it  
 10 is speculation, but those who I believe set off to swim  
 11 away may well have stayed with the boat.  
 12 That doesn't guarantee survival, but I think it may  
 13 well have lengthened survival time and given them more  
 14 opportunity to be rescued.  
 15 Q. Thank you. You next deal at paragraphs 4.14–4.18 with  
 16 a mass casualty triage tool {INQ010283/23}. Can we turn  
 17 that up. It is figure 3 at page 23 of the report,  
 18 please. Thank you.  
 19 What issue is this tool intended to address?  
 20 A. Well, normally, when groups go to rescue people in the  
 21 water, you are dealing with small numbers, one, two,  
 22 three, maybe four people and it's possible in that  
 23 situation to remove the individuals from the water and  
 24 then do a triage and to ie work out what the best thing  
 25 to do for each of those individuals is.

1 There isn't a published In-Water Mass Casualty  
 2 Triage Tool and that's partly because this is  
 3 a relatively new issue. So we thought it would be of  
 4 value to have a tool that would allow you to identify  
 5 people in the water who were most at risk and most in  
 6 need of assistance because clearly if you have got  
 7 30 people in the water, you cannot remove them all from  
 8 the water and then make a decision about who needs the  
 9 help. So this is just to help make sure that you  
 10 prioritise those that need assistance. And, as I say,  
 11 to my knowledge this is the first tool that allows you  
 12 to do that.  
 13 Q. Thank you. So, I think it provides a sort of flowchart  
 14 effectively for those involved in making decisions about  
 15 where best to allocate resources, is that right?  
 16 A. Exactly.  
 17 Q. Thank you. You were closely involved in its  
 18 development, is that right?  
 19 A. I was.  
 20 Q. Thank you. Are you aware that the RNLI has developed  
 21 a tool that looks remarkably like this triage tool?  
 22 A. I am and I know why.  
 23 Q. Why's that?  
 24 A. Because when we first did this -- and I'm talking about  
 25 Dr Paddy Morgan, myself and others -- we presented it at

1 a conference in Rotterdam. Dr Morgan presented it and  
 2 there were obviously people in the room and obviously  
 3 one of the reasons we presented it was to make it  
 4 publicly available as soon as possible because we  
 5 believed it would help save lives.  
 6 What then happened is Dr Morgan was invited to  
 7 a meeting with the RNLI when he discussed this triage  
 8 tool and as a consequence of which they have adopted the  
 9 same triage tool.  
 10 Q. Thank you.  
 11 A. It's an earlier -- I have it say it is an earlier  
 12 version than the one at figure 3 because as part of our  
 13 publication process --  
 14 Q. Yes.  
 15 A. -- we revised this slightly.  
 16 Q. You revised it and you included the reference to "Airway  
 17 observed to submerge", is that right?  
 18 A. Correct. Because if you are actually there and you see  
 19 somebody's airway being clear of the water, but then go  
 20 under it they are a high priority for rescue.  
 21 And the only thing I would recommend really is two  
 22 things really from this: is that firstly that we try and  
 23 align any versions of this that are out there because  
 24 there's nothing worse than having slightly different  
 25 iterations of it.

1 Q. Yes.  
 2 A. And, secondly, it -- it probably needs to be tested.  
 3 In -- it's all theoretical at this time. I mean,  
 4 I think it's logically theoretical but it would do well  
 5 to be tested.  
 6 Q. Thank you. Next, and finally, you make reference at  
 7 paragraph 4.18 of your report, {INQ010283/24} to ongoing  
 8 work that you and others under your direction I think  
 9 are doing with the IAMSAR curve that you have told us  
 10 about. Is that ongoing?  
 11 A. Yes. There's two things that are ongoing. Firstly, we  
 12 have been, as I have mentioned, involved in the  
 13 Probability of Survival Decision age -- helping the --  
 14 age -- "Aid" rather, helping the US Coastguard develop  
 15 that and at the moment that's being considered by  
 16 His Majesty's Coastguard as a step forward in terms of  
 17 refining the decisions as to when to stop a search.  
 18 Q. Thank you.  
 19 A. But we are also always attempting to collect more data  
 20 in order to inform things like the IAMSAR curve. And  
 21 one of the problems we have with that is that -- the  
 22 National Water Safety Forum do operate the water  
 23 incident database, the wave database, but it's, you  
 24 know, it's done with difficulty.  
 25 It could do with being -- and we could do with

1 having a proper — turning that into a proper national  
 2 database and making sure that those data are collected  
 3 because pretty much everything I have said to you today  
 4 is founded on that kind of data and, and that  
 5 information.  
 6 And so, I mean I think part of that would be having  
 7 drowning prevention and water safety as a portfolio of  
 8 a senior minister, so that there is some real drive to  
 9 make sure we continue to collect these data so this  
 10 doesn't happen again and, if it does happen again, we  
 11 have continued to get better and better information to  
 12 refine the kind of conversations we have had.  
 13 MS LE FEVRE: Thank you. Thank you, Professor Tipton.  
 14 Chair, I have no further questions for Professor Tipton.  
 15 Questions by SIR ROSS CRANSTON  
 16 SIR ROSS CRANSTON: I think we might ask you to develop that  
 17 a bit more in writing if you don't mind.  
 18 Could I just ask you about the triage. You  
 19 published that in November last year, it was peer  
 20 reviewed. Have you had any commentary — you say it's  
 21 theoretical of course at this stage, but have you had —  
 22 sometimes when you publish a paper you get some  
 23 reaction.  
 24 A. Yes, you do, I can confirm that. We have no — had no  
 25 reaction. It's generally been welcomed but because it's

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1 the first of its kind, it's — I mean, I think people  
 2 are still you know giving it some consideration.  
 3 It was also published along with the  
 4 Ministry of Defence, who had a representative in that  
 5 Rotterdam meeting, and hence the particular tool that  
 6 you see is also looking at things like a stranded  
 7 submarine with military personnel, lots of military  
 8 personnel at the surface. Hence the first part of it is  
 9 all to do with whether you are under fire or not.  
 10 So, no, I think it's being considered. I am  
 11 unaware, although I am not 100% sure what everybody is  
 12 doing in this area, whether or not this has been the  
 13 subject of any training or any exercises, but I think it  
 14 certainly should be. As I say, I think it works  
 15 perfectly reasonably theoretically, but obviously that's  
 16 a step away from practically.  
 17 SIR ROSS CRANSTON: Yes. You mentioned the advice and you  
 18 said frankly that it would be impossible to pass all of  
 19 that. But wouldn't it be the case that you could give  
 20 just the key advice such as: float to live, don't swim?  
 21 A. Yes, no, I think, I think so. I am just, you know,  
 22 having listened to the conversations, which obviously  
 23 are incredibly sad, you just get the impression that  
 24 just the communication of information in that  
 25 environment is tremendously difficult.

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1 But I would — I don't doubt that telling people to,  
 2 you know, stay as still as possible, wear as much — a  
 3 lot of the trouble is some of the advice you would want  
 4 to give people before they are in that situation. But  
 5 certainly when they are in that situation staying still,  
 6 entering the water slowly, you know, there's some of  
 7 that advice that one would hope would be of some  
 8 benefit.  
 9 SIR ROSS CRANSTON: Yes. You said, and correct me if I am  
 10 wrong, that you didn't think that the IAMSAR model was  
 11 up to scratch.  
 12 A. No, that model is fine, but I think what people need to  
 13 appreciate is that it's based on extreme survival. So  
 14 it's not something that one would necessarily expect and  
 15 really when you consider an incident like this it's how  
 16 far removed from that people will be.  
 17 Because that, that line which, as I say, comes from  
 18 the 12 people who have survived the longest across that  
 19 temperature range may have been wearing an immersion  
 20 suit, may have been ... You know, there is all kinds of  
 21 things and it is perfectly reasonable as a guide to say:  
 22 Go and look.  
 23 But I mean, I have had contacts with search and  
 24 rescue organisations who all know that if somebody is in  
 25 a severe sea state and the water is 13 degrees, at

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1 20 hours is a lot longer than somebody is going to  
 2 survive. Now, the problem comes when you have committed  
 3 a resource to that and they could be somewhere else  
 4 helping people that they could, you know, so —  
 5 SIR ROSS CRANSTON: Yes.  
 6 A. — you're tying up resource and that's one of the —  
 7 that was one of the motivations to go down the route of  
 8 coming up with these other models that were going to be  
 9 much more precise.  
 10 SIR ROSS CRANSTON: Yes. You said with the Cold Exposure  
 11 Survival Model that had been adopted by I think you said  
 12 12 organisations around the world.  
 13 A. Yes.  
 14 SIR ROSS CRANSTON: But any in the UK, to your knowledge?  
 15 A. No, I think no. The UK is still using the IAMSAR, as  
 16 are, you know, 193 other countries under the convention.  
 17 The actual number is, yes, a dozen countries and  
 18 including the Canadian search and rescue arm of the  
 19 Royal Canadian Airforce are using the Cold Exposure  
 20 Survival Model. The coastguard, the last time  
 21 I checked, we had done some work to start their  
 22 evaluation of the Probability of Survival Decision Aid,  
 23 which is the US Coastguard model, for its use within the  
 24 UK. I am unaware of where that's got to.  
 25 SIR ROSS CRANSTON: Yes. I see there was a footnote to

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1 Dr Tikuisis' exploration of the model.  
 2 A. Yes.  
 3 SIR ROSS CRANSTON: I am just wondering, I think that's  
 4 2008. I can't find it again. Was that peer reviewed,  
 5 do you know, to your knowledge?  
 6 A. Yes. No, the -- Dr Tikuisis has presented this model at  
 7 international meetings, he's presented it at and  
 8 published it as what was DRDC, the defence --  
 9 SIR ROSS CRANSTON: So well accepted?  
 10 A. It is well accepted.  
 11 SIR ROSS CRANSTON: Yes. Just finally, we heard evidence in  
 12 fact the first day from Issa Omar, who survived, one of  
 13 the two survivors and he described amazingly -- an  
 14 amazing man -- he survived, but he described the effect  
 15 on his legs. Would that be what you set out there as  
 16 the muscular rigidity? You obviously didn't examine him  
 17 and you can't --  
 18 A. No.  
 19 SIR ROSS CRANSTON: Is it likely to be that?  
 20 A. Probably not.  
 21 SIR ROSS CRANSTON: Because I couldn't understand what he  
 22 was talking about, but it sort of fits with what you say  
 23 here.  
 24 A. No, I don't think that's the same thing. The cooling  
 25 I am talking about of the neuromuscular cooling of

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1 particularly the superficially running nerves and  
 2 muscles in the arms is the thing that leads to physical  
 3 incapacitation. That would have stopped Issa from being  
 4 able to swim, which it clearly didn't.  
 5 I -- whether it's just due to protracted time in  
 6 cold water, to salt water, whether there was clothing  
 7 rubbing, I don't know. I don't know the reason for  
 8 that.  
 9 SIR ROSS CRANSTON: No.  
 10 A. What I suspect also it's worth just mentioning is that  
 11 because I believe that Issa was right at the limit of  
 12 where he could be and when he talks about swimming,  
 13 resting, sleeping I suspect that the sleeping was  
 14 probably, you know, drifting in and out of consciousness  
 15 and the fact that he stayed afloat when he wasn't doing  
 16 anything suggests that he had a reasonable amount of  
 17 buoyancy from whatever source.  
 18 SIR ROSS CRANSTON: Yes. Well, thank you very much and my  
 19 counsel team will tell me it was an entirely  
 20 inappropriate question.  
 21 Well, look, thanks very much. Thanks for the report  
 22 and thanks for coming along today and giving the  
 23 evidence, it has been extremely helpful. So  
 24 Professor Tipton, thank you.  
 25 A. Thank you, sir.

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1 SIR ROSS CRANSTON: Right.  
 2 MS LE FEVRE: We have no more witnesses coming today so that  
 3 will end proceedings so far as evidence is concerned.  
 4 SIR ROSS CRANSTON: Then I think we have the RNLI tomorrow.  
 5 MS LE FEVRE: We have got them tomorrow, yes, that is right.  
 6 SIR ROSS CRANSTON: Okay. Thanks very much, everyone.  
 7 (1.40 pm)  
 8 (The Inquiry adjourned until 10 o'clock,  
 9 on Tuesday, 18 March 2025)

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