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The Cranston Inquiry

Day 4

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1 Thursday, 6 March 2025 1 an 'availability service basis." 2. (10.00 am) 2. Is that right? SIR ROSS CRANSTON: Well, good morning, everyone. A. That's right. Good morning, Mr Norton. Thanks very much for your 4 4 Q. Can you explain for us --5 5 A. Excuse me, Ms Woods. 6 In a moment, Genevieve Woods will ask you some 6 Q. Of course. 7 questions, but first of all, could you read 7 A. Should I be seeing something on the screen? 8 the affirmation, please. 8 Ah, are they not appearing on the screen before you? 9 CHRISTOPHER NORTON (affirmed) 9 10 SIR ROSS CRANSTON: Thanks very much. 10 Q. We appear to be having some technical difficulties. If 11 Ms Woods. 11 you could just pause for a minute. Questions by MS WOODS 12 12 (Pause). MS WOODS: Thank you, Chair. 13 13 Thank you very much. 14 Good morning, Mr Norton. 14 We're in paragraph 8 at the very top of the page 15 A. Good morning, Ms Woods. 15 there. We can see the start date for the contract Q. Could you give your full name please for the Inquiry? 16 eight months later, 19 November 2019. And then we're 17 A. Christopher James Richard Norton. 17 just on the very last sentence here. 18 Q. Thank you. 18 A. Thank you. 19 You have made a witness statement which was provided 19 Q. "The ASv service required was multi-faceted and included 2.0 to the Inquiry and dated, I think, 27 November of last 20 Search and Rescue ... maritime patrol and 21 vear: is that right? 21 counter-pollution tasking on an 'availability service' 22 basis." 22 A. I'm sure it was. 23 Q. Thank you, Mr Norton. 23 A. That's right. Q. Could you help us with what an "availability service 2.4 It's right that you're here to give evidence on 2.4 25 behalf of a company called 2Excel Aviation Limited; is basis" is? 2.5 3 1 that right? A. The -- the idea of an availability service is to provide 1 2 A. It is. 2 a capability, which, in this case, is aircraft with --3 Q. Can you tell us what your role is within 2Excel? 3 equipped with sensors, crewed by suitably qualified and A. I'm one of the founders of 2Excel. I'm a main board 4 4 experienced personnel to provide a contract-air service, 5 director, and I'm the accountable manager, which means 5 and that would be for an amount of flying within -that I'm responsible for the management system through within a readiness, reactionary readiness schedule for which we deliver our services. a period of time. So, in this particular case, it was 8 Q. If you're a founder, you must have been there from 8 a 365 day, 24-hour service for five years, but to 9 the very outset. How long have you been at 2Excel? 9 provide 1,044, I think it was, hours per year within 10 A. 20 years now 10 that 365 day, 24-hour service. Q. 20 years. 11 11 Q. Have I understood, with a certain amount of lead time, 12 Can I ask to turn to your statement, which is 12 depending on the time of day, 2Excel was required to 13 $\{INQ10335/3\}$ and page 3 of that statement. Thank you 13 essentially $\mbox{make assets} -- \mbox{aerial assets available}$ 14 very much. If we're looking to paragraph 8, 14 24 hours a day, all year around? 15 I understand that 2Excel was contracted to provide 15 A. Correct. So in the daytime, it was a 45-minute notice services to the MCA; is that right? period for a King Air, a 60-minute notice period for 16 16 17 A. That's right. 17 a Panther, and those were -- the initial ASv contract 18 Q. And we can see in your statement, paragraph 8, that 18 was just for King Airs, but that was later amended to 19 contract was awarded on 19 March 2019 and began 19 provide Panthers as an additional service later on. The 20 eight months later on 19 November 2019; is that right? 20 and at night, it was a 60—minute readiness timescale 2.1 A. It was, yeah. 21 for the King Air and 120-minute readiness timescale for $\ensuremath{\mathsf{Q}}.$ And at the bottom of that paragraph we can see that 2.2 2.2 the Panthers. 23 23 Q. Mr Norton, you've mentioned I think the names of the service required was: 24 " ... multi-faceted and included Search and Rescue 24 a number of different types of aircraft. Could I ask that we go to $\{INQ010335/11\}$ of your statement and to 2.5 ... maritime patrol and counter-pollution tasking on 25

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- 1 paragraph 43, so right down the bottom. 2 3 Q. We can see there: 4 "In November 2021, 2Excel had three aircraft types in place ... ' 5 I think you've just mentioned King Air, which is 6 7 the first one there. So we have two King Air aircraft in November 2021; is that right? 8 9 10 Q. And they could fly for approximately five hours --11 A. Yeah. 12 Q. — is that what it means when it says "endurance" there? 13 14 Q. Then below, we can see there were also three Panthers 15 I think you also mentioned Panthers? A Yeah 16 17 Q. And one Navajo; is that right? 18 A. Yeah. So the -- the contract we had was to provide two 19 King Airs and two Panthers, but we had additional 2.0 aircraft within our fleet which meant that we could 21

Q. Understood.

of availability that we needed.

25 I want to understand, if I can, the different types

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hit the key performance indicators to provide the level

- 1 of tasking that those planes could be sent to as part of 2 this MCA contract. In your statement you say the first 3 type is called an SAR, a search and rescue tasking, and you say it's where you're airborne in response to 5 a known rescue requirement with a rescue call sign. Can you tell us what that means? In lay terms --6
- 7 A. Sure.

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- 8 Q. --what is an SAR tasking?
- 9 A. Okay. The two types of tasking were defined as reactive 10 tasking and proactive tasking. Reactive tasking is 11 a response to a known situation and proactive is 12 effectively patrolling. Patrolling may turn into 13 something that becomes more reactive, but -- but search 14 and rescue as a specific is a response to be a direct 15 threat, like a -- sorry, a direct hazard, which is like 16 a ship sinking or -- or migrants being found in 17
- 18 Q. There's a second category described in your statement, 19 a reactive SOLAS tasking. Is that safety of life sea, 2.0 SOLAS?
- 2.1 A. Safety of life at sea, correct.
- 2.2 Q. And how is reactive SOLAS tasking different from 23 a Search and Rescue tasking that you've told us about?
- 2.4 A. So it's really down to the specificity of the situation 25 at the time. So if a ship goes down and you know where

- the ship is, you can go straight -- you can be launched,
- you know, from -- from the ground. And in the case of
- 3 you don't know where it is and you might have to -- to
- find it , then -- then -- or you -- or you launch because 4
- you think it might happen, because you're responding to 5
- a known situation where something might happen, that 6 7
- would be SOLAS.
- Q. And specifically, there is a difference between 8 9 a reactive and a proactive SOLAS tasking?
- 10 A There is
- 11 Q. How is a proactive SOLAS tasking different from
- 12 a reactive SOLAS tasking versus a Search and Rescue 13
- A. So it's a -- it's a continuum, almost, of -- of risk, 14
- 15 effectively . So a search and rescue is to a known -
- 16 that, you know, such and such a ship has sunk here.
- 17 Proactive SOLAS is we think there's a likelihood that
- 18 there could be ships sinking here. And reactive --
- sorry, that's reactive SOLAS. And proactive SOLAS would 19
- 2.0 be the conditions might be right for such and such
- 21 a thing to happen, we'd like to you get airborne so that
- 22 you're ready and go and look to -- to see the -- see
- 2.3 the potential threats coming.
- 2.4 Q. Understood. Thank you very much.
- 2.5 The Inquiry understands that when you were providing

- 1 these services for the MCA, you were primarily working
- 2 on something called Operation EOS. Could you tell
- 3 the Inquiry what your understanding was of
- Operation EOS?
- 5 A. So Operation EOS is a proactive, planned patrolling,
- 6 looking into an area because there's a known set of
- 7 threats or a known set of potential hazards. So "EOS",
- 8 as we call it, E-O-S, is a response to the high
- 9 likelihood that you might be required, but it's not in
- 10 response to an actual sinking.
- 11 Does that mean it's proactive SOLAS tasking? Does it 12
 - fall into that category?
- 13 A It does
- Q. Okay. 14
- 15 The Inquiry is also aware of a separate operation 16 which 2Excel occasionally was tasked to work on called
- 17 Op Altair. Could you tell us what that was, your
- 18 understanding of what that was at the time?
- 19 A. So Op Altair usually precedes Op EOS, and effectively
- 2.0 it's to go and look into the start of the threat area
- 21 and potentially see people getting into boats on
- 2.2 the beach in order to be able to pass that information
- 23 through the command and control system to, in this
- 2.4 particular case, the French authorities so that they
- 25 could hopefully stop the people getting into the boats.

And if they get into the boats, you start watching them as they start to migrate across the Channel in order to be able to, if somebody goes into a —— into a hazard area, to transition from Op Altair into Op EOS. So it's often a precursor to Op EOS, but you can be —— you can go to look for specific threats or you can go to warn people of potential threats.

- Q. In practical terms, if you're the pilot sitting in the plane, what's the difference if you're tasked to do an Op EOS tasking versus an Altair tasking? Is it just who you're reporting to, or ...?
- 12 A. You report to the same commander control in both cases,13 it's just where your report might go.

So in Op Altair, you would look further in towards the coast, so you're looking into French airspace, into French sea space, ultimately all the way to the French beaches, but you're looking from UK airspace and UK waters. And once there is a potential threat and you're watching people come across the sea as they enter into the UK spaces, then that transitions into Op EOS, where you're saying the boat's going to land here, you know, make sure that the UK forces are ready to receive.

Q. Is it fair to say it is more about where you're looking
 than what you're looking for or what you're doing in
 the plane itself?

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- A. What you're doing is the same, the senses you're using is the same, where you're looking is slightly different, and the purpose of your report is slightly different.
- Q. Thank you.

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Can we pull up a document at $\{INQ005198/1\}$. This is the Op EOS tasking policy and we believe this is the version which applied in November 2021.

Can we go to page $3\{INQ005198\}$ of that document, please. We can see in the middle there's a section called "Criteria". At the top, in "Overview", it tells us about the services provided by 2Excel to the MCA.

Then under "Criteria", it sets out when those services are provided. So it says:

"These flights, which are proactive in their nature, can only be requested when the following criteria are met."

And there's two criteria there. Just looking at the top one for the minute, the first criteria is when

"Operation Deveran weather assessment [is] received by the [Coastguard] Liaison Officers and states that migrant crossings during a defined period of time (that is no greater than 12 hours) are deemed as a realistic possibility (or greater) to occur."

Does that mean that your taskings for 2Excel were to

some extent determined in advance by the assessed likelihood of migrant crossings on a given day?

3 A. It does

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Q. And I think it says, correct me if I'm wrong, that where the assessment was that there was a realistic possibility of crossings, that 2Excel was in those circumstances to provide proactive surveillance patrols; is that right?

8 9 A. We have -- our understanding at 2Excel is there are sort 10 of three conditions, red, amber and green, and during 11 red days, or red time periods, there is a high 12 likelihood of a crossing, and we are required to be 13 airborne, able to be, at very short notice, effectively 14 to -- to react to a hazard. On an amber day, we would 15 forward deploy, okay? So -- so that is a less 16 likelihood of a crossing, then we would forward deploy 17 so we could still react quickly, but we may sit on 18 the ground. And on a green day, we wouldn't necessarily

so we could still react quickly, but we may sit on the ground. And on a green day, we wouldn't necessarily forward deploy, we may sit at our normal —— our normal base, because there is a less likelihood of crossing.

Q. Understood. I think we can take that document down.Thank you very much.

On a day where crossings were amber or red, so we're talking about likely or high likelihood of crossings, did 2Excel still receive and review a tasking from

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the MCA or from the Home Office, or was the default position that you were preparing and assuming to provide services on those days?

4 A. So the — there are — there is a sort of cascade of
5 information. Weekly, there is a meeting, and that
6 meeting says this is what's likely to happen over the ——
7 over the week, and we would use that information to make
8 sure that we had the correct level of availability and
9 we were planning to forward deploy if we needed to be,
10 or we were planning to be airborne if we needed to be.
11 That — that's sort of done on a weekly basis.

But our tasking is specific. So the tasking comes on a tasking form, and the tasking form requests that we get airborne for a particular time, or we forward deploy for a particular time, and it tells us what task we are likely to receive. So that may be proactive SOLAS, it may be reactive SOLAS, it may be reactive SOLAS, it may be maritime pollution patrols. So there are — there are many things. But it's actually the tasking, it's not whether it's red or it's amber or it's green, it's the tasking that tells us what we are — what we are required to do.

We then either accept that, if we can, or we qualify our acceptance, or if we can't deliver it, then we would reject the -- the tasking. So it's the tasking itself that is specific, not the conditions. It's not our

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choice, we just prepare for the ability to respond to to taskings from Dover Coastguard." 2 the tasking. And those tasks will generally come, 2 Below that are some objectives. But if we turn to 3 you know, a day or so in advance. So on the night in 3 the following page {INQ000148/3}, about halfway down 4 question, we had pre-planned tasking to be ready, and 4 the page, we can see a section called "Consequence of non-delivery", and it says: 5 then that was upgraded and upgraded as $--\,$ as the events 5 unfolded "Non delivery of this patrol could." 6 6 7 Q. So was 2Excel able to see the RAG rating, the red, amber 7 And there are three risks listed there. The first 8 green rating for a period in advance through that weekly 8 9 meeting? 9 "Reduce the chance of ... vessels being identified 10 10 earlier within their transit ... " A. Through the weekly meeting, yes. 11 Q. And when taskings were received, is it right that they 11 The second is: 12 came through something called the ARCC, which is 12 ... impact on [Search and Rescue] response times, 13 the Aeronautical Rescue Control Centre? 13 decreasing the chance of early interdictions and 14 potentially increasing risk to the migrants." 14 15 Q. And that's part of the MCA Operations Centre? 15 And the third is, it could: A. Yeah. So our tasking -- all tasking would come through 16 "Be detrimental to the building and analysis of 16 17 17 the Maritime Domain Awareness Picture." 18 Q. So turning then to planning for the specific night of 18 If this tasking weren't completed. 19 19 23 to 24 November, if we can, could I ask that Were those things that 2Excel had in mind and was 2.0 $\{INQ006332/1\}$ is brought up on the screen, please. This 2.0 aware of when determining whether or not to accept 21 is the RAG rating for 23 to 24 November. We can see in 21 a tasking? A. To be -- we would -- if we were tasked, we would always 22 the box down in the corner —— it's quite small writing, 22 2.3 23 go on the task, if we could go on the task. hopefully you're able to see -- the first row is for 22 November, but that second row is for the 23rd through 2.4 The consequence of non-delivery of this patrol, so -- so to 6 o'clock UTC, and we can see it's been assessed as 25 in this particular case, A through D is UK airspace, UK 13 1 amber, as likely for crossings. And then below it, 1 water space, it's a patrol and therefore it's moving into the 24th, as red, highly likely that 2 2 non-specific, but the idea, on a day like this, which 3 crossings would occur. 3 was an amber, going red, day, is we need to be airborne. Is this something that you received in advance of So the -- we wouldn't reject a task. We're not 5 5 assessing the risk of non-delivery per se, we would 6 A. This -- I believe this is a document that is used in 6 accept the task if we could accept the task. The detail 7 7 that weekly briefing . It 's $\,--\,$ it may be sent to us, but of the tasking is , "Go and do X, Y and Z" and it's $\,--\,$ it was definitely known by us, because we attend 8 8 the consequence of not delivering is stated here, that 9 9 was a sort of normal statement. And, to be honest, it that briefing. So we would know those -- those colour 10 codes, but as I say, our tasking is -- comes on tasking 10 was normal that we would be airborne, because we knew it 11 11 was a red day, we knew it was an amber day, we knew what 12 Q. Can I take you then to that tasking form. So it's 12 our job was, which is to be prepared from an airborne 13 position to, in the case of Op EOS, understand what was 13 $\{\mbox{INQ000148}/1\},$ please. So just looking at that front 14 page for the minute, we can see that this is a document 14 going on in UK waters and UK airspace from 3 o'clock in 15 dated 22 November 2021, and it is an Op EOS tasking, 15 the morning until 8 o'clock in the morning, and so our 16 MCA 719 is the reference. And we can see, in that 16 whole planning was to accept this task. 17 17 Q. Looking at that third risk in that little box there -little box down the bottom, that the timing, "On—scene 18 time" is 0300 through to 0800 on the day? 18 A. Yeah.

19 A Yeah

20 Q. Turning then to page 2 {INQ000148}, we can see 21 the particular tasking that was given on this form.

22 A. Yeah.

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23 Q. So we can see a map with different zoned areas and below 24 it. it says:

"Aircraft is to patrol areas A through D and respond

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23 Q. Can you tell us what that means?
24 A. So the -- the sensors that exist on the aircraft and

didn't fly on a given night.

25 the picture that we could help to build by the other

the picture that we could help to build by the other

Q. $\,--$ "the building and analysis of the Maritime Domain

Awareness Picture" could be adversely impacted if 2Excel

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22 A. Yeah.

people who were connected to us was enhanced by the sensors on the aircraft. We would cover that 2 3 4 therefore two or three different aircraft . which are equipped with slightly different sensors, but all of 5 those sensors are helping to build the picture for 6 7 the users of the data, which, in this case, goes through 8 -- back through the various communications channels to 9 the ARCC and to all the government departments that get 10 fed that picture. Q. Does that mean there's an adverse impact on awareness of

- Q. Does that mean there's an adverse impact on awareness of what is happening in the Channel in the area that it was tasked to if that task is not completed?
- 14 A. It would

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- 15 Q. Could I ask now that we turn to a document at 16 $\{INQ001195/1\}$, please, and to page 4 $\{INQ001195/4\}$. 17 This is a chain of emails showing that tasking being 18 sent across to 2Excel. So right down the bottom, we can 19 see, 22 November, 1.04 pm, and there's an email sent 2.0 from the ARCC through to 2Excel Ops, and it says here are the tasking requests and that's the document we've 21 22 just looked at.
- We can see the response above it, at 4.16, sent from 24 2Excel Ops to the MCA, and we can see the tasking sheets were completed and returned. But then it says:

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"Please note that due to only having 1 aircraft overnight on 23rd/early hours [of the] 24th, we will not be able to cover the whole tasking period for Op Eos."

Pausing there, can you tell us why only one aircraft was available at that point?

- A. So we actually had four aircraft available, but that wasn't until the next day. We had three aircraft available, and this looks to be looking at one of the two Navajos -- one of the two Panthers, I'm sorry. So, at the stage that this email was written, which was on the 22nd, then one of the aeroplanes was in servicing, so we had one Panther and two King Airs. It looks to me like that email is referring to the Panther line, and we were going to deliver the five -hour window using two -- two aircraft. So I think it may have been slightly lazy language from the operations controller, but on the night, we had two King Airs and two Navajos available. The day before, we had two King Airs and one Navajo available. The Navajo was got serviceable before the 23rd such that we had two -- well, we had a primary and a back up aircraft for both the King Air lines and the Navajo lines.
- Q. If what you're saying now is that there were in fact three aircraft available at this point, the day before, and in fact more the next day, why does this email say,

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1 "We only have one aircraft available overnight" for

the 23rd to the 24th?

3 A. I don't know, actually.

4 Q. Are you saying that this isn't an accurate statement of 5 the position at the time?

6 A. The -- there may have only been -- I can't explain that one aircraft, because the plan on the 23rd was that

8 there would be two aircraft, each with a spare,

9 throughout the whole of the VUL, throughout the whole of

the — from the 23rd at 11.30 at night through until the next morning, we would use five sorties with two

the next morning, we would use five sorties with two aircraft to fulfil the tasking.

Q. Can we turn then to page 3 of {INQ001195} of the same document. At the bottom, we can see Coastguard

reverting, 16.23, to ask:

"What times would you be looking at covering so

can look at what gap I need to cover?"

And above it, 16.24, so I think just one minute afterwards, saving:

"We're going to look again at the plan, can we revert shortly please."

Moving to page 2 of {INQ001195}, we can see that at 5.17, so at the top page {INQ001195/1}, we have a further email from 2Excel at 5.14 that evening

25 {INQ001195/2}:

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1 "We're currently working to get enough crew to be
2 able to provide full coverage, unfortunately we've been
3 hit with a crew catching covid so we're just waiting to
4 hear back from one crew member to find out where our
5 options lie."

So you've told us about the availability of aircraft and said it wasn't right when they said there was only one aircraft available, in fact there were more. Is it right that there was a problem with obtaining sufficient crew to cover this tasking?

11 A. There was a problem, and the problem was solved.

The COVID -- the crew member that was on the roster was struck by COVID and therefore we needed to find

struck by COVID and therefore we needed to find a replacement crew from within our fleet, and that was

-- that was found and rostered in.

16 Q. And at what stage was that problem resolved?

17 A. Certainly by sort of lunchtime on the 23rd.

18 Q. Okay.

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Can we turn to page 1 {INQ001195}, please, we can see the response from the Coastguard, 5.16, still on the 22nd:

22 "Thanks for the update."

23 And then at the end

"I'll wait until you give me the final outcome."

Now, the Inquiry hasn't seen any further emails on

1 this topic or in response to this. Is it right that 1 I'd have to -- I'd have to -- just have to check 2 there was no response to this message saying, "I'm 2 3 waiting until you give me the final outcome"? 3 Q. That's fine. A. One of the -- the learnings for us, for 2Excel, is that 4 4 If we turn over to the next page $\{INQ000206/3\}$, we 5 we weren't recording enough of the data in a -- in 5 a good enough way to be able to fill the blanks in 6 6 7 later. A lot of communications were happening verbally 7 dav ... " on the telephone, not always backed up by email. That 8 8 9 was a normal method of communication, and we've -- we've 9 10 10 struggled to fill in the blanks as to why some of this 11 information was, you know -- well, was presaging 11 12 12 effectively an inability to provide, when actually we 13 solved all the operational problems by the day and we 13 14 were able to provide. I think -- and that was -- that 14 15 was a lesson that we learnt and we've put in place 15 16 16 various mechanisms to make sure that we record all of 17 those decisions going forward. But at the time, we 17 18 didn't have a very good record, which is why I'm 18 19 struggling to answer your -- to answer your questions, 19 because a telephone call may or may not have, you know, 2.0 2.0 21 recorded the various communications between the parties. 21 22 What I do know is that there was a -- an intent, 22 2.3 23 a will and an activity, an operational activity, to 2.4 provide the service for the amber going red day such 2.4 25 that we were able to fulfil the tasking and that -- that 25 single aircraft, and so in his head, he was planning two

- tasking was -- was all -- sorry, the provision was all 1
- 2 there with a sensible plan by the afternoon of the 23rd. 3 Q. On the same day, in fact at the same time, there was
- a planning meeting with the Coastguard. Can I take you
- to document $\{INQ000206/1\}$. We can see this is a migrant 5
- 6 red days meeting. That's the name given to those
- 7 planning meetings. We can see that there, right down,
- 8 bottom, second from the bottom, is an attendee from 2Excel?
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- 11 Q. And we can see this was taking place at 4 o'clock on 12 the 22nd, so at the same time as the emails were being 13 sent?
- A. Yes. 14

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- 15 Q. Is it right, that's not you in that meeting, that was 16 your head of surveillance?
- 17 A. That's right.
- 18 Q. Can we go to the bottom of page $2\{INQ000206\}$, please.
- 19 So there is a comment, right at the end, by someone 2.0 called "NB", who I understand is from the Coastguard, 21 and it savs:
 - " ... 23rd Both drones due up 0530 to 1330. CG22 is on stand by overnight for [Search and Rescue]."

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- 2.4 Which aircraft is CG22? Is that the King Air?
- 25 A. I'd have to -- I'd have to check, but it was -- yeah,

can see then a comment made on the 24th: "... One AR3 drone up on Deveron, AR5 on rest I think those are the Home Office drones: " ... and Op Eos ... has been requested to 2XL from 0300 - 0800 as has the amber day." Does that mean that, at this stage, the plan from 2Excel was for this aircraft CG22 to be on standby overnight on 23 to 24 November? A. The timing of this is on the 22nd, in the afternoon? So the -- at that stage -- at that stage, we were planned to be on Op EOS, so -- and I believe that the request for Op Altair, which extended our tasking, came in a bit later than that -- than this meeting. But this meeting is the weekly meeting, as far as I'm aware, and the weekly meeting is: this is the threats, this is the picture. Our head of surveillance was operationally trying to manage his assets to be able to provide for, in this particular case, the tasking. Five hours from 0300 to 0800 would be just beyond the limit for any one

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- 1 aircraft, so using the King Air and the Navajo, they 2. would have different call signs, and the plan was to 3
 - overlap them such that they could relieve in place.
- Q. There's no comments in this document by your head of 5 surveillance, by the representative from 2Excel at this 6 meeting. Is it right then that that plan that was in
- 7 his mind wasn't shared with this meeting, as far as 8
- we can tell?
- 9 A. To be honest, the meeting is a tasking meeting.
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- 11 And he was sort of going, "Right, okay, I know what
- 12 the intent is". It's a tasking meeting that isn't
- 13 a specific tasking meeting to him, it's a more general
- 14 meeting where it's, this is -- this is -- we're
- 15 marshalling all our assets. He's at the meeting to be
- 16 able to listen to the overall intent and play his part
- 17 in the plan, but this is not a tasking meeting for him,
- 18 it's a provision of capability meeting, if you see what
- 19 I mean, and the tasks fall out of those tasking forms
- 2.0 that you -- that you showed earlier.
- 21 Q. It's right to say this was a planning meeting, wasn't 2.2 it?
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- 24 Q. But 2Excel's plan wasn't shared with the other attendees 2.5 of the meeting at that stage?

nothing specific that came out of that meeting, as, "You 4 are to do this", it was the tasks that followed that 5 meeting that said, "You are to do this". 6 Q. Can we turn to a document at $\{INQ006340/1\}$, please. This is another email chain. We can see down the bottom 8 9 of that page, the email at 16.16 which we've already 10 seen. This is the response to that tasking, returning

A. This -- this is where they effectively are starting to

not necessarily in specific tasks. It -- there's

form their plan. They're getting given their jobs, but

12 " ... due to only having 1 aircraft ... we will not 13 be able to cover the whole ... period ... '

the sheets and saying:

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- 15 Q. If we go up to the email at the top, we can see that 16 this is an email from, about two minutes later --
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- 18 Q. -- 16.18, and it's from a person at 2Excel -- it's 19 redacted there -- to Ops, a number of other people at 20 2Excel and to the Special Missions Duty Exec. Looking 21 at the content, it says:
- 22 "I'm currently in a small boats meeting with 2.3 the stakeholders -- there's significant risk in this 2.4 period and we should try and cover as much as we can. 25 I'll stick a quick catchup meeting in for 1645."

1 So looking at this, it seems that the person who was 2 in that red days meeting has, during that meeting, seen 3 the email sent by 2Excel saying, "We're not going to be able to cover the tasking period, we only have one 5 aircraft", but that's not raised in the meeting. So they've seen the email below, "We can't cover 6 7 the tasking period", they're physically in that planning 8 meeting with other stakeholders, why didn't they say, 9 "There might be some problems with covering the tasking 10

- A. I can't answer for that individual , but my $--\ \mbox{my}$ understanding is that he's going, "We've really -- we really need to move our assets around, people, planes, whatever, accelerate the engineering, whatever, but we need to be able to fill this hole", and this is two days in advance, or 18 -- 36 hours in advance, there or thereabouts. So he's -- he's still got time to solve the problem. I don't know what he said in the meeting, he hasn't written anything in the meeting, but he $--\,$ he's definitely taken the point that this is a red or an amber-red day and we need to make sure that we provide for our job, which is to be airborne or forward deployed
- 2.4 Q. Given the recognised significant risk on that day, or 25 overnight, wouldn't it have been helpful to other

stakeholders to say, "We may have some problems covering

2 this", to enable them to have an opportunity to find

3 alternatives, or to turn to a plan B?

- 4 A. I think —— I think his position would be that they have said, "We may have problems fixing this". So if -- if 5
- you're right about that, we've only got one aircraft, 6
- 7 that is saying it, it's saying it through
- 8 the operational response mechanism, as opposed to in
- 9 the meeting. I don't -- if -- were those minutes of
- 10 the meeting that you showed earlier?
- 11 Q. Yes.

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- 12 A. And he didn't say anything?
- 13 There's no entry from the representative from 2Excel in
- 14 the meeting. The only section that touches on 2Excel is 15 the one that we looked at earlier.
- 16 A. Okay. So having spoken to him, he's -- he -- he said,
- 17 really, we go to that meeting to listen, not to talk,
- 18 but we go -- you're absolutely right, it's like he -- he
- 19 would have been -- he would be articulating risk. His
- 2.0 people are articulating risk, because they're saying,
 - "We have only got one aircraft, we've got a COVID member
- 22 -- sorry, a member of staff who's gone down with COVID",
- 2.3 the -- the job that he took out of that meeting was, "We
- 2.4 need to make sure that we can provide" -- this is on
- 25 the 22nd, the risk is coming the following, so he's got

- sort of 24 to 36 hours to fix $% \left(1\right) =\left(1\right) \left(1\right) +\left(1\right) \left(1\right)$ to 36 hours to fix $\left(1\right) \left(1\right)$ and that -- and by 1
- 2. 4.45, he's going to try and do that. So it's how can we
- 3 -- how can we fix this problem. And that is a normal
- operational thing. It's like, right, the -- you need to
- 5 -- you need to throw everything at this in order to be
- 6 able to provide the service.
- 7 Q. And in fairness to you, we can see, looking at the email 8
 - on the screen, that in fact there is someone from
- 9 the MCA who is cc'd into that email.
- 10 A. Thank you.

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2.4

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- 11 Q. Can I ask to turn to page 4 {INQ003895}, please.
- 12 This is an email on the following day. I can't 13 quite see the very top, it's on the next page, but it's 14 23 November at 11.17. This an email from ARCC to 2Excel 15 Ops:
- "I have received a request for Op ALTAIR for tonight 16 17 ... only if it remains an AMBER Day tomorrow, if it 18 isn't this request is withdrawn.
- 19 "Are you able to support? Op EOS with SOLAS intent 20 takes property."
- 21 And, at 12.41, we can see an email accepting that 2.2 tasking {INQ003895/3}.
 - So despite the concerns and the difficulties about being able to cover the tasking the previous day, 2Excel then went on to accept another tasking on the 23rd; is

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1 that right? A. Accepted both taskings. So both the Op EOS tasking, 2 3 which was the -- the original one, and a subsequent 4 Op Altair tasking, by lunchtime on the 23rd, yeah. 5 Q. And we can see a slight request in this email to change the time a little --6 A. That's right. $\mathsf{Q}.\ --$ so that it's on task for 30 minutes past midnight, so 8 9 30 minutes after the start of Altair. 10 Can we go to {INQ006337/1}, please. That is 11 the tasking form for this Altair request. So this is 12 reference number 722, dated 23 November, and we can see 13 this one's coming through from the Home Office rather than from the MCA. Is that because it's Altair instead 14 15 of FOS? A Yeah 16

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17 Q. Understood.

> And we can see the timing of that. It's for 24 November from 0001 through to 0500 on the 24th. And, of course, we know from that email the request was to change the timing slightly.

It's right that that overlaps with the Op EOS tasking that had already been accepted by 2Excel? A. I think, actually, they were accepted at the same time.

I think the previous email, the 12.41, was we accept

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1 both taskings, but -- but what -- can we start 2 the Op Altair tasking 30 mins later.

Q. Apologies, I think that was my question not sufficiently clear. The timing of the taskings themselves overlap. So we can see this one is midnight to 5 o'clock, and we could see the other one was, I think, 3 through til 8; is that right?

8 A. Yes

9 Q. So in terms of timing, they were essentially at the same 10 time on the 24th?

11

12 Q. Or at least there was a period of overlap?

13 A. Yeah.

Q. If we turn to page 2 of {INQ006337}, we can see 14 the tasking itself . We can see the same diagram: 15 16 "Aircraft is to patrol areas E through H ..." And then, underneath, we can see the objectives set

17 18 out.

In fact, there was a third tasking request also accepted on that day, wasn't there, Mr Norton? I'll take you to that, that's {INQ001188/1}. So this one is MCA 717 and this appears to be a further Op EOS tasking; is that right? This is coming through from ARCC?

24 A Yeah

2.5 Q. And we can see that's for 8.30 until 4 pm on 24 November. So it follows on in time from the previous Op EOS tasking that was accepted from 3 am until 8 am?

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 $\ensuremath{\mathsf{Q}}.$ If it was a struggle to cover the initial tasking, if there were concerns on the 22nd about whether you'd have enough aircraft or enough crew, why accept two further additional taskings the following day?

7 A. Because by the 23rd, we'd solved all of those potential 8 9 or actual operational constraints, such that by 10 lunchtime on the 23rd, we had generated or regenerated, 11 actually at lunchtime on the 23rd, it was two King Airs 12 and one Navajo — one Panther, I'm sorry, which happened 13 to be a Navajo, and later on that day, we managed to get 14 the Panther back up such that we had, by the time of

the start of the tasking, two King Airs, a Panther and a Navajo to provide two lines of tasking. With those

16 17 two lines of tasking, we could flip flop between

18 the King Airs and the Navajos, okay, such that you could 19 go airborne with one, airborne with another, relieve in

2.0 place; land the first one, fill up with petrol, get 21 airborne again, relief in place; land the second one,

22 fill up with petrol, get airborne again, relief in 23 place; land the first one, fill up with petrol, and keep 2.4 flip flopping.

2.5 That sounds easy if you're all going from one place.

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The issue was that there was weather to manage, there were different crews that were going to get into the air -- into the aircraft, and we were having to land at different bases. Nevertheless, there was a plan that, broadly, we could see, by lunchtime on the -- lunchtime on the 23rd, that we could deliver from half past $\ \ \, \text{midnight through} \,\, -- \,\, \text{through the} \,\, -- \,\, \text{the VUL until}$ the next day, in order to be able to cover the whole time for all the tasks. And when I say all the tasks. it's because there was a clear prioritisation that Op EOS would take priority over Op Altair. So if there was a conflict by the -- for the one aeroplane about whether you're doing Op Altair or doing Op EOS, EOS would take priority, SOLAS would take priority, saving lives at sea would take priority. So we would provide the picture to the Home Office if we could, but if -- if we needed to, we would go for saving lives at sea, and we could cover the whole VUL broadly we could cover the whole vol with those two lines of tasking throughout the night, weather permitting.

19 2.0 21 Q. You've just told us quite a complex plan for stopping 2.2 and changing between planes. I think it might assist if 23 I take you to where that's set out in your statement. 2.4 So could we go to {INQ010335}, bottom half of page 22. 25 So under where it says, "To cover the overnight window",

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- 1 it says "five sorties", is that five flights
- 2 essentially ? A. Five flights, yes. 3
- 4 Q. Quite a complex arrangement set out in those bullet
- 5 points there. So, am I right, the intention was to use 6 two planes to cover those taskings, one was a --
- 7 originally a G-UMMI, is that a Navajo?
- 8 A. Yeah.
- 9 Q. And then that changed to become a Panther?
- 10 A Yeah
- 11 Q. And then to use a King Air plane as well; is that right?
- 12 A. That's right.
- 13 Q. Are you able to say whether that's the CG22 plane that
- 14 was mentioned in the red days planning meeting?
- 15 A. I think it was, yeah. I'd be doing it from memory, but 16 somewhere in there it's written down
- 17 Q. Can you tell us why the change from the Navajo to
- 18 the Panther?
- 19 A. The -- the Panther came up late, but it's a slightly
- 20 better aircraft, so it is better equipped in the cockpit
- 2.1 with -- the -- the equipment in the cockpit is better,
- 22 it has a slightly longer endurance because it carries
- 2.3 more petrol and it has a bigger engine, so it has got
- 2.4 slightly more endurance, so five hours not four, and it
- it's got slightly better mission fit, in that it's not

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- 1 a hand-held radio, it's an aircraft radio for
- 2 a particular frequency band.
- 3 Q. So the plan then was to start with the Panther rather
- than the Navajo? 4
- 5
- 6 Q. And to use that to cover the Op Altair tasking from half
- 7 past midnight; is that right?
- 8
- 9 Q. In fact. I think later in your statement you explain 10 that it was planned to take off at about 11.30 in
- 11 the evening, in anticipation of that tasking?
- 12 A. Correct.
- Q. 2Excel has provided to the Inquiry flight packages for 13
- four of the five flights planned to cover this period, 14
- 15 but not for that first flight, that first Panther
- 16 flight.
- 17
- 18 Q. I wonder if you can help us, was a package put together,
- 19 was it made for that first flight?
- 2.0 A. I expect it would have been, yeah,
- 2.1 Q. Are you able to help us with why that's not been shared 2.2 with the Inquiry?
- 23 A. I don't -- I don't know.
- 2.4 Q. Okay.
- 25 So looking at this array of bullet points here, we

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can see the plan was the Panther flies first , from about

- 11.30 to meet the Op Altair tasking. Then it's relieved
- 3 by the King Air plane. Then the Panther lands at
- 4 Southend, then it departs again to relieve the King Air.
- 5 Then the King Air lands at Southend to refuel, then it relieves the Panther, and the Panther would land back at
- 7 East Midlands airport; is that right?
- 8 A. That's right. It may help, I think it's figure 19--
- 9 Q. Yes, it's on, I think, the next page at 24 {INQ010335},
- 10 if that assists . There's a diagram showing the overlap 11 between the different flights .
- 12 A. That's right.
- 13 Q. Looking at this figure, is it right that, at any given
- 14 time, there was only one plane that was covering
- 15 the tasking?
- 16 A Correct

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- 17 Q. I want to ask how that was possible in a situation where
- 18 2Excel had two taskings at once and you've told us that
- 19 saving of life takes priority over Altair, but the
- 20 Altair tasking was at E to H in the Channel, whereas
- 21 the EOS tasking was at A to D, so they were in two
- 22 different places at the same time? How could one plane
- 2.3 cover both different locations?
- 2.4 The -- so this -- this depends on which plane, okay? So
- 25 the King Air has a radar and the range of the radar

- 1 looks out, it can -- it can see a much larger volume of
- 2 airspace -- sorry, sea space than a non-radar equipped
- 3 fixed wing asset, where the primary sensor is an
- electro-optic turret, electro-optic infrared turret, and
- 5
- 6
- 7 you're scanning by looking through a telescope.

so you're searching either with your naked eye or with your sensor, but looking -- in the case of sensor, Where -- if you fly the aeroplane up and down the middle of the Channel, you can look either side of

you, so you can scan and the radar will cue you to an issue or other sensors may cue you to an issue, or the tasker could cue you to an issue, so, you know, "Go

12 13 and look over there". Our job was to fly in UK airspace

- 14 for Op EOS and focus on UK airspace, but before boats 15 which are travelling from France to the UK get to UK sea
- 16 space, they will be in French sea space and it is
- possible to look into French sea space from UK airspace. 17
- 18 So it's really we're prioritising Op Altair because 19
- that's what we've been asked to do. If, at any point, 2.0 somebody says there's actually somebody in trouble you
- 21
- can go looking elsewhere, and the aeroplane is quite 2.2
- fast and the sensors give you additional range as long 23

2.4 In the case of radar, you can't see through cloud --2.5 sorry, you can see through cloud. In the case of an

electro-optic infrared turret, you can't see through This is the transcript of a call on 23 November at 8.01 2 cloud. So actually, whilst you're there, you only in the evening, and it's a call between Mr Lugg and 3 really $\,--\,$ if it's $\,--\,$ if it's foggy or it's cloudy or you 3 Mr Golden, who is the operations controller at the ARCC. 4 can't get underneath the cloud, there is a limited 4 Could we turn to the next page, please, capability of the Panthers and there's a much greater $\{INQ008827/2\}$. So we can see Mr Golden is asking about 5 5 capability in the King Air. And -coverage, asking 2Excel. Essentially he says: 6 6 Q. Can I pause you there, Mr Norton. I think you said in 7 " ... I'll come back to you in a minute [want] to 8 confirm with you what you think you are flying tonight, 8 the answer you've just given me that you were 9 prioritisation Op Altair unless and until there was 9 over the next ... 12 to 24 hours?" 10 1.0 someone who needed rescue: is that right? In the middle of the page. He asks about that 11 11 overlap in timings and he's asking about what 2Excel's 12 12 Q. But the email tasking you to Op Altair said Op EOS with plan is for the night. Turning to page 4 of{INQ008827}, if we can, we can 13 SOLAS intent takes priority, so in effect you should be 13 prioritising Op EOS over Op Altair; isn't that right? 14 see Mr Golden, at the ARCC, asking at the top: 14 15 A. The Op EOS tasking time was 3 o'clock, the Op Altair 15 "The gap -- physically, there will be no aircraft tasking time was 0030, is what we -- what we accepted, 16 16 for the Dover Straits from 2Excel between ... About 4. 17 17 5.30, 6.30?" but at any time Altair can be trumped by Op EOS. It's 18 trumped, according to the situation you see at the time. 18 So he's asking what you think the gap is being to 19 You're looking to Altair, but -- but SOLAS would always 19 be. Mr Lugg replies: 2.0 take priority over building the maritime picture. And 2.0 "No. We should have it pretty covered. 21 that was agreed in the tasking, so that -- the email 21 "From 00.30, we'll be covering each aircraft's gap 22 that you referred to earlier said suffice to say Op EOS 22 with another aircraft." 2.3 23 will always take — take priority. So — so we know So that seems to be a reference to the plan you've 2.4 that, so you look and you try and build the picture told us about, where you have the Panther and

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- 1 the first two and a half hours, so from 0030 to
- 2 3 o'clock, the priority given to us was Altair, and then

until there's an issue, and that -- that -- for

- 3 from 3 o'clock the priority would be EOS. But up until
- that time, whilst you're doing Altair, if there's any
- 5 EOS tasking, which can be given to you by
- 6 Dover Coastguard, then you would prioritise, that would
- 7 that would trump the Altair.
- 8 Q. And in the period where both taskings were overlapping, 9 which I think is from 3 until 5 in the morning, is it
- 10 right that the pilot would not have been doing Altair,
- 11 they would have been doing an EOS tasking because that
- 12 takes priority, it's SOLAS, it's a proactive SOLAS
- 13 tasking, so it takes priority over Altair?
- A. You'd -- you'd -- I'd have to go back to the tasking, 14 but I think the tasking in -- from 3 o'clock in 15 16 the morning is -- is -- the priority is looking A to D,
- 17 and that trumps looking in E to H.
- 18 Q. Understood.
- 19 Mr Norton, I'm about to move to the night itself, to 2.0 the 23rd to the 24th.
- 21

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- 2.2 Q. Is this a convenient moment for you to take a break, or
- 23 would you like to keep going?
- 2.4 A. I'm fine.
- Q. Could I ask that $\{INQ008827/1\}$ is brought up, please. 2.5

1 A. Yes. Can you remind me what the timing of this telephone call is, please? 2.

the King Air going one by one; is that right?

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- Q. This is 8.01 in the evening on the 23rd.
- 4 A. Yeah.

2.5

- 5 Q. Is it right that at that stage, 2Excel was still
- 6 expecting to complete the delivery plan that you've told 7 us about and to go ahead and cover the taskings?
- 8 A. 2Excel was planning to provide that tasking subject to 9 weather. So the -- the plan was to be available and to
- 10 be airborne as long as the weather said it was fit, and
- 11 the five aircraft plan, with aircraft getting up and
- 12 getting down, was I believe what they were discussing.
- 13 So it was an explanation from Ops: this is our plan to
- cover the whole time during -- during the -- during 14
- 15 the night to subsequently.
- 16 Q. At this stage in the evening, was 2Excel aware that
- 17 there was risk from the weather, that fog and other
- 18 factors might mean that the tasking couldn't be
- 19 completed?
- 2.0 A. It was certainly aware that there was a poor -- that 21 weather was poor, ves.
- 2.2 Q. Here, Mr Lugg isn't say, "We'll complete this subject to 23 weather", as you're telling me now, he says:
- 2.4 "No, we should have it pretty covered.
- 25 "From 00.30, we'll be covering each aircraft's gap

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1		with another aircraft."	1	Α.	Yeah.
2	A.	Yeah.	2	Q.	Okay.
3	Q.	Why isn't he saying, "There's a risk we might not be	3		Can I ask you to go to 7824, please {INQ007824/1}.
4		flying tonight"?	4		This is a further transcript of a call, again between
5	Α.	I think those conversations —— so at that stage, we	5		Mr Lugg and Dominic Golden at the ARCC, and this time v
6		wouldn't want to cancel, we would want to be able to	6		have dipped over into 24 November and we're looking at
7		provide the —— provide the assets. The weather was	7		a call at 2.04 in the morning. If we turn to the next
8		getting worse, but $$ and the weather forecasts were	8		page {INQ007824/2} we can see again:
9		getting worse, so we knew there was risk. My	9		"Hi Jacob, it's Dom down the ARCC.
10		understanding is that that risk would be articulated,	10		"Hi, you all right?"
11		but the provision of assets, people, planes, airfields,	11		And Dominic Golden says:
12		was — was a plan, and the plan was to be able to get	12		" where are we going with any Eos flying in the
13		airborne if you possibly could.	13		early hours of the morning? Is yours still playing the
14	0	You say that that risk would be articulated. Can you	14		— is the diversions ashore? That is the problem."
15	Q.	tell us now whether 2Excel was saying to the MCA, to	15		And Mr Lugg says, as you've just told us:
16		the Home Office, "We might not be able to cover this	16		"Yeah. And it's the weather in the tasking area."
17		tasking depending on the weather"?	17		So he goes on to say, further down:
18	Α.	I can't —— unless it says it in that statement, which	18		"The weather is not great in the tasking area."
19		I don't think it does, I can't point to that at	19		And we can see this is a call in which Mr Lugg
20		8 o'clock in the evening. I can point to it as time	20		explains to Mr Golden at the ARCC why 2Excel hadn't
21		went on later in the evening.	21		flown that night. In that bottom paragraph, Mr Golden
22	Q.	Let's turn then to later in the evening. If we could go	22		says that there are "upwards of at least 11 vessels
23		to $\{INQ000224/1\}$, please. This is an entry in the ARCC	23		on their way across", says that the "Heli brief is
24		log for that evening, and if we go to page 2 of	24		showing awful weather visibility over land ".
10:56	5:33	25 {INQ000224} we're looking at 23:53:50, which is down	25		And then if we go over to the top of the next page
		41			43
1		the bottom half of the page. We can see there:	1		{INQ007824/1-2}:
2		"CG25: Assigned to Incident	2		" Dover Coastguard can still see
3		"ARCC Message."	3		the lights"
10:56	5:48	4 At 23:53:50. And it says:	4		Of France in the distance.
4		"2Excel Ops [to] ARCC.	5		And he goes on to say that they've "got no
5		"Can't complete this tasking.	6		recognised maritime picture out there". We can see
6		"Southend out of limits att for Panther AC.	7		that, second paragraph:
7		"Will reassess later for King Air."	8		"So we are now going down a decision matrix here of
8		Now, that doesn't say, "Can't complete this tasking	9		what we want to do. We've got no recognised maritime
9		because of the weather", it says, "Southend out of	10		picture out there. Clearly, we've got yourselves as
10		limits att for Panther AC."	11		the normal de facto solution. But if you are unable to
11		Can you tell us what the problem was at that stage	12		go"
12		that meant that this tasking couldn't be completed at	13		He wants to understand what the thought process is.
13		this time?	14		
	۸				So I want to understand, at what stage did 2Excel
14	Α.	Because Southend's weather was out of limits for	15		determine that the weather that night would prevent them
15	^	the Panther aircraft.	16		from completing the taskings?
16	Q.	So it's a problem with the weather at Southend; is that	17	Α.	So, at 23:50 — sorry, 22:50, the email you just showed,
17	_	right?	18		the decision had been made not to fly the Navajo because
18		Yes.	19	_	it couldn't go.
19	Q.	We're looking at the time here, we can see this is	20	Q.	Is that the Navajo or is that the Panther, the first
20		22:53. The take—off for the first flight was planned	21		flight?
21		for I think 11.30?	22	Α.	The Navajo and $$ and/or the Panther. So it was

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the Navajo until the Panther came up, but we can't

actually pinpoint exactly what minute that happened, we

just know it happened in that evening. So the transfer

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A. Yeah.

the Panther flight?

Q. Is it right that that first flight did not happen,

2 but the Panther couldn't go either. So the Panther 3 couldn't go at 11.30, so the first wave of the plan 4 couldn't go. At this stage -- and that was the -the cancellation because of Southend out of limits. 5 That's part of the story, that's -- you know, there's 6 more to that -- that -- that story. The -- the King Air was still there, still hoping to 8 9 be able to go if the weather permitted it, but it 10 couldn't get airborne either, not actually because 11 the weather in the area, but because of the diversions 12 which meant that it couldn't -- it couldn't go to 13 Southend and know that it was going to be able to get 14 in, so it couldn't get airborne because it couldn't 15 necessarily land at Southend. If it couldn't land at 16 Southend, it had one diversion to be able to go to. 17 which was Brize Norton, but the whether was so bad 18 around the whole country we needed two diversions to be 19 able to go to and we couldn't find a second diversion. 20 So --2.1 Q. Is this right, Mr Norton. The problem with the first 22 flight was the weather at Southend? 2.3 A. And -- and the diversions. 2.4 Q. And then the problem with the King Air was really

from the Navajo to the Panther was that -- that evening,

the diversions rather than the weather; is that right? $\begin{tabular}{ll} 45 \end{tabular}$

1 A. It was the same problem for both --2. Q. Right, it was a combination --3 A. -- the problem was -- was the consistent problem. It wasn't -- it wasn't -- the weather at Southend was 5 really bad. Southend was the place we were planning to go and land. Even if you -- even if you might -- you 6 7 might be lucky and you might get in to Southend, but if 8 you couldn't get in, you needed to have somewhere to go. 9 Because the weather was so bad around the country. 10 the weather meant we -- the rules that we obey meant we 11 had to have two diversions, and we could find one in 12 Royal Air Force Brize Norton, but we were not able to 13 find another, or we were not able to secure another. We 14 could find another, it was called Manchester, but they

wouldn't accept us as a diversion . So we were then unable to get airborne because we didn't have a legal place to land, or enough legal places to land. That was the reason we couldn't go. This — this discussion, which is more discussions about, you know, what could we do if we were there, sort of thing, there's lots of pre — presuppositions, because the pilot is looking at the weather for his whole mission, but the constraint was we didn't have the diversions to be able to get airborne.

Q. Understood. I think let's look at what Mr Lugg says.

And where it says "2Excel pilot" there, that's Mr Lugg.

A. I don't think it is, actually.

3 Q. Oh, forgive me, no, that's the pilot and Mr Golden.

4 That's my error, apologies.

5 A. Yes

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6 Q. So the pilot says here:

"Our issue, we're looking at the weather here and all the forecasts are showing the fog that is over France at the moment, is going to be creeping north over the next couple of hours."

Dominic Golden says:

12 "Yeah."

And he says:

"... it's all layered cloud, so we would be safe to
fly, but I think there's going to be a layer of cloud
beneath us, IR camera won't be able to see through as
soon as it hits ..."

So, is it right, it was safe to conduct the flight?

19 A. It was safe to fly.

20 Q. Safe to fly. What's the difference?

21 A. You couldn't find a place to land.

22 Q. I see.

And in terms of what the pilot could see using equipment and using their eyes, I suppose, the IR camera wasn't able to penetrate through fog?

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1 A. No.

2 Q. What about other equipment on board?

3 A. The radar would be able to see through the cloud.

Q. So the plane, if safe to land, could have flown and usedradar to look at the Channel below?

6 A. The King Air could. The King Air could.

7 Q. But not the Panther?

8 A. Because it doesn't have a radar.

9 Q. Because it doesn't have a radar. Understood.

Could we turn to page 4 of {INQ007824} of this
document, please. So we can see here the conversation
continues, and right down the bottom, we have a comment
from the pilot saying:

"9 o'clock is starts to break again, and then we'll definitely be able to see. My current train of thought is if I get airborne, I'm going to be wasting four or five hours of flying because Doncaster has ... got a NOTAM with the runway closing tonight."

Can you tell us what a NOTAM is?

A. NOTAM stands for Notice to Airmen, and it's a warning of
 some constraint which air crew need to be aware of

because it would affect their flying .

23 Q. And who is it issued by?

24~ A. The NOTAM is -- is issued -- so the person who knows

25 what the constraint is going to be sends it to -- to --

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the night. He says:

- 1 they issue it, or they write it, and then it's put on 2 a system such that everybody can see it. 3 Q. And how is it seen by 2Excel? How is it communicated? 4 Is it through a central software system? A. Yeah, yes, effectively it's a software system whereby 5 you check the NOTAMs, and there is a place to go to to 6 7 check NOTAMs; they're all published and you read them. 8 So it's a -- you pull the data, but the data is pushed 9 by the person who knows what the constraint is. That 10 could be an airfield, it could be an air crew, it could 11 be the military, it could be civilian, it could be 12 anvone 13 Q. And is that something that 2Excel needs to proactively 14 monitor, that system, or are you getting notifications 15 and alerts? A If -- if the person who's -- who understands what 16 17 the constraint is going to be knows that it's going to 18 affect people, they might buck the system, if you like, 19 and warn you of it, but you have to pull the data. So 20 you go somewhere and you check the NOTAMs. 2.1 Q. Could we turn over to the next page, please, 2.2 $\{INQ007824/5\}$. We can see Dominic Golden responding: 2.3 "Yeah, of course it is . Yeah ... I suppose down 2.4 south ... as I said, the weather over land is what 25 Southend, they're getting worse ... they're all shutting 49 1 down, aren't they?' 2 And he says: 3 " ... I'm happy with that. I just wanted to gauge 4 5 Then we have some comments from the pilot, again
- 6 explaining the reasons why the tasking couldn't be 7 completed: 8 "My other concerns as well are available airfields 9 for diversions. 10 Which you've mentioned to us. And Dominic Golden 11 says: 12 "Yeah ... that's only going to get worse." 13 And the 2Excel pilot says: 14 "Getting worse and going out of limits ... 15 Manchester is the only one that is legally within limits 16 but it is classed as a diversion ... " 17 And then there are some words that can't be heard on 18 the transcript. That reflects what you were telling us, 19 doesn't it, about the restrictions on airfields being 20 actually the real reason why 2Excel couldn't complete 21 the flight that night? 2.2 A. Yeah. 23 Q. Can we go to page 7 of {INQ007824}, please.

Dominic Golden, in that second entry, makes a comment,

essentially, about the planning and the arrangements for

5 that we're always going to get aircraft, and they're always going to give us the recognised maritime picture 6 7 ... you know, life's a good one. And surprise surprise 8 ... the plan doesn't always work. So what's our plan R?" 9 10 He asks. And here, we don't actually have an answer 11 there to that question, "What's the plan B"? I wanted 12 to ask you. Mr Norton, was there a plan B? 13 I think we should be careful about conflating what the subject of that -- that is. So plan B, it's --14 15 I believe, the way I read that, that that's a rhetorical 16 question, because 2Excel is not going to be able to get 17 airborne and provide the -- the recognised maritime 18 picture. So, "What's our plan B" is not, "What can 19 2Excel do about it", it's, "What's my plan B". 2.0 I believe that's a rhetorical question. 2.1 Q. Understood. But I want to know from you, did 2Excel 22 have its own plan B, a back up for a situation where it 23 couldn't fly like this? 2.4 If we can't fly, we can't provide the picture. As -- as 2.5 I said at the -- at the front of this, we're part of 1 a system where we provide a capability and there are 2 other people who can provide similar or supplementary 3

" ... I think there's an element here of, I think

not got lax but we've dropped back into the assumption

people were thinking, dangerously to put it ... we've

capabilities to help provide the recognised maritime picture. In this particular case, we had two different 5 aircraft types. We had a plan to forward deploy in 6 order to avoid the NOTAM, so our plan was to go to 7 Southend so that we could continue to fly and we would 8 be forward deployed. From -- our plan was then to land 9 back at East Midlands when it -- when it became fit, and 10 that would allow us to swap the crews over and continue 11 to provide the assets for -- for the amber day or 12 the red day. The -- so our plan was a good plan, 13 the best plan we could have, effectively, in 14 the conditions. But what stopped us flying was 15 the inability to be able to know that we would be able 16 to land, and that was down to the lack of alternate 17 airfields were we unable to get back into Southend, 18 which was forecast to be in and out of limits, but out 19 of limits or below limits such that we needed to have 20 a diversion. 21 So our plan was already: use two different aircraft 2.2 types to relieve in place over the whole VUL, landing 23 away in order to not be affected by Doncaster's closure

and use alternates which mean we could do it and be able to put the aeroplanes in right place to change the crews

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over when the crews ran out of hours as well, with a spare aircraft for both lines. So, if you like, we 2 3 put in place all of the things we could, but if we 4 couldn't get airborne, we can't provide a picture, and that -- that -- that was the problem. And I think 5 the rhetorical question is, "What's our plan B", was 6 7 a question, an internal question, which is, "I don't know, what's my plan B", and that could be other 8 9 providers, but it would have to be other providers 10 because 2Excel had tried everything that we could to be 11 able to get airborne.

12 Q. Thank you.

13 I do want to ask you a little bit more about 14 the NOTAM, if I can.

15

Q. Can we go back to your statement which is $\{INQ0010335/1\}$ 16 and page 19, please. We're looking at paragraph 86. 17 18 Mr Norton, you've very helpfully excerpted a section from the NOTAM here, we can see it in that box. We can 19 2.0 see the reference code and we can see the timing on 21 24 November. It says "Doncaster Sheffield", and it 22

"Closed due loading/unloading of dangerous air cargo 2.3 2.4 for up to date information contact the airport duty 25 manager."

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1 Is that the NOTAM you were talking about --

2. A. Yes

3 Q. -- when you were referring to --

4 A. Yeah.

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5 Q. -- Notice to Airmen coming in to 2Excel?

Could we go, please, to $\{INQ0006338/1\}$, which is the record showing the different NOTAMs on the night. That might be a native file that needs to be brought up on screen, if we just pause for a second.

We can see there, Mr Norton, is that a spreadsheet showing the different NOTAMs that came in in that period? So we can see it runs from 8 November through to 30 November 2021. If you look at the highlighted rows there, we can see coming in 23:36 on 23 November 2021, we can see NOTAM, "[Runway] 02/20 closed due loading/unloading of dangerous air cargo."

Is that that NOTAM coming in?

18 A. That's correct.

19 Q. If we then go down below an entry to the one that in column C is labelled "1825", it again says: 2.0

> "[Runway] 02/20 closed due loading/unloading of dangerous air cargo ... '

Then it says NOTAM cancelled, and that's timed at 23:41. Does that mean that the NOTAM above it was in fact cancelled that night at 23:41?

1 A. It's quite confusing, and I think what that refers to is

the 04:30 NOTAM. So what they did was they changed

3 the times. So there was a NOTAM saying 4.30 to 8.30,

4 which was cancelled, and a NOTAM that was then moved.

5 the times came forward by one hour by 3.30 to 7.30,

which is what happened. And subsequently, at about 7 6.30, they actually cancelled the NOTAM because they'd

8 finished the work. So the NOTAM itself, which referred

9 to 4.30 to 8.30, was cancelled, but there was another

10 one in place that said now 3.30 to 7.30.

11 Q. So it's this right, the first highlighted entry is the

12 change in timings? That is its own NOTAM identifying to

13 others that the timing of the runway opening has

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15 A. That's -- that's my understanding, yeah.

16 Q At 4 30 on 24 November?

A. Yeah 17

18 Q. Then below that we can see a separate entry at 23:36, 19

which is the runway closed all together; is that right?

20 That's the second highlighted entry?

2.1 A Yeah

22 Q. So 1825 below that, highlighted now on the screen, is

the cancellation of the first highlighted entry, not 2.3

2.4 the cancellation of the closure of the runway?

2.5 A. Correct. That's what I understand.

 $\ensuremath{\mathsf{Q}}.$ And looking then to the entry below that at 6.43 in 1

the morning on 24 November, is that the cancellation of 2

the actual NOTAM itself?

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5 Q. So the runway remained closed throughout the night of 6

24 November up until 6.43; is that right?

7 A. That is our understanding, yeah. So the NOTAM closures,

you have to cancel the NOTAM, but effectively they 8

9 brought the times forward by one hour, so they closed 10 the airfield at 3.30, not 4.30, and that's what -- and

11 therefore they cancelled the NOTAM that said 4.30 in

12 order to be able to have the extant NOTAM which said

13 3.30 to 7.30, and then they closed that one, they

cancelled that NOTAM at 6.43, so then the airfield's 14

15 opening again.

16 Q. Okay. And when the airfield's opened again at 6.43, did

17 that mean that the position had changed and 2Excel was

18 now able to fly and complete the tasking?

19 A. So from a weather perspective, 2Excel became able to fly

at 4.54 in the morning. So the weather got -- improved,

21 and at 4.54 in the morning the weather was fit, but

2.2 unfortunately the aeroplanes were all locked into

23 a closed airfield. And at 6.30 we could have gone

2.4 flying $\,--\,$ sorry, 6.43, the NOTAM was closed. There

25 would have been a reaction time for us to -- you know,

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- we weren't expecting it to be closed then, and by that stage, we'd had the discussion with the ARCC saying we
- 3 can't fly, so the next tasking we have is 717, I think
- 4 it was, the tasking that started at 8 o'clock in
- 5 the morning.
- $6\,$ $\,$ Q. So at 6 in the morning, 6.43, that entry that's
- 7 highlighted now --
- 8 A. Yeah.
- 9 Q. -- that was the earliest time on the night that 2Excel
- 10 could have stood up its aircraft and become available to
- 11 fly with of course some lead time --
- 12 A. Yeah.
- 13 Q. -- to be able to take off; is that right?
- 14 A. Yeah, when the NOTAM was cancelled.
- 15 Q. And at that stage the weather was fit for flying?
- $16\,$ $\,$ A. As far as I can tell , the -- the weather forecasts
- 17 became fit at 4.54. That's the first forecast that's --
- 18 that you could have got airborne at.
- 19 Q. And at that stage there was an hour or so left of
- $20\,$ $\,$ the Op EOS tasking. Did you consider flying to work on
- $21\,$ $\,$ that tasking for an hour, or at that stage, what was
- 22 the decision made?
- 23 A. So I don't -- I don't -- the -- the NOTAM was cancelled,
- but we didn't know that was coming. So we were still
- planning for 7.30 NOTAM being cancelled. People were

- still there, people were still at work, but they were
- 2 coming to the end of their flight time limitation, so
- 3 effectively you were now looking at crew changeovers
- 4 into the next crews, and so once the -- once
- 5 the aeroplane is effectively -- the tasking has
- 6 effectively been —— we can't get airborne for 3 o'clock,
- 7 then we're now looking at the next sortie which was
- 8 planned for there or thereabouts, 7.30/8 o'clock in the
- 9 morning.
- $10\,$ Q. Understood. And that's the tasking we looked at
- 11 earlier, the Op EOS tasking that followed on I think
- from 8.30 formally in the morning?
- 13 A. Yeah.
- 14 Q. In your statement you talk about other airports
- available as diversions during the night?
- 16 A. Yeah.
- 17 Q. Can I understand, if another airport had been available
- 18 as a diversion, could 2Excel have flown, or would you
- still have had the problem of the aircraft being shut in
- 20 an airfield?
- $21\,$ $\,$ A. After 3.30, when the airfield was closed, you couldn't
- 22 get airborne.
- 23 Q. Right
- $24\,$ $\,$ A. Even though the weather was fit. Had we got airborne
- before 3.30 because the weather was fit, we could have

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- 1 flown -- sorry, the weather was fit at the diversions,
- 2 then we would have been able to fly.
- 3 Q. So the aircraft could have physically left prior to 3.30
- 4 had there been a diversion available?
- 5 A. Correct.
- 6 Q. Once we hit 3.30 and the NOTAM was issued and the runway
 - closed, there was no way for the planes to get out; is
- 8 that right?
- A. Correct.

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- 10 Q. In your statement you talk about alternative aerodromes.
- I don't think we need to go to the specific section, but
- 12 you list a number of them as being weather unfit,
- Gatwick, Stansted, Heathrow, for example. How do you
- determine whether an airfield is weather unfit on
- 15 a given night?
- 16 A. In simple terms, it depends on the visibility at that
- 17 airfield and the cloud base compared to the number of
- pilots and the automatics and the approach aids that are
- 19 available between the aircraft and the -- and
- 20 the airfield, in simple terms.
- 21 Q. Is that something that's assessed on an ongoing basis?
- 22 A. Yeah.
- 23 Q. It's kept under review --
- 24 A. Yeah.
- 25 Q. -- through the night by persons at 2Excel?

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- 1 A. Yeah
- 2 Q. Okay
- 3 In your statement you talk about East Midlands as
- $4\,$ a potential alternative and you say it wasn't an airport
- 5 that had limitations on category 1 ILS landing and it
- 6 was potentially available for that reason. Can you help
- 7 us with why East Midlands couldn't have been used as
- 8 the diversion on the 23rd/24th?
- 9 A. So, at the time when -- so on the 23rd and the morning 10 of the 24th --
- 11 Q. Yes
- 12 A. it was out of limits because the aids at the airfield
- and the aircraft trying to come in and the limitations
- of the regulations meant that the minimum height that
- the aeroplane could get down to and the minimum
- visibility that it -- the pilot was allowed to use, were
- 17 that you were allowed to use with the sensors with
- 18 the aids at the airfield , was above the limits of
- 19 the weather. So that the weather was worse than
- $20\,$ the minimum height and the minimum visibility you could
- 21 go to.
- 22 Q. So, again, it was a problem with the weather at
- 23 East Midlands
- 24 A. Yeah.
- 25 Q. Not anything else to do with its acceptance of different

- 1 categories of flights?
- 2 A. No
- 3 Q. It was purely to do with the suitability of the weather 4 at that location?
- 5~ A. So -- so there are -- there are particular aids, that's
- 6 approach aids, at an airfield . They have limits, so
- 7 that may be the type of aid may have a type of --
- 8 a height minimum that you're not allowed below or
- 9 a range that you're not allowed to get close --
- visibility you're not allowed to have, and in the case
- of East Midlands, until the next morning, the weather
- 12 was not fit to be used.
- $13\,$ $\,$ SIR ROSS CRANSTON: Ms Woods, I'm going to have to give
- 14 the transcript writers a break at some stage.
- 15 MS WOODS: Of course.
- 16 SIR ROSS CRANSTON: How much longer do you have?
- 17 MS WOODS: Sir, I think I have five more minutes.
- 18 SIR ROSS CRANSTON: In that case, we'll --
- 19 MS WOODS: If it won't impose too much on the transcript
- $20\,$ writers, then I think I can wrap up before a break.
- 21 SIR ROSS CRANSTON: Okay, good.
- 22 MS WOODS: Thank you very much.
- 23 Mr Norton, you told us earlier about difficulties at
- 24 Manchester and its willingness to accept certain
- 25 categories of flight . Can you tell us what the problem

- 1 was on that evening?
- 2 A. So the -- the weather was fit at Manchester, so we could
- 3 have used Manchester as a legal diversion, and we
- 4 requested that, but that request was rejected, and
- 5 the reason that we were given is because of staffing
- 6 limitations due to the post—COVID impact.
- 7 Q. So it was because of the post—COVID staffing available
- 8 at Manchester itself?
- 9 A. Yeah, so it was the Manchester staffing.
- $10\,$ Q. In certain circumstances, airfields are required to
- 11 accept flights if they fall into a certain category.
- Are airfields required to accept Category B flights?
- Perhaps I can frame that in a different way.
- When asked about potential changes for the future to
 assist in facilitating aerial support for search and
 rescue in the Channel, 2Excel said to the Inquiry team
- that currently airfields are not compelled to acceptdiversion requests from SAR aircraft, search and rescue
- 19 aircraft, on Category B taskings; is that right,
- 20 Mr Norton?
- 21 A Yeah
- 22 Q. Was that an issue on the night? Was that part of
- 23 the issue to do with Manchester?
- $24\,$ $\,$ A. So we could not compel them to accept us.
- $25\,$ $\,$ Q. Are there circumstances in which you can compel an

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- airfield to accept a flight?
- 2 A. If you have a -- a Mayday, so an emergency, or
- 3 particular categories of tasking, you may be able to
- 4 compel them, but at the time we would -- we were unable
- 5 to compel them.
- 6 Q. But ordinary search and rescue taskings, so an Op EOS
 - proactive surveillance search and rescue tasking was not
- 8 in the category of flights which were —— airfields were
- 9 compelled to accept; is that right?
- 10 A. That's correct.

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- 11 Q. Is that still the case now?
- 12 A. I don't believe that the categorisation of the flights
- 13 has changed. That -- that is a tasking, as opposed to
- 14 something that we would -- we would be able to say.
- $15 \hspace{1cm} \hbox{The $--$ but what we have done in $--$ to cover this}$
- $16 \qquad \text{ eventuality } -- \text{ and, again, as a learning from } -- \text{ from }$
- $17 \hspace{1cm} \hbox{this event $--$ is put in place with all of the major} \\$
- airfields an agreed acceptance for our -- for us to be
- 19 able to use them as a diversion. So all the major
- airfields that will be open at night, you know,
- Heathrow, Gatwick, etc, then we've put in place
- 22 a pre-prepared, you know, if we -- if we ask you to be
- $23\,$ a diversion , we don't need very much from you, but we do
- 24 need to be able to come and use you to land.
- 25 Q. And that wasn't something that was in place --

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- 1 A. No.
- 2 Q. -- prior to 23 November 2021?
- 3 A. No, it wasn't.
- 4 Q. Can I ask when that came in, roughly speaking?
- 5 A. To be honest, it's been successive airfields, we've had
- $\,\,$ 6 to negotiate with each airfield . Heathrow only accepted
- 7 that a few weeks ago.
- 8 Q. And if 2Excel had been able to compel Manchester to
- 9 accept it as a diversion airfield on the night of
- the 23rd to the 24th, could 2Excel have flown that night
- and used its radar over the Channel?
- 12 A. The King Air could have flown that night had we been
- able to have two diversions, and the Navajo could have
- 14 flown that night, but it wouldn't have had a radar.
- 15 MS WOODS: Understood.
 - Thank you very much, Mr Norton. Those are all my
- 17 questions for you.
- 18 Thank you, Chair.
- 19 SIR ROSS CRANSTON: I think we might like to know the full
- $20\,$ list , though, of the airports where you have made those
- 21 successful negotiations. Not now --
- 22 A. Okay

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- 23 SIR ROSS CRANSTON: —— but at some point subsequently.
- 24 I think that would be quite helpful.
- So, Mr Norton, thank you very much indeed for both

the statement and also the evidence you've given this 1 A. That's correct, yes. 2 morning. Extremely helpful, and you're now free to go. Q. Thank you. 3 But we'll have a ten-minute diversion -- ten-minute3 In terms of the services provided by Bristow, in 4 break, and I have to, because the usher always wants 4 your witness statement you explain to us that there are a specific time, so we'll say .25 to 12. Thank you. 5 5 two types of services provided to the Coastguard: (The witness withdrew) helicopter search and rescue and dedicated patrols to 6 6 7 (11.25 am) 7 enhance situational awareness. Can you just take us 8 (A short break) 8 through the differences between those two types of 9 (11.37 am) 9 services, please? 10 SIR ROSS CRANSTON: Well, good morning, Mr Hamilton. In 10 A. Yes, the -- the latter came towards 2021, when we were a short moment, Rekka Hollos is going to ask you some 11 11 asked to provide an overwatch system, but our primary 12 12 questions, but first of all, could you read role from 2015 to 2021 was search and rescue activities. 13 the affirmation? 13 which can be broken down into search and then rescue. 14 GRAHAM HAMILTON (affirmed) 14 The overwatch facilities that we then provide are where 15 Questions by MS HOLLOS 15 we had aircraft that would fly along beaches to give ${\sf MS\ HOLLOS:}\ {\sf Good\ morning,\ Mr\ Hamilton}.$ 16 16 a presence, give the Coastguard situational awareness. 17 17 Could you give the Inquiry your full name, please. Or other emergency service, police, for example, if they 18 A. Graham Douglas Hamilton. 18 wanted to understand if there was flood protection 19 Q. Thank you 19 breaches, we would take them up in the aircraft and 20 Now, Mr Hamilton, you are currently the director of 2.0 allow them to radio back to their bases. Then latterly, 2.1 UK search and rescue for Bristow Helicopters Limited, 21 from 2022, we introduced the uncrewed air system. 22 a company I think you describe as a $\mathsf{UK}-\mathsf{based}$ civil 22 Q. Now, in terms of the search and rescue aspect of 2.3 23 helicopter operator; is that right? the services that you provide, you've outlined in your 2.4 2.4 statement, and if we could bring it up, please, it's A. That's correct, ves. Q. You've made a witness statement to this Inquiry which 2.5 {INQ010336/5} and paragraph 3.6. You've identified for 67 1 was signed on 3 December 2024 and runs to 25 pages? 1 us four categories of taskings: rescue or recovery; A. That's correct, yes. 2 2 search; pre-arranged transfer; and support. Are these 3 Q. Thank you. 3 all delivered under the search and rescue contract or 4 Now, although you're currently the director, I think 4 are they also part of the overwatch services that you've 5 you in fact joined Bristow back in June 2015 as 5 described? the safety and compliance manager for search and rescue. 6 A. No, these are all search and rescue activities under the 6 7 7 You were then promoted to deputy director of search and contract 8 8 rescue in 2019, and finally director in 2022; is that Q. And earlier, when you said you can divide search and 9 9 right? rescue into search and rescue is that because of the two 10 A. That's right, yes. 10 types of categories of tasking that you can have, as 11 Q. Could you briefly just explain for us your 11 you've set out here? 12 responsibilities as the director of search and rescue? 12 A. Yes Q. Thank you. We can take that down please. Thank you. 13 A. So my role is mainly accountable to 13 the Civil Aviation Authority to ensure that 14 14 I'd like to come, please, on to the process by which 15 15 the regulatory standards for the aviation activities Bristow aircraft are tasked by the Coastguard, and 16 that we undertake are met, and that's from engineering, 16 you've set out the process for us at paragraph 3.9 of 17 your statement {INQ010336/6}. In summary, a call comes flight operations, training, through to our ground 17 18 operations, our fuel requirements, our cadetships, to 18 in from the Joint Rescue Co-Ordination Centre to 19 ensure that we meet the civil flight regulations, but 19 the relevant Bristow base, that telephone line is manned 20 2.0 also the emergency CAP 999 regulations, which allow us 24/7, the JRCC passes information about the tasking to 21 21 to operate search and rescue aircraft outside the normal the Bristow crew, who can then either accept or decline

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Q.

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contracts with the government, including the search and

Q. And you are also I think responsible for Bristow's

rescue contract with the Coastguard?

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When the call comes in to the relevant Bristow base

the tasking. Is that an accurate summary?

That's an accurate summary, yes.

Thank you.

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aviation airspace.

1 from the JRCC, is any record made by Bristow of 2 the instructions given in relation to the tasking? 3 A. When the tasking's accepted, yes, the information is transferred to the pilot's $\log.$ But then information 4 5 will be updated as the aircraft goes on task. So the the initial information will be very scarce, it would 6 have location information, the type of rescue they're 8 expecting or search activity to be conducted and 9 typically the crew will then ask for more information, 10 weather conditions at the site, et cetera. And then 11 once they've accepted a task, they will then man 12 the aircraft and more information will be transferred to

the aircraft. That will all be recorded on the pilot's

- Q. What happens if a tasking is refused? Is any record made of the reason for the refusal of the tasking?
- 17 A. Yes, there is, ves.
- 18 Q. And where is that recorded?
- 19 A. That's recorded in our electronic system called iSAR.
- 20 Q. And who records that information in iSAR, the JRCC or 2.1 Bristow?
- 22 A. Bristow.

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Q. Now, we've discussed the possibility for taskings to be
 either accepted or refused, and in your statement you
 give us two examples of reasons why a tasking might be

- refused: if it's better suited to another base, or if the crew have just returned from another task. On what other grounds might a tasking be refused?
- other grounds might a tasking be refused?

 A. It could be weather, it could be out of range for
 the aircraft. Sometimes it won't be refused, it will be
 delayed while —— say, it's a shipping vessel. It may be
 at the extreme range of the aircraft. By giving it
 another 30 minutes or an hour, so the ship will have
 moved closer and we'll be able to reach it, and the ——
 conduct a search —— or a rescue operation for longer on
 site.
- 12 Q. You've mentioned "out of range". What do you mean by 13 that?
- 14 A. So the aircraft have a range of 240 nautical miles. If 15 a vessel was at 240 nautical miles, we would have very 16 little time to be on task, as we would say. To be 17 sitting above the ship, five minutes, that would be very 18 difficult, to rescue somebody or pull somebody from 19 the deck, so sometimes we'll wait for the ship to get 2.0 close so we can spend longer, half an hour, for example, 21 in the hover, to allow medics to go down, treat 2.2 the casualty and bring them back up to the aircraft.
- Q. You've also mentioned the possibility of taskings being delayed. What intervals of time can you delay a tasking
 - up to before you decide: actually, this isn't feasible

1 we need to refuse?

- A. That would be an ongoing conversation with JRCC.
- 3 $\,$ Q. I'd like to, please, come on to the types of assets that
- 4 are available for tasking for search and rescue by
- 5 Bristow. You explain at paragraph 2.3 of your statement
- $6 \{INQ010336/3\}$ that Bristow operates two types of search
- 7 and rescue helicopter: the Sikorsky S-92 and
- 8 the Leonardo AW189. Are both of those types of
- 9 helicopters designed to operate in challenging, adverse 10 weather conditions at sea, whether day or nighttime?
- 11 A. Yes.
- 12 Q. Is there any practical difference between their 13 capabilities?
- 14 A. Just their size
- 15 Q. And does their size affect passenger load?
- 16 A. Yes, the number of passengers you could carry.
- 17 Q. And does their size also affect their endurance?
- $18\,$ $\,$ A. The S92 has a longer endurance; it can go out to 240 $\,$
- 19 nautical miles and stay on station for 30 minutes, but
- $20\,$ $\,$ to do that, it has to -- it's required to have internal
- 21 fuel tanks, which takes up space, so you're -- you're
- 22 balancing one off against another.
- 23 Q. Is one or the other type preferred for the conduct of
- 24 search and rescue in the Dover Strait?
- 25 A. The 189 would be the preferred; smaller, more agile.

7

- 1 However, the 92 is just as capable of operating there.
- 2 Q. In terms of the technology available on board, you've
 - helpfully set out this in paragraph 6.9 of your
- 4 statement. If we could please bring up {INQ010336/16}.
- 5 A. Yeah, I see it.

3

- 6 Q. So you've listed here for us a range of technology
- 7 available on board both assets.
- 8 If we could go over the page, please,
- 9 {INQ010336/17}, what I'd like to come on to is your
- identification of the equipment or technology that's
- best suited or of most assistance for conducting search
- and rescue where what you are looking for are persons in
- 13 the water.
- 14 A. Mm-hm.

2.0

- 15 Q. If we could go over the page, please {INQ010336/18}, and 200m in on paragraph 6.10.2.
- So you've identified here for us four types of
- equipment that I'd like to go through with you.
- The first of those is "Night Vision". Briefly, can you
 - just explain for us how night vision operates?
- $21\,$ $\,$ A. Yes, so the Night Vision system is what you see
- 22 the military helicopter fly with. It's focal tubes that
- go in front of pilot's eyes, focused at infinity. Each
- $24\,$ $\,$ pilot sets them up for their own eyesight before they go
- 25 flying . They are still limited in that you need ambient

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- 1 light, so you need moonlight or -- or --
- 2 Q. Moonlight?
- 3 A. Moonlight, yeah, or other lighting from ships/vessels to
- 4 give you some reflective for them to enhance that
- 5 lighting, and it increases your -- your visible -- what
- 6 you can see at night, so it gives you better enhanced
- 7 visuals at nighttime, not during the daytime.
- $8\,$ Q. You've mentioned one restriction on their effectiveness ,
- 9 which is the need for some level of ambient lighting?
- 10 A. Yeah.
- $11\,$ Q. What other elements might affect how effectively they
- 12 can be used to detect persons in the water?
- 13 A. Mist, fog. Same as your normal eyesight.
- 14 Q. What about the sea state?
- 15~ A. Sea state -- the sea state, no different to your -- your
- normal eyes, a target can disappear with the waves, so
- 17 it's very little different between night vision and --
- and your normal eyesight in the day.
- 19 Q. Does that same analysis apply for the size of the target
- that you're looking for? No different whether you're
- $21 \hspace{1cm} \hbox{looking through night vision or with your normal eyes?} \\$
- A. Slightly harder with night vision; you have to really focus in on the target to see a shape. But once you
- focus in on the target to see a shape. But once you see the shape, you can normally build the picture very
- quickly. It's very granular green picture, it's not --

- 1 it's not like sitting in this room.
- 2 Q. It's not perhaps the cinematic experience --
- 3 A. No.
- 4 Q. we're familiar with from TV?
- 5 A. N
- $\ensuremath{\mathsf{Q}}.$ The next item of equipment that you've identified for us
- 7 is "FLIR", which I think is forward—looking infrared?
- 8 A. That's correct, yes.
- 9 Q. Can you just explain how that works for us?
- $10\,$ $\,$ A. So it's a forward—looking infrared camera fitted to the
- $11 \qquad \hbox{nose of the aircraft that's trying to pick out infrared} \\$
- $12\,$ radiation bands. You can use it during the day, but at
- 13 night it's much more effective. It's also got normal
- camera vision on there. So, typically, what the crews will do is use the infrared function to pick out heat
- signatures in the water, especially if you're looking
- for people in the water, you're trying to look for that
- decaying heat signature, and then as they get —— once
- they've identified it, they'll switch to the normal TV
- 20 camera to see, to try and pick it out, to pick
- 21 the target out a bit bigger.
- $22\,$ Q. Is it right that, essentially , the way it works is by
- looking for the differences in heat output between --

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- 24 A. Yes, it's the emissions.
- 25 Q. It's the emissions?

1 A Vool

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- 2 Q. How does the length of time that a person is in
- the water affect the act of the forward—looking infrared to detect their presence?
- 5 A. So your main body will not show up, because your body
- 6 will be under the water, so it will be your head or any
 - exposed part. If you've got a life jacket on your
- 8 chest, it will be coming out of the water. But as --
- $9\,$ $\,$ the long you're in the water, your heat signature decays
- naturally, because the water's cooling you.
- 11 Q. And if your heat signature decays and becomes closer to
- 12 the temperature of the water, does that reduce
- the ability of the forward—looking infrared to detect?
- 14 A. Yes. And wave height as well. You can disappear behind
 a wave and it won't see you, so ...
- 16 Q. The third piece of equipment is search lights and --
- 17 A. Yes, so the search lights, they -- they help us.
- 18 Previously, we talked about the ambient light it
- 19 requires. They can flood the area with light levels
- that enhance the goggles. Typically, they're very
- 21 helpful for -- we can control them, so we can send them
- in different directions. If we're looking, typically,
- for people with life jackets on, of course, they've got
- 24 reflective tape and that sometimes gets caught when
- 25 the search light flashes across them; where, if you've

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- $1 \hspace{1cm} \text{not got that, the search light $--$ you're still looking} \\$
- 2 into blackness and just trying to pick out something.
- ${\sf 3}$ ${\sf Q}$. And is the effectiveness of the search light affected by
- $4 \qquad \text{weather conditions such as fog?} \\$
- 5 A. Yes
- ${\sf 6} \quad {\sf Q}.$ Are there any other factors that would affect their
- 7 ability to assist?
- 8 A. With the search light?
- 9 Q. Yes. At nighttime.
- $10\,$ $\,$ A. No, it's primarily weather would be the big factor.
- They're very powerful lights . They've got almost half
- 12 a mile beam range.
- $13\,$ $\,$ Q. And finally coming on to radar. How effective is radar
- $14 \hspace{1cm} \text{at detecting people rather than vessels?} \\$
- 15 A. It's got very low probability of detecting a person.
- ${\tt 16} \qquad {\tt You'd\ probably\ detect\ something\ around\ the\ person\ first,}$
- 17 typically a vessel or an aircraft, which is what we
- 18 typically look for.
- 19 Q. And how effective is radar at detecting small boats
- 20 rather than large shipping vessels?
- 21 A. It's not very effective. They're made of rubber, so
- they don't give a good reflection, radar reflective
- 23 signature
- Q. Is the efficiency of the radar affected by weather
- 25 conditions?

- 1 A. It can be, yes.
- Q. In what circumstances?
- 3 A. It can be affected by just the atmospheric, so moisture. 4 Not so much fog and mist, but heavy rains can sometimes 5 affect the screening on the front of the aircraft, which 6 affects the reflecting that's coming into the radar 7 screen.
- Q. Thank you. 8

9 In terms of conducting search and rescue at night, 10 there are a number of other items of equipment that you've flagged at paragraph 6.10.3 {INQ010336/18}? 11

12 A. Yes.

2.4

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13 Q. Any of those that you would wish to point out for us, in terms of how it might assist at nighttime, over and 14 15 above those we've discussed?

A. They -- if we're talking about the Automatic Flight 16 17 Control System, this relieves the pilots of the pressure 18 of trying to fly at low level. It will keep 19 the aircraft at a set altitude and height, so they can 2.0 then focus on allowing an extra set of eyes to look out 21 the windows rather than having to concentrate on flying 22 the aircraft constantly. So they can just monitor 2.3 the aircraft around there.

> The other systems are there to -- to help the pilot, of warnings that he's about to find an oil platform, or

> > 77

a ship is about to come into range that they need to

The AIS Transponder, again, just identifies shipping that's got a transponder on, and it just shows up on their mappings so they get better situational awareness.

And the Mission Management System allows them to programme in search patterns, so the aircraft will carry them out automatically with the flight control system, relieving the pilot of the pressure.

10 Q. Thank you.

> I'd like to come, please, on to the endurance of the Bristow assets, and I think you've already discussed their range in terms of nautical miles. In your statement you describe their endurance as three hours with a 30-minute reserve?

16

17 Q. What are the factors that are capable of affecting their 18 endurance?

19 A. The weight of the aircraft, so the number of people you 2.0 put in the aircraft, the amount of equipment you carry 21 in the aircraft. The outside air temperature can affect 2.2 it, the air density can affect it, so the performance of 2.3 the engines. These are all factors that the crew are 2.4 aware of and they'll calculate that into their fuel burn 25 rates for the mission.

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1 Q. How would you compare the endurance of a helicopter to

2 a fixed-wing asset for conducting searches over

3 a prolonged period of time?

4 A. It 's -- a fixed—wing asset, theoretically, can stay up longer. But at the end of the day, we've got human 5 beings on our aircraft and four hours in a rotating 6

7 object is quite enduring on them.

8 Q. I'd like to come, please, then on to the increase in 9 small boat crossings --

10 A Mm-hm

11 Q. — and the impact on Bristow's work. Could we please 12 bring up the diagram from your witness statement, which 13 is at $\{INQ010336/8\}$, and if we could just zoom in on 14 that graph. Thank you.

15 You've set out here for us the taskings received by 16 Bristow in the Channel up to 23 November 2021, and save 17 for a slight decrease in 2019, there is a general 18 upwards trend up to 187 taskings in the first 11 months

19 A. Yeah

20

2.1 Q. What did you put the increase in taskings down to?

22 A. We knew this was linked to the small boats, but

23 the resilience within the system wasn't being stretched.

2.4 because we are -- we do use the aircraft as a system, so

2.5 each base will support the other base, they're not

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individual $\,--\,$ not individual air stations, but they 1

2 require Lee-on-Solent to cover Lydd, Lydd to cover

3 Humberside, Humberside to cover Lydd, etc. So we

weren't stretched; this was not causing us any problems

with our tasking rates. What it was causing problems 5

6 with was that we were using crews at nighttime, so we

7 were having to bring a second base on state in

8 the morning to cover off the Channel area.

9 Q. And did you experience any difficulties in identifying 10 additional crews that could be brought in in

11 the mornings?

14

2.2

12 A. We can't bring in additional crews because of

13 the regulations, so we bring -- we bring another base

down. So we used to bring Humberside down to Lydd, or 15 Lee-on-Solent across to Lvdd to cover that area of

16 the Channel, if we -- if we were required to.

 $\ensuremath{\mathsf{Q}}.$ Did the type of taskings that were issued to Bristow 17 18

during this time by the MCA change in nature at all?

19 A. No, they were search.

2.0 Q. Did you find that you were conducting a greater

21 proportion of search taskings as opposed to, for

example, the rescues, the pre-arranged transfers that

23 vou'd outlined for us earlier?

2.4 No, in Lydd's case, generally it's search and rescue;

25 they don't tend to do the transfers.

- $1\,$ Q. And is Lydd the closest Bristow base to cover
- 2 the Dover Strait?
- 3 A. Yes, it is, yes
- 4 Q. Can we please take a look at the map of Bristow's
- 5 taskings that you've outlined for us. It's page 12 of
- 6 $\,$ this same document {INQ010336/12}, and zoom in at that
- 7 map. Thank you very much.
- 8 This is a map of the taskings received by Bristow in
- 9 2021 in the Dover Strait. I presume that each of
- 10 the little orange circles denotes a tasking?
- 11 A. It's a location of a task, yes.
- 12 Q. It's the location of a task. Thank you.
 - Is this map broadly representative of
- the geographical spread of taskings in the years leading up to 2021 as well?
- $\stackrel{\cdot}{\text{16}}$ A. No, so the -- the top right-hand corner has got more
- activity than we had seen before.

 18 Q. What do you put that down to?
- 19 A. The small boats. That's all the small boats areas
- The main part of the Channel, from Eastbourne to
- Folkestone, was very similar to what we saw in previous
- 22 years.

- 23 Q. And so when you're saying "the top right-hand corner" --
- 24 A. So --
- 25 Q. -- are we looking roughly --

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- 1 A. -- so Dover --
- 2 Q. -- between Folkestone --
- 3 A. -- Dover --
- 4 Q. -- and Ramsgate?
- 5 A. Yeah, Folkestone to Ramsgate, yes.
- 6 Q. Thank you.
- 7 We can take that down. Thank you.
- 8 I'd like to come, please, on to Operation Ceasar,
- 9 which you describe as an operational awareness programme
- $10 \hspace{1.5cm} \hbox{that led to the introduction of dedicated} \\$
- 11 Channel aviation assets?
- 12 A. Yes
- 13 Q. What were the types of aviation assets that were
- 14 introduced as a result of Operation Ceasar?
- 15 A. So I -- I was only responsible for delivery, so I was
- given the contract change notices in my evidence pack;
- 17 I don't know what the build—up to that was. So
- 18 I delivered S-100 Camcopter helicopters, four of, and
- 19 DA62s, which are Diamond Aircraft 62 aircraft,
- 20 reconnaissance aircraft, two of.
- $21\,$ $\,$ Q. How did those additional assets help with
- 22 the situational awareness over the Channel?
- $23\,$ $\,$ A. So we were able to use those assets, and we still do, to
- $24\,$ do the search patterns, to provide the Coastguard with
- $25\,$ visual $\,--\,$ visuals of the small boats that are crossing,

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- 1 is the have -- is the small boat underway, do they have
- 2 life jackets on, how many people are on there, where -
- 3 what its location is in relation to the other assets
- 4 that are out there. Border Force, etc.
- 5 Q. So in effect you had more assets who were able to
- 6 conduct these overwatch patrols?
- 7 A. Yes.

13

- $8\,$ $\,$ Q. Now, in terms of timing, I think earlier in your
- 9 evidence to me you made reference to the overwatch
- 10 patrols commencing in 2021?
- 11 A. Yes, that's right.
- 12 Q. Is that separate to Operation Ceasar, which we
 - understand was implemented in the March of 2022?
- 14 A. That's correct. It was the build—up to that.
- 15 Q. So help us with the overwatch patrols then. Were they
- brought in pursuant to the same search and rescue
- 17 contract that we've been discussing?
- 18 A. Yes, they were just -- it wasn't even an amendment, we
- 19 were just tasked with more overwatch. We were asked to
- 20 move aircraft from different locations so that we had
- 21 more continuous cover. Especially if Lydd, for example,
- had been used through the night, we would bring
- Humberside down to cover Lydd. It didn't necessarily
- mean the aircraft weren't flying, it was just available
- 25 to be called on to the silver watch.

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- $1\,$ $\,$ Q. And you said 2021 is when these overwatch patrols began.
- 2 Do you know when in 2021?
- 3 A. No, I couldn't tell you.
- 4 Q. Now, separately then we have Operation Caesar, which is
- 5 March 2022, and the additional aviation assets we've
- 6 discussed?
- 7 A. Yeah.
- 8 Q. Does that mean that the additional assets were available
- 9 to be deployed from March of 2022?
- 10 A. From 1 April, yes.
- 11 Q. 1 April.
- 12 A. Yeah -- oh, in fact, sorry, no, it was 1 March it was
- signed, so, yes, they were. There was reduced numbers.
- 14 We only had two Camcopters. We had a DA62 that we
- borrowed -- that we used from another subcontractor in
- Belgium while we brought our own assets up to full
- 17 strength
- 18 Q. Now, the DA62 is a fixed—wing aircraft; is that right?
- 19 A. That's correct, yes.
- 20 Q. Was that still nonetheless operated by Bristow?
- 21 A. Yes. Yeah.
- 22 Q. And you've mentioned that initially there were reduced
- 23 numbers. When did the full complement of assets under
- 24 Operation Caesar become available?
- 25 A. So that would be the July of '22.

- Q. I think you've said in your evidence that you weren't involved in the lead-up to Operation Caesar, you just
- 3 received the contract change notice. If I were to take
- 4 you to Bristow's proposal to the MCA in relation to
- Operation Caesar, is that something that you would be 5
- able to speak to? 6
- 7 A. If it's about DA62s and S-100s, yes. If it's
- 8 about B62s, no.
- 9 Q. Less about the assets and more about the proposal 10 itself
- 11 If we could bring up $\{INQ008119/1\}$. Now, this is 12 a presentation entitled:
 - "English Channel Enhanced Situational Awareness.
- 13 14 "Bristow Proposal.
- "Version: 4.0 Final." 15
- Dated 26 November 2021. Is this a document that you 16
- 17 are familiar with?
- 18 A. Only through the evidence packs.
- 19 Q. Were you involved in its preparation at all?
- 20 A. No.
- 21 Q. You may not be able to answer this but let me try. If
- 22 we could go to page 3 of that document, please,
- "Requirement Assumption Overview". Are you able to say 2.3
- 2.4 whether or not this sets out the assumptions to which
- 25 Bristow was working to in relation to the proposal?

- A. Yes, these were. as we know they are the assumptions. 1
- 2 That's what we were briefed, yes
- 3 Q. That's what you were briefed?
- 5 Q. Can I just ask you please about the second bullet point
- and whether or not you're able to assist with that: 6
- 7 "HMCG lack situational awareness due to paucity of
- air assets and conflicting priority tasking." 8
- 9 Were you aware of any conflicting priority tasking 10 insofar as the tasking of Bristow assets by
- 11 the Coastguard was concerned?
- 12 A. Not of Bristow assets, no.
- Q. All right, thank you. If we could take that down, 13 14 please
- 15
- Coming, please, on to training exercises . At 16 paragraph 4.4 of your witness statement {INQ010336/11},
- 17 you describe attending a table top exercise on
- 18 4 November 2021, which simulated the capsizing of small
- 19 boats and you set out the lessons learned as a result.
- 20 Did Bristow participate in any other tabletop exercises
- 21 or live exercises in relation to small boat search and 2.2 rescue?
- 23 A. I'm not aware if we did, no.
- 24 Q. Would you find it helpful to do so?
- A. Yes, and I know we did, we were involved in deployment

- of life raft trials, etc. And we normally are, the MCA
- are normally very good at bringing us into
- 3 the tabletops, so ... But again, the previous director
- 4 may have attended though; it was not myself.
- Q. Thank you. 5

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9

- Coming, please, on to then the operation of 6
 - the search and rescue flights and in particular
- training . I understand from your witness statement that 8 Bristow crew members and pilots have to undertake
- 10 training and pass assessments in a number of different
- 11 competency areas before they can conduct search and
- 12 rescue operations: is that right?
- 13 That's correct, ves.
- 14 Do those competencies include search and rescue
- 15 techniques as set out in the Bristow Flight Operations
- 16 Manual?
- 17 A. Yes
- 18 Q. And do they also include search patterns and search
- 19
- 20 A. Yes
- 2.1 Q. Now, there's guidance on conducting search patterns and
- 22 search parameters in the IAMSAR manual. Is that
- a portion of the manual that you would expect your 2.3
- 2.4 pilots and crew members to be familiar with?
- 2.5 A. Yes, I would, yes.

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- 1 Q. In order to check that the crew members and pilots
- remain familiar with their competencies, there's an 2
- 3 annual competence check as well, isn't there?
- A. That's correct, yeah. As a whole crew, that is.
- 5 The pilots get checked every six months in the simulator
- 6 where we can put them through different training
- 7 tests /environments.
- 8 Q. And is it every single competency that is checked on an
- 9 annual basis?
- 10 Through the year, yes.
- 11 Q. Through the year.
- 12 Now, staying with the topic of search patterns. Who
- 13 determines the type of search pattern that a pilot would
- 14 follow on a search and rescue operation? Is it
- 15 the pilot or is it what we've come to know as
- 16 the controlling authority?
- 17 A. The controlling authority.
- 18 Q. And is that in all cases or can there be exceptions?
- 19 A. There can be exceptions, but it's very rare. Generally,
- 2.0 it's when the aircraft is on scene, they'll report back
- 21 that the weather conditions don't allow them to do
- 2.2 the search pattern and then they would change the search 23
- 2.4 Q. If the search pattern is set by the controlling
- 2.5 authority, can a Bristow pilot question those

- instructions or make alternative recommendations if they
- 2 don't feel that the pattern is the most appropriate or
- 3 the most effective?
- 4 A. They can, and they have those conversations before they
- 5 launch, ves.
- Q. Where they have those conversations, who does the final 6
- 7 decision rest with?
- 8 A. The controller
- 9 Q. Are Bristow pilots expected to be able to provide advice
- 10 on appropriate search patterns and track spacing to
- 11 the controlling authority?
- 12 A. Yes. they are.
- 13 Q. And are they expected to be able to select an
- appropriate search pattern and track spacing if that 14
- 15 decision hasn't already been made by the controlling
- 16 authority?
- 17 A. Yes, they would be.
- 18 Q. And where the search pattern and the track spacing has
- 19 been selected, that's what gets input into the mission
- 20 information system that you helped us with earlier?
- 2.1 A. That's correct, yes.
- 2.2 Q. Final topic from me, please, which are the taskings on
- 2.3 the night of 24 November.
- 2.4
- 25 Q. You've explained to the Inquiry that Bristow assets were

- 1 involved in four operations on the night of the 23rd to
- 2 24th November and using the tasking types we've
- 3 discussed at the beginning, these were all search
- operations?
- A. That's correct, yes. But any search can become 5
- a rescue. Any flight can become a rescue. So 6
- 7 the aircraft is capable of switching roles in flight.
- 8 Q. Did any of those four search operations become rescue 9 operations over that duration?
- 10 A. No, they were all search, and they reported back
- 11 positions of vessels to the controlling authority.
- 12 Q. Thank you.
- 13 You've summarised those different taskings for us at paragraph 7.2 of your statement {INQ010336/19}, but just 14
- 15 briefly, search and rescue 233/21, this was the tasking
- 16 of rescue 163 captained by Christopher Trubshaw and from
- whom the Inquiry will hear later today? 17
- 18 A. That's correct, yes.
- 19 Q. Search and rescue 224/21, this was a search for illegal 2.0 immigration activity in migrant search area Charlie?
- 21 A. That was rescue 175, wasn't it?
- 2.2 Q. Yes. What is "migrant search area"?
- 23 A. That's in the Coastguard's instructions, they've got
- 2.4 areas Alpha, Bravo, Charlie, Delta. It's specific
- 25 coordinate areas that the crews know to go and search

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- in. It allows to us control the different assets. So
- you can put asset -- different air assets, different
- 3 surface assets into different parts of boxes, basically,
- 4 boxes of airspace.
- 5 Q. Now, you wouldn't have been in the room at the time when
- Mr Norton gave his evidence, but we saw a map of 6
- 7 the Dover Strait broken into areas A. B. C. D. on the UK
- side of the median line, and E, F, G, H, on the French 8
- 9 side of the median line. Is that what the migrant
- 10 search areas are?
- 11 A. Yes, as far as I understand, yes.
- 12 Q. Thank you.
- 13 The third mission was search and rescue 234/21,
- 14 a tasking to multiple persons in the water who had
- 15 become separated from a small inflatable boat and who
- were located in the vicinity of French vessels? 16
- 17 A. Yes, that's right.
- 18 Q. And then search and rescue 235/21, which was a return to
- 19 the same general search area as the third mission --
- 20
- 2.1 Q. -- to conduct any further searches?
- 22 A. That's correct, yeah.
- 2.3 MS HOLLOS: Thank you.
- 2.4 Thank you very much, Mr Hamilton. Those are all my
- 2.5 questions.

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- 1 A. Okay, thank you.
- SIR ROSS CRANSTON: Well, thank you very much indeed, 2
- 3 Mr Hamilton. Your evidence has been extremely useful,
- so thank you very much.
- We haven't got Captain Trubshaw yet? No, so, what, 5
- 6 that's 2 o'clock? Okay.
- 7 Right, well, we'll pause until 2 o'clock. So thanks
- 8 very much.
- 9 (12.10 pm)
 - (The short adjournment)
- 10 11 (1.14 pm)
- 12 SIR ROSS CRANSTON: Yes, well, good afternoon, everyone, and
- 13 good afternoon in particular, Mr Trubshaw.
- 14 In a moment, Ms Onabanjo is going to ask you some
- 15 questions, but first of all, could you read
- 16 the affirmation.
- 17 A. Yes, sir
- CHRISTOPHER TRUBSHAW (affirmed) 18
- 19 SIR ROSS CRANSTON: Thank you.
- Questions by MS ONABANJO 2.0
- 21 MS ONABANJO: Thank you, Chair.
- 2.2 Good afternoon, Mr Trubshaw.
- 23
- 2.4 Q. Would you start by giving the Inquiry your full name,
- 2.5 please?

- 1 A. Christopher Trubshaw.
- 2 Q. You have made a witness statement for the Inquiry, which
- 3 you signed on 22 November last year, which runs to
- 4 15 pages; is that right?
- 5 A. I believe so, yes.
- 6 Q. Turning then to your role, you're employed by Bristow
 - Helicopters Limited, which I will call "Bristow" in
- 8 the course of your evidence, as a search and rescue
- 9 pilot; is that right?
- 10 A. That's correct, yes.
- 12 since 2015?

- 13 A. That's correct.
- $14\,$ Q. And prior to that, you had significant experience as
- a helicopter pilot . I note from your statement that you
- qualified in 1989 whilst in the Royal Navy?
- 17 A. Correct
- $18\,$ $\,$ Q. And you then left around 1996 and you subsequently flew
- for the police as a civilian pilot?
- 20 A. Correct.
- 21 Q. And you rejoined the Navy in 2001, where you stayed
- 22 until you joined Bristow in 2015?
- 23 A. Yes
- 24 Q. And you were the Captain of the search and rescue
- 25 helicopter with the call sign R163 on the night of

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- $1 \qquad \quad \text{the incident that the Inquiry is investigating} \, ; \, \, \text{is that} \\$
- 2 right?
- 3 A. That's correct.
- 4 Q. You mention in your statement that when you joined
- 5 Bristow, you completed an initial operational training;
- 6 that's correct, right?
- 7 A. Yes.
- 8 Q. And you also undertake recurring training with
- 9 competency assessments every six months?
- $10\,$ $\,$ A. That is a legal requirement under the terms of my
- 11 licence that I hold, yes.
- 12 Q. Thank you.
- 13 The director of search and rescue at Bristow has,
- 14 this morning, given evidence to the Inquiry and he
- confirmed that the training competencies include search
- ${\tt 16} \qquad \text{ and rescue techniques contained in Bristow's manual; is} \\$
- 17 that right?
- 18 A. Yes, they do.
- $19\,$ Q. And those training competencies also include search
- 20 patterns and parameters?
- 21 A Yes
- 22 Q. And those search patterns and parameters are set out in
- 23 the IAMSAR manual?
- 24 A. That is the descriptor for it, yes.
- Q. And Mr Hamilton also confirmed that as a search and

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- 1 rescue pilot, he would expect you to be familiar with
- $2 \hspace{1cm} \hbox{the portion of the manual dealing with search patterns} \\$
- 3 and parameters?
- 4 A. Yes

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- $5\,$ $\,$ Q. Did you undertake any specific training in relation to
- 6 searching for small boats and persons in water prior to
 - November 2001?
- 8 A. I wouldn't say "specific". The training that we are
- $9\,$ given, undertake and continue to do, covers a whole lot
- $10\,$ of potential scenarios, different objects and the ways
- $11 \hspace{1cm} \hbox{that we are employed using the standard techniques to} \\$
- 12 try and find where they are.
- 13 Q. So is it your evidence that your general training in
- 14 relation to search and rescue would enable you to
- 15 competently carry out search and rescue of people in
- water, for example small boats in water?
- 17 A. Yes
- $18\,$ Q. I would now like to ask you about the helicopter itself
- 19 and the crew
- 20 A. Yes
- 21 Q. You set out helpfully in your statement the capabilities
- and the equipment on board the helicopter. The Inquiry
- 23 has heard from Mr Hamilton, this morning, on -- on that
- very topic, so I propose to treat it very briefly with
- 25 you.

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- 1 A. Yes.
- $2\,$ $\,$ Q. What Mr Hamilton said this morning was that, in
- 3 particular, equipment that would be useful searching for
- 4 people in water would be the night vision goggles,
- 5 forward looking infrared cameras, search lights and
- 6 radar; is that right?
- 7 A. Specifically for looking for people --
- 8 Q. For people in water or for small boats in water as well,
- 9 although he —— he did acknowledge in the course of his
- 10 evidence, and I will come to that, that those equipment
- 11 have limitations?
- 12 A. Yes. So, sorry, reflecting to the first part of your
- 13 question.
- 14 Q. Yes
- 15 A. Yes, those equipments are fitted and made available
- 16 to us as aids to location. They do have limitations, as
- 17 I suspect you'll come to, and they are not necessarily,
- in standalone, a panacea for finding anything,
- 19 especially in the water, as it goes.
- 20 Q. Could you explain what you mean by that, that they're
- 21 not standalone?
- 22 A. Yes, so if you're -- say you're looking using night
- vision devices, night vision goggles, they are not
- 24 necessarily the only thing that will pick up contacts.
- So they are all used in conjunction with each other and

- they are all different to the operation, and combined 2 give you the best chance of locating something given
- 3 the conditions that they're operated in.
- 4 Q. And would there be a particular combination of those 5 aids that would be most useful in identifying /locating
- small boats or persons in water? 6
- 7 A. They are all useful, and together, along with the operators' competency and training and operation, 8 9 that stands you in the best chance of finding what
- 10 you're looking for.
- 11 Q. Thank you.
- 12 In terms of the limitation of equipment. 13 Mr Hamilton's evidence was, in relation to night vision 14 goggles, for example, that they require ambient lighting
- 15 and they could also be affected by fog; is that right?
- 16 A. Yes, it is a possible popular misconception that night 17 vision goggles turn night into day. They do not. They
- 18 require a degree of lighting, ambient lighting, as you
- 19 say, in order for them to function. So without that 2.0 initial trigger, the ambient light, they have reduced 2.1 capability
- 2.2 Q. And would it be the case that in circumstances where it 2.3 is dark, search lights would mitigate —— would be 2.4 the mitigator?
- 25 A. Search lights help. They are not necessarily

- 1 the solution, they help.
- 2 Q. I take from your answer that what you're saying is that
- 3 they are limited in the extent to which they mitigate
- a lack of natural lighting or other source of lighting.
- 5 Could you explain further what you mean?
- A. So I think --6
- Q. So I take it from your answer, you say "they help --"
- 8 A. Search lights?
- 9 Q. Search lights.
- 10
- 11 Q. What is the limitation? What is the limitation of 12 the extent to which they help?
- 13 A. A focused search light is obviously a beam of light, not 14 something like the sun or the moon, where you have
- 15 a larger pool of light creating that ambient light.
- 16 A fixed point of light, a light on a ship, for example,
- 17 will show up, giving that -- that background, if you
- 18 like, with night vision goggles, if you were looking
- 19 directly at it.
- 2.0 Q. Thank you.
- 21 In terms of the forward-looking infrared camera, 2.2 which I understand is referred to as FLIR, is that --
- 23
- 24 $Q. \ --$ is that right? Yes. I understand this relies on
- 25 a contrast between infrared signatures?

- And so if persons had been in the water for a long time,
- 3 this decreases the chance of locating them with
- 4 the FLIR?
- 5 A. Yes, as does the size of the target as well. And I refer to things as "target". Basically, that is 6
- 7 the target we are looking for and nothing else.
- 8 Q. Understood.
- 9 And in terms of the search lights, Mr Hamilton's 10 evidence was that they are affected by fog; is that
- 11
- 12 A. Fog defracts light, disperses light, and that will have 13 an effect . ves
- 14 And then finally, radar. His evidence was that they
- 15 have a low probability of detecting small boats and
- 16 people in water?
- 17 A. Yes
- 18 Q. And why is that?
- 19 A. Without wishing to get into radar theory, basically,
- 20 the way it operates is a beam of energy is sent out and
- 21 is reflected by certain objects and then received back
- 22 from the transceiver. If it's a small object, it has
- what's called a small radar cross-section, a person in 23
- 2.4 the water has a tiny radar cross-section and if any at
- 25 all, because we, as humans, do not reflect that energy.

1 Q Understood

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Are there any other challenges associated with searching for small boats or persons in the water or searching at night that you think it would be important

for the Inquiry to know?

6 A. Visibility is a big factor, and at night, you are

7 obviously physically restricted in terms of the eyes

8 adjusting to light to be able to pick out stuff on 9 the water, unless there is an external light source, and

10 so your ability to distinguish objects in the water is 11

vastly reduced at night.

12 Night vision devices help, because they will enhance 13 reflected light, etc, as I've explained. The FLIR will 14 help, given the fact that it is a camera operating 15 within light that we don't necessarily see as human 16 beings, but the limitation, again, is, at night, you 17 can't directly see out the window unless there is an

18 ambient light source, ie the moon.

19 Q. Thank you.

2.0 Turning now to the crew of the R163. You explain in 21 your witness statement that is usually crewed by four 2.2 people, so there is the captain, the co-pilot, the winch 23 operator and the winch paramedic, and you explain that 2.4 the winch operator and paramedic are both competent to

25 operate the search equipment. You also explain that,

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3 effecting a search, what are the two pilots doing in 4 the helicopter? 5 A. The captain of the aircraft usually sits in the right-hand seat and he has overall responsibility 6 7 for the running and coordination of the operations within the aircraft and within the search and rescue 8 operation. The pilot in the left -hand seat will normally be "hands on flying". He's known as the pilot

when effecting a rescue, one pilot is flying and

the other is monitoring. What I'd like to know is, when

9 10 11 flying for purposes of distinction. The pilot who is 12 not actually controlling the aircraft is then known as 13 the pilot monitoring. He's monitoring the actions of 14 the other pilot, he's monitoring the actions and 15 the requests coming in to the aircraft, although doesn't 16

necessarily respond to each piece of information, ie is 17 not solely talking on the radios, and therefore he has 18 responsibility for the safe and effective operation of

19 that aircraft. 2.0 The two pilots at the front can swap the handling

duties, and it is good to do so at times, because it 22 provides a different level of stimulation and a different level of input into the running of that 2.3 2.4 mission, and it relieves fatigue of doing the same thing

25 all the time. So that is basically what the pilots do.

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The captain of the aircraft , though, retains that overall responsibility for the input of information, the processing of information, and to an extent the outward transmission of information, although he can't obviously tell any other person on the radio exactly what to say at what time.

- 7 Q. In terms of the search equipment --
- 8 A. Yes.

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- 9 Q. — to what extent do the pilots get involved in 10 operating the equipment or using the equipment. So, for 11 example, you say there are four night vision goggles on 12 the helicopter, to what extent would you use that on --13 on a flight?
 - A. We would fly with the enhancement of the NVGs and they would be down within our eve level at all times. They help us with the safety of the aircraft, as far as we can see, they do help with the visual look-out, because that is the best way of finding something is to actually see it. Then the operators in the back are tasked with the safe and efficient operation of the -- the FLIR, etc. in the back, and they look at the -- monitor it on the screen. The pilot can select a repeat of that screen on our multi-function displays in the front of the aircraft, and certainly if something is being investigated, then we would put that display up in

the front so that we can see what they're seeing in the back at the same time. And that's the delineation of responsibility that is formally handed over whenever the pilots change control so that nobody's in doubt as to who's actually -- excuse me -- who is actually flying the aircraft.

Q. Thank you.

 $I\,{}^{\backprime}d$ now like to ask you a couple of questions about the general operation of search and rescue flights . Firstly, Mr Hamilton confirmed, this morning, that if you are tasked to conduct a search and the search planning hasn't been done for you, then you would be -you would be expected to be able to decide the search parameters, so decide the patterns and decide the track spacing and the sweep width; is that correct?

15 16 A. The expectation is that we are passed a plan with 17 the parameters so that it fits in with the overall 18 coordinator's idea of what's going on. For search 19 patterns, ones that are dedicated, then we would expect 2.0 to be given a start point, the leg length, direction of 21 travel, direction of the first turn, etc, because this 22 is $\,--\,$ affects the area that you actually cover during 23 the search. So therefore, if we decide to do something 2.4 solely, it might not fit in with the overall 25 coordinator's plan of what to do. So therefore we would

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1 be given those parameters, we would programme it into 2 the aircraft and get the aircraft to fly it under those 3 parameters. (a), it's more accurate, and (b), it gives us a chance to look out and carry on with the visual 5 aspect of looking for whatever it is we're searching 6

7 Q. I understand that, but if you -- in a case where you are 8 not provided with the parameters or the search patterns, 9 what would vou do?

10 Ask for them to be given. It sounds a little blunt, I'm 11 sorry, but, again, we are there to carry out 12 the requirements of the overall mission. Therefore, if 13 we randomly choose something that doesn't necessarily 14 fit in with what is required, then that would be 15 counter-productive. IAMSAR does say that if you 16 approach a datum position initially, with very other 17 little information, then the use of an expanding square 18 search or the sector search, which looks a bit like 19 a clover leaf, is the best option, because it covers 2.0 a wide area to do.

We are trained in the use of or the selection of sweep width, but actually the best one determining -determining the best one is not down to us in the aircraft to do it.

25 Q. I understand that, but would you be able to, would you

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- 1 have the information and would you have what you 2 required to enable you determine the parameters if they 3 weren't provided to you?
 - A. Through knowledge of what you are looking for, we could decide a parameter. Whether or not it is the correct or the most -- sorry, the most desired parameter, we cannot calculate that within the aircraft.
- 8 Q. Thank you.

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Next, I'd like to ask you about Mayday relays. You mention those in your statement, and perhaps we can turn to your statement. If I could have $\{INQ009651/1\},$ please. And if you could go to paragraph 4.1.4 of the statement {INQ009651/9}.

In the second sentence, you say:

"When we are tasked directly for an incident, we would not normally be advised that a mayday relay was being broadcast."

Who would you expect to advise you that a Mayday relay was being broadcast?

20 A. That would come as part of the tasking. I refer to it 2.1 there, that we were not necessarily aware of Mayday 22 relay, because that is to alert other participants 2.3 within an area that an incident is going on. We are 2.4 tasked directly to that incident, so would not be part 25 of that Mayday relay.

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- 1 Q. Would you --
- 2. A. So a Mayday relay is the means by telling everybody else 3 that somebody has made a distress call.
- Q. Yes. I understand.
- A. So, to us, to be told necessarily there is a Mayday 5 relay going on, is not required because we are tasked 6 7 specifically to -- with that incident.
- 8 Q. Thank you --
- 9 A. And --
- 10 $Q. \ -- \ I$ understand that.
- 11 A. Sorry.

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Q. Thank you. 12

> I would now like to ask you about the typical tasking of a search and rescue helicopter by the Coastguard. Mr Hamilton explained, in his evidence this morning, that the usual process is that the ARCC would make a request by ringing the base at Lydd and they would provide you with initial details of the tasking. Could you tell us what information the ARCC would typically give you?

- 21 A. They would say roughly what the tasking is. There is 2.2 language used like "wet job", "dry job", a search task. 23 So initially a wet job would indicate it's over
- 2.4 the water, for example. Then they would give a brief
- 25 synopsis of what is involved, where it is, any
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amplifying information that they have, and then who's

- 2 going to be coordinating the incident that you're
- 3 responding to. There is a chance within that initial
- 4 call to ask further questions and for us to get as much information as possible within that. So that would be 5
- the initial tasking: what, where, when, requirements. 6
- 7 Q. And it would not be part of the ARCC's role to provide
- 8 you with any details of search planning; is that right? 9 A. The ARCC would not normally pass the search plan,
- 10 because that is passed to the Rescue Coordination
 - Centre, whoever is controlling it within your area.
- 12 They may have information that we would be tasked to
- 13 conduct an area search of something, or given initial
- 14 coordinates, your task -- your search plan will be
- 15 passed, and then we would expect that -- to receive it
- 16 en route. There is an opportunity to further question,
- 17 and if further details are available, then it's best
- 18 given on the ground so that we then have a chance to
- 19 programme the aircraft en route, otherwise it's
- 20 reactive.

Q. Thank you. You've already said that the MRCC provide the search 22 23 plan and that the reason why you would not normally 2.4 decide search parameters is that it has to be -2.5 the search parameters have to be determined as part of

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- the overall mission. In relation to small boats. 1
- wouldn't the overall mission be similar? 2
- 3 A. No, it can vary. It can vary, and what we have seen
- over the years is these things have progressed from --
- inverted commas -- "patrolling", ie locating possible 5
- 6 contacts within a certain area, to definite areas, which
- 7 are slightly smaller in surface area, to go and look for
- 8 things. So the tasking can be wide and varied and
- 9 responding to whatever is happening. There have been
- 10 times when boats have been located and we go and provide
- what's called "overwatch", ie making sure, from the air, 11
- 12 we can see what's going on and relay anything if people
- 13 are missing or something is not quite right, or we can
- 14 be tasked to go and recover people from the Border Force
- 15 boats, for example, if they are listed as unwell.
- 16 So the -- the parameters can change each time as to 17 what we're being asked to do.
- 18 Q. So parameters can change depending on whether you're
- 19 being asked, for example, to search for something 2.0 specific --
- 21 Sorry, can you say that bit again, sorry? Α.
- 2.2 So what you've said is that the parameters can change
- 23 depending on whether, for example, you are being asked
- 2.4 to do something specific, or you are being asked to
- 25 provide overwatch, or you're being asked to patrol?

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you are asked to fly up and down to see what you can 3 find. Searching is when you are looking for something 4 specific within a certain area. And then assisting would be somebody's fallen ill, can you go and assist by 5 either the paramedic -- winch paramedic providing their 6 professional opinion or moving the -- inverted commas —— "casualty" to the next level of medical treatment. 8 9 So there are several different factors within that. 10 Q. So within — within patrols, for example, would 11 the overall mission be similar in relation to small 12 boats? So within that sub-category of type of task? 13 A. Yes. So you're given a line between two points 14 potentially, saying we are aware of boats coming across 15 — this is what has happened before -- can you fly along 16 there and see what you can find. 17 Q. Thank you. 18 Can I now take you -- can I ask you some questions now about the tasking of the R163 on the night of 19 2.0 24 November 2021. If I could call up your statement 21 again, it's $\{INQ009651/1\}$, and if we can go to 22 $\{INQ009651/8\}$ and paragraph 4.1.3.

A. Yes. "Patrolling" is the term that I would call it when

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Before I ask you a question about that, how well do

Q. And I imagine you undertake a lot of search and rescue
 flights over the course of the year and you've
 undertaken many since then?

you recall the events of the night?

A. I would say some is patchy, it was a while ago.

4 A. Quite a few, yes.

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5 Q. At paragraph 4.1.3, you say:

6 "On the night of the Incident, our initial tasking was quite vague."

A. Yes, the initial phone call, if you can imagine being in your bed at some form of sleep to be woken up by a phone call and passed information when your circadian rhythm is at its lowest, it takes a while, a finite amount of time to actually take in that information that maybe needs to be — repeat itself.

In the -- in this instance, the initial conversation was an opportunity to see the feasibility of actually achieving a task. I won't say this particular task, but a task, as there were other factors to take into consideration.

So the vagueness of it was, "Can you get up, can you have a look and see so that we can discuss the feasibility of achieving a task".

- Q. Ah, so your reference to the initial tasking is
 a reference to the first conversation you had in
 relation to that tasking?
- 25 A. Yes

1 Q. Thank you.

If I could take you now to documents relating to your conversation with the Aviation Tactical Commander on the night, Mr Golden. If I may call up, please, {INQ007825/1}, and as you can see, this is a call on 24 November 2021 at 2.17, between you and Mr Golden.

If I could turn to {INQ007825/2}, please. We see here that Mr Golden says what you've just described. He says:

"Allow yourself to gather area thoughts and request a call back. The request is going to be for you and you alone to have a discussion with me about weather and suitability for conducting ... a two hour sweep along the boundary [line] in ... an hour's time. So if you want to adjust yourself, you don't need to get the rest of the crew up ..."

And so he was saying: this is what I am proposing to discuss with you, can you get yourself together and we have a discussion about it?

- 20 A. Yes
- 21 Q. And then you ask:

22 "A two hour sweep of what boundary, along the channel you mean?"

24 And then he confirms:

25 "... along the channel."

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- 1 A. Yes.
- 2 Q. So is this -- it is this conversation that you're 3 referring to when you say --
- 4 A. Ye
- Q. But at this stage, you hadn't been tasked, he hadn't
 given you the tasking, he was just indicating that he
 would task the helicopter?
- 8 A. Yes. The information that is portrayed on the screens
 9 with regards to weather, visibility, etc, they have
 10 information within the ARCC, but that discussion was to
 11 look at the feasibility of actually what we could
 12 achieve and what useful part we would be able to play
 13 given the weather information that he had, and he was
 14 asking me to go and have a look and make an assessment.

The reason I was asked to get up and not get the rest of the crew was to maintain that level of rest for them, to allow them the best opportunity that, as and when they were woken up, they would be of a fresh state before going. If they'd been gotten up earlier and nothing happened, then, again, sleep patterns are interrupted etc. So what he was trying to do was look after the welfare of the crew and look at the actual effectiveness and the possibility of achieving a —— what I would term a patrol task. I would also say that "patrol task" is not actually written down in any of our

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literature, but that's effectively what it is. 2 Q. Thank you 3 If I could now call up $\{INQ010697/1\}$, and you'll see from that first page that this is a call a few minutes 4 later at 02:23 between you and Mr Golden. 5 And if we could turn to the next page, please, 6 7 {INQ010697/2}. Halfway down the page, you say: "I haven't stuck my head out the window ... and had 8 9 a look. It can always be a sort of false negative, 10 false positive ... I think we can do it.' 11 A. Yes, that's slightly relaxed language. I would say 12 I did literally have a look out the window, but I also 13 consulted the Met information that we have. Again, at 14 3 o'clock in the morning or 2.30 in the morning, you're 15 still $\,--\,$ your body is still recovering from rest, so in 16 terms of configuring exact language, it's slightly 17 difficult. However, what I was referring to there was. 18 yes, literally, looking out the window, but if you look 19 out the window at night, all you can see is dark, so we 2.0 look into the lume of the lights on the airfield, for 21 example, to see if there is moisture in the air and that 22 would potentially affect something we need to do. There

distance, and a water tower halfway between the two, 113

is also Lydd Power Station, which is visible from

the airfield, which is a good barometer of measuring

which, again, gives you an indication of what you are faced with before going. And therefore, what I was looking at was not a reason not to go, but was just getting all the information: can we do it and feasibly provide something meaningful to an operation.

Q. I understand

And in that section of text, you ask:
"Whereabouts are you expecting us to patrol?"

9 A. Yes.

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10 Q. So —— yes

And then, if we turn over to the next page $\{INQ010697/3\}$, he, Mr Golden, talks about the fact that a fixed wing couldn't fly because of the issues with weather and their inability to get alternate.

And then, at the bottom of that, he says:

"Now, as usual, that catalogue of phone calls is beginning to trickle in of the, you know, the classic, I'm lost, I'm sinking, my mother's wheelchair is falling over the site, et cetera."

Stopping there for a moment. What do you think he meant at the time by that?

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A. He was starting to get information in. Over the years, we have seen a pattern of calls from certain areas that might exaggerate the condition of that object. I think he was trying to use levity there —— you would have to ask him exactly what he was meaning by that one -- in order to get the message across, and again overcome the circadian difficulties in getting going.

I think it was not meant to be disrespectful. It is a means of introduction into what was being passed.

6 Q. I understand.

How did you come to understand that there was a pattern of exaggeration on calls?

A. We've been involved in migrant crossings for ten years now. Patterns changed initially from boats being driven by a third party to deliver people crossing the Channel and then returning back to whence they came — where that is exactly, I have no idea — to then the pattern of what is widely reported now with the amount of migrants crossing.

The calls have been reported in initial tasking in the past that they have reported potential deficiencies within the boat and the need for assistance. When we have located some of these -- and this is personal experience as well as in general -- we have found that what has been reported is not necessarily what has been going on in the first place. So we have seen that increase and it's almost as if it's been scripted.

However, that has not affected our reaction to what we are given, and every incident is treated with

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the correct amount of severity and need, so every time we get that information, it is an opening means of conversation and not exactly what is going on on scene.

4 Q. Thank you.

5 So that I'm clear, you said at the outset that 6 you've been involved in search and rescue for ten years.

7 A. Yes.

8 Q. Do you mean to date? So, as at the date of this call,
9 it wouldn't have been ten years? No, sorry, in terms of
10 Bristow's experience of search and rescue?

A. We have been involved in search and rescue missions
 across the Channel area since inception, ie since
 standing up at Lydd, so the experience has accumulated
 over that period of time.

15 Q. Thank you.

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In terms of your understanding of that section of the call that I've just taken you to, so that I'm clear, you didn't understand Mr Golden to be saying at that point that there were in fact people in the water or vessels in distress, your understanding was that he was conveying that there were some distress calls coming in, but these were exaggerated calls?

A. No, I don't believe that actually distress was mentioned at that point, so I was not aware of a specific reference to an incident at that point.

25 reference to an incident at that point

1	Q.	Thank you.	1		the visibility gets worse.
2		So moving down then, further down the page in terms	2		"Would you rather be doing this now or trying to do
3		of what Mr Golden tells you, he says:	3		it at six, seven o'clock in the morning when I think
4		" \dots a solution to generate a maritime picture \dots "	4		looking at the weather tools to hand, the visibility is
5		In terms of what he was looking for:	5		going to be worse. So this is a discussion rather than a
6		" that we might be able to understand the problem	6		tasking. I value your input."
7		better would be to get you out if you were prepared to	7		And then you then go on to talk about the search
8		go, hence this discussion and fly."	8		equipment:
9		He says:	9		"The issue obviously is with the conditions. If
10		"Dover"	10		we've got horizontal visibility and can look through
11		And I assume that's MRCC Dover:	11		the [Night Vision Goggles], that would be okay from
12		" can work on a better plan, but I'm thinking	12		a safety aspect. The performance of the equipment in
13		about something like the 190 radial down from Dover	13		this sort of weather is not brilliant "
14		right through to about 150 radial from Dover up and down	14		Can we turn over the to next page please
15		the boundary line So it's effectively as they	15		{INQ010697/5}:
16		cross the line."	16		" obviously, because you need to have that
17		And by "they", he means the small boats crossing; is	17		horizontal visibility for Fleur to work. It won't look
18		that right? So I'm looking now six lines down in	18		through fog and cloud."
19		the bottom text.	19		So you were discussing there the limitations of
20	A.	Yes, I can't remember whether he would be mentioning	20		the equipment in terms of carrying out an effective $$
21		the median line, ie the sort of halfway point across	21	Α.	To be effective and produce meaningful results, yes.
22		the Channel, or the line as described by an ARCC. He's	22		There's also a safety aspect, as I mentioned there, we
23		mentioning the general area there, I believe, so that	23		need to be able to see where we're going so as to avoid
24		I can make an assessment as to the feasibility and	24		collision with objects.
25		the effectiveness of a search within that given	25	Q.	And then, in the next section, you say:
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1		the weather reported at the time.	1		"In terms of sort of getting in and out and
2	Q.	So what do you understand him to mean when he	2		[the] safety of the aircraft , obviously if we are
3		said "the boundary line"?	3		looking at radial contacts and trying reduce that, we
4	A.	There is what is called the "median line" between $$	4		wouldn't pick up a rubber dinghy anyway."
5		roughly divides the Channel in half, and I would $$ at	5		What did you mean by that?
6		the moment, I can't remember whether I made a decision	6	Α.	The "getting in and out" would be taking off and getting
7		that's what he meant or whether it was going to be	7		back to Lydd or somewhere suitable once we reached fuel
8		a specific tasking line from point A to point B and see	8		endurance. In terms of the radar performance and
9		what is around in that area.	9		tracking a small rubber dinghy, as I mentioned before
10	O	Thank you.	10		about radar cross—section and radar reflection from
11	•	If we could go to {INQ010697/4}, please. Halfway	11		materials, it wouldn't necessarily pick up a rubber
12		down the page, where it says:	12		dinghy on the radar.
13		"The final thing I'll say of course"	13	0	Thank you.
14		Can you see that?	14	ų.	You then go on to discuss weather and feasibility,
15	۸	Yes.	15		and then you say you will consider the situation and
16		He says:	16		call him back.
17	Q.	"The final thing I'll say of course is, I have no	17		So if I could take you to the next call . It's
18		idea with the moisture in the air, whether we are going	18		{INQ007389/1}, and this is a call again between you and
19		to be dealing with a useful search with"	19		Mr Golden at —— and this time at 2.41.
20		And I take it that means FLIR, the forward—looking	20		If we could go to the next page, please,
21		infrared ——	21		{INQ007389/1}. And the second time you speak, so
22	Α.	F-L-I-R, yes, not the flower.	22		the big block of text ——

" \dots or are \dots going to be, quite frankly, just try

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to look out the windows to see where you're going as $% \left\{ 1,2,...,2,...\right\}$

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Q. $\,--\,$ a third of the way down through the page, you say

you've spoken to the person, who I take it to be your

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- 1 co-pilot, you've got him up and you've had a discussion 2 and you confirm that you can do the tasking?
- 3 A. Yes

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4 Q. And then six lines down, you say:

"Obviously, we will try and stand off any vessel if 5 6 we find any."

What did you mean by that?

A. Two things. Obviously, collision avoidance, as I've mentioned, if we couldn't necessarily see with visual aids, so with the naked eye, we would be required to maintain a distance away from a contact, because we don't know what it is and therefore there is a risk of

The second thing is, if we find something, the idea is not to fly directly over the top of it, unless requested for further information, so as not to alarm or disturb any persons on board. So we would stand off. observe, report back and see what the next course of

Obviously, if there had been anybody in distress that we had located, then we would come up with a course of action and recommendations to carry that out.

- 23 Q. Thank you.
- 2.4 A. But the stand off —— sorry, if I may.

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- 1 A. The stand off is to get as much information and assess 2 the situation. There's no point in charging in if it's 3 not required.
- Q. Thank you.
 - In the next sentence, you say:

6 "Then it's what you do with that information if we 7 do find the staff.'

And then, the following sentence, you say:

"Obviously, we'll have to be sort of playing chicken, radar-wise, with vessels, and it might be that we find nothing."

What did you mean by that?

- 13 A. If the visibility was poor, as I've just iterated, we 14 would need to maintain a distance from a radar contact. 15 and therefore, if we are maintaining that distance, that 16 limits our field of view, our ability to have a broad 17 area knowledge of what is going on, and then it's based 18 on the grounds of safety. And obviously, if you can't 19 see it, you can't do anything about it.
- 2.0 Q. And so the reference to "playing chicken" in that 21 context is?
- 2.2 A. Again, it's flippant language of early in the morning.
- 23
- 2.4 A. It means that we would not be able to close definite 25 radar contacts unless it was on a dedicated radar

approach to them, and that takes up a lot of time, to be able to do that. So playing radar chicken means that we were having to be cautious.

4 Q. Thank you.

> You then say you'll get the crew up and you will be airborne by 3.30. But in terms of what you'd agreed with Mr Golden, you then say, at the bottom of the page -- at the top of {INQ007389/3}, if I could take -- if that could be taken to the top of page 3:

1.0 "So we'll have an agreement with yourselves an 11 hour-and-and-half on that patrol line, see if we can 12 find stuff, which is basically the south-westerly 13 traffic separation zone sort of area, isn't it?"

14 A. Yes

- 15 Q. And so what did you understand? What was the agreement, 16 as far as you understood?
- 17 A. The agreement was to go and fly a line that was going to 18 be defined. Initially, he was saying the rough area on
- 19 those radials, which are bearings from a known point, 20 and we will fly along that bit and see what can be
- 2.1 located to try and help with their recognised maritime
- 22 picture
- 2.3 Q. So, from the calls with Mr Golden that I have taken you 2.4 through, your understanding of what he'd asked you to do 2.5 was to patrol the boundary line, you weren't being asked

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- 1 to search for a particular vessel, it was to obtain a recognised maritime picture; is that right? 2
- 3 A. As far as I can remember, it was non-specific to
- a certain contact.
- Q. And you weren't told that there were people in 5 6 the water, for example, you weren't told that -- about
- 7 particular distress calls, it was just to patrol 8
- the boundary line?
- 9 A. Again, as far as I can remember, it was just that, ves.
- 10 Q. And as far as you can recall, even though you said 11 the initial call with Mr Golden was vague, you 12 understood the subsequent instructions he gave you in 13 terms of what to do?
- A. Yes 14
- 15 Q. I'd like to go through one further aspect of this 16 transcript with you, and if I could go to the bottom of this page 3, please. Mr Golden says there: 17

18 "The only other question I have, of course, 19 the nervousness in my back pocket will be of course we 2.0 say 90 minutes, but of course once you get up, if this 21 begins to change, you can then see more and more demands 2.2 being put on you. So my nervousness will be that once 23 you're up once, this is it now, you're up for the rest 2.4 of your shift or until you claim the fatigue card ... 25 coming back, rotors running and coming back out again

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2 mind, have that as a distinct possibility.' 3 Do you understand what he was saying there? A. Yes. So the initial bit was, we anticipate building 4 5 a picture as best you can within that hour and a half, be alert to the possibility that obviously if things 6 7 change, then the nature of the tasking will change. To -- to that end, be prepared, in terms of fuel state, in 8 9 terms of briefing the crew, in terms of preparing 10 yourselves mentally, this may extend as things develop, 11 and that's what he's saying there.

et cetera et cetera. So I would, in the back of your

12 Q. And his reference to the "fatigue card", what do you think he meant there?

A. Again, the language is slightly, if I may use the word, slang. We understood each other, that he knows, being tasked at that time in the morning, the effort it takes to produce meaningful results, searching in the dark in reduced visibility in — under pressure to find these things is fatiguing, so be aware. He was reinforcing our ability to say, right, this is tiring, (a) we need a break or something, or something further may happen that we are unable to continue due to fatigue. And would I also stress at this point that fatigue is different to tiredness. Tiredness is as it says. Fatigue can be a culmination or combination of many

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factors reducing — resulting in the reduced performance of an individual.

3 Q. I understand, thank you.

I'd now like to turn to the search instructions you were provided by MRCC Dover.

6 A. Yes

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Q. Following your call with Mr Golden, you contacted MRCC Dover and is that because Mr Golden had said to you Dover would define the parameters?

10 A. No, the reason for contacting Dover was to try and get
11 as much information before lifting so that we could
12 prepare the aircraft ready for that task. That relieves
13 capacity then to deal with potential poor weather and
14 the requirements of dealing with that.

Q. If I can have {INQ007601/1} on the screen, please. This
 is the first call with MRCC Dover and it's at 2.49, and
 it's a few minutes after you spoke to Mr Golden.

If we could go to $\{\mbox{INQ007601/2}\}.$ And, as you said, you said to him:

"We're going to get airborne fairly soon \dots I reckon around 3.30 \dots and do this patrolling for \dots potential boats."

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23 Then you ask

24 "Are you starting to get distress calls in about it 25 now?"

1 And Mr Downs says:

"Yes. Yes, we are."

But he doesn't provide you with any further information about what calls might be coming in; is that right?

6 A. As far as I can remember, yes.

Q. And so you then say you would like instructions, and hesaid he will speak to the SMC.

If we could then have {INQ008823/1}, please. This is a call between you and the SMC, Mr Gibson, at 2.50, so a minute after.

Could we turn to $\{INQ008823/2\}$, please, and a third of the way down, you say:

"A request, please, is just can we be clear on what you want us to do and if you want to give me something to work on now that we can amend as we go?"

 $17 \hspace{1cm} \hbox{And so you were asking for instructions to take off,} \\ 18 \hspace{1cm} \hbox{and that could be amended whilst airborne?}$

19 A. Yes. exactly that.

20 Q. He then says, about halfway down the page:

"Yeah. So, I mean, at the minute, from what I've got from the French. Their reports — obviously, there are numerous, but I don't believe they were all on the water. I think they're just multiple reports that have been ringing regularly."

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What was your understanding of what he was saying there?

3 A. I think, if I just step back, what I was hoping for was, "You are tasked to do this, at this point, with these parameters". So amplifying it a bit further down, 5 6 I believe he was saying that there were reports of 7 multiple boats coming across the Channel, and I can't 8 remember the exact detail of that part other than what is written in the transcript here. So the idea of 10 calling him was to try and get clarity before we took 11 off as to exactly what they want us to do in the form 12 of, "You are tasked to a boat", or, "You are tasked to 13 carry out a search of a certain type starting in this position here". Now, I should imagine, at that point, 14 15 he didn't have that detail, but the more we can get it

before we get airborne, the better prepared we are and the less time we — in inverted commas — spend "just flying" waiting for the instructions to come through.

19 Q. That's right.

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And you can see from the bottom of the page there, that he gave you a provisional search area, so he said:

"... sort of Mike Papa Charlie buoy up towards the Sandettie light vessel and then back towards the edge of the south—west lane. That sort of area there. Seems to be the high intensity crossing area at

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If we can go to the next page {INQ008823/3}, please. 2 3 Then he talks about the Flamant being on scene, which is

4 the French boat, and he refers also to the Valiant.

which is the Border Force vessel --

6 A. Yes.

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7 Q. -- proceeding.

8 And then he -- and then he gives you coordinates for 9 the Sandettie Lightvessel; is that right?

10 A. He didn't actually give me coordinates, no. He says 11 that is the reference point.

12 Q. No. sorry, he gave you the reference point for 13 the Sandettie Lightvessel, yes.

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15 Q. In his evidence yesterday, Mr Gibson told the Inquiry 16 that he wasn't -- and as you've indicated this afternoon

— asking you to search for a specific incident per se.

18 what he was seeking to do was to gather an aerial

picture of what was going on, and so he says he set what

2.0 he calls a rectangular box and the task was to identify

21 small boats or dinghies in the area that he set. Would

22 you agree with that characterisation of what he --

2.3 the instructions he gave you?

2.4 A. I would agree that the initial instruction there is -is fairly wide in its construct. I can't say whether it

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- 1 was a definite, "These are the edges of the box", with 2 latitude and longitude references to fly within, which
 - for an effective search is really what you're after.
 - Q. Yes, and what he said, yesterday, was that there was
- 5 a distinction between a search and a patrol, and he
- explained that a search would be undertaken when you're 6
- 7 looking for something specific, you know, and, you know 8
- you're looking for where it went, you know its estimated 9 drift and size, whereas a patrol is effectively
- 10 intelligence surveillance and a reconnaissance flight
- 11 and so you're not -- the details provided are not as
- 12 specific. Would you agree with that?
- 13 A. Yes, intelligence surveillance and recording or 14 reporting.
- 15 Q. And you understood the instructions that Mr Gibson was 16 giving you in terms of the patrol area?
- A. I would imagine so, in terms of, "Right, that is 17
- 18 the rough area where they want us to go, this will be
- 19 refined once we're out there". Because, again, unless
- 2.0 you have defined parameters, you can carry out something
- 21 within an area and then something else comes in and 2.2 you're searching exactly the same area again, but with
- 23 different parameters.
- 2.4 Q. Thank you.
- 25 If I could take you back to your statement, please.

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So if we could have $\{INQ009651/1\}$ on the screen, and if we could go to paragraph 4.1.3 on $\{\mbox{INQ009651/8}\}.$ So we've seen this before, and you referenced the initial tasking being vague, we've talked about that and you've clarified what you meant by that. And then you said:

"We received reports of a distress call from people in the water saying they were in a boat and it was

7 sinking although they did not know where they were." 8

Having now gone through the calls that I've taken you through, would you agree that, at the time, you did not receive that information about people being in the water and it sinking?

- 13 Maybe not succinctly at that point, no.
- 14 Did you receive it at all?
- 15 A. I can't honestly remember, but my focus at that point
- 16 was the safe operation and getting airborne along those
 - initial parameters that we were given, up towards
- 18 the Sandettie Light and along that line, looking for
- 19 a number of boats that were coming across. So I don't
- 2.0 know if I can honestly say I was specifically told that
- 21 there were people in the water, because that does change 22
- 23 Q. Yes, and there's nothing in the transcripts that $\ensuremath{\text{I}}\xspace$ 've
- 2.4 taken you to that indicates that you were told that.
- 2.5 A. I don't believe so, no.

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- 1 Q. And Mr Gibson in fact accepts in his evidence to
- 2 the Inquiry yesterday, that you weren't told that.
- 3 A. It is fairly vague, initially , yes. So given that
- specific detail, I don't think we were, no.
- 5 Q. And at that point, you weren't told about
- 6 Incident Charlie, which is the incident that the Inquiry 7
- is investigating?
- 8 A. No.
- 9 Q. So nothing at all about a particular boat or 10 a particular set of small boats?
- 11 No. The idea was to go and see what we could see
- 12 Q. If I can -- after that, that set of calls then, you then 13 went to prepare the helicopter, and you explain in your
- statement that there was some delay in getting 14
- 15 the helicopter airborne because of an electrical fault.
- 16 A. Yes
- Q. You've set that out in your statement and I don't 17 18 propose to take you to it.

19 The mission report, you understand what I mean, 2.0 the mission report produced by Bristow after the tasked flight, records the flight taking off at 3.45 and

21 2.2 records that you were on task at around 4.02; would that

- 23 be correct?
- 2.4 A. Yes.
- 2.5 Q. In terms of the search conducted then, if I could take

1 you to paragraph 4.3.7 of your statement, so that's 2 {INQ009651/13}. 3 A. Yes

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4 Q. You say there that:

> "In this instance we were told to conduct an expanding square search, using the parameters provided by Dover MRCC which I have referred to above."

If I could take you, please, to a call that you had with the SMC whilst you were airborne, and that's $\{INQ008825/1\}$, and this is a call at 3.52 between vourself and the SMC.

If we could go to the next page, please, {INQ008825/2}. It's quite a short call. It's a radio transmission, my apologies, and it says, from the SMC:

"Further information. Valiant's on scene of one craft

"She has reported one other craft sighted in the vicinity. So, I believe that a search around the Sandettie light vessel as an expanding square, or parallel track as you see fit to search for potential other craft in the area."

Based on this exchange, would you agree that Mr Gibson was giving you the choice of the most appropriate search pattern to use between the expanding square search pattern and the parallel track?

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1 A. Can I first say that might not have actually been me on 2 the radio answering that, as the radio duties are shared 3 amongst the crew, but the information would have been passed. The selection of the expanding square search is 5 best used when you're given a datum point and you wish to literally expand out from that point to cover a wide 6 area of possibilities . The parallel track search means 8 that you cover an area parallel to a potential known track of a vessel or a - - as I've said before, a target. 10 and therefore that will cover the best area known to 11 that specific target.

> The selection of an expanding square search in this instance meant that we could cover a large area properly and thoroughly around that initial datum that was passed.

- 16 Q. So do you accept that you chose the expanding square 17 search pattern?
- 18 A. I think it was probably agreed that that would be 19 the best course of action.
- 2.0 Q. And agreed between whom?
- 21 A. Within the crew. Within the experience that is -- that 2.2 is available to do it. As I've said, the captain of 2.3 the aircraft is responsible for the actions going on and 24 the responsibility of the aircraft . It would be a fool 25

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to ignore the advice and professional input from

the rest of the crew when selecting these things when there are multiple other tasks going on at the same 3

4 Q. Thank you.

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Can I have your -- Inquiry $\{\mbox{INQ009651}/1\}$ on the screen again, please. So at paragraph 4.3.7 $\{INQ009651/13\}$ you say that -- so you've accepted that you chose the expanding square search and you've explained why that search pattern was appropriate. But in the next sentence, you say:

"If we had not been given a specific search pattern, the best way to search an area quickly is generally to do a clover leaf search ... pattern.'

13 14 So you're suggesting there that a clover leaf search 15 pattern might have been appropriate?

16 A. It is another recognised appropriate search pattern, 17 yes. But in this instance, where we were given two 18 options and one of them being the expanding square 19 search, which is also an appropriate search pattern,

2.0 that is what was chosen to do, and the -- the parameters

21 for that would then have been passed to us.

22 Q. In terms of the appropriateness of the sector search, could I take you to the IAMSAR manual? 2.3

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25 Q. And that is at $\{INQ010511/1\}$. If I could take you to

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1 page {INQ010511/8}, please, and section 5.5.1. If you 2 could highlight the first four lines of that, please.

So that says:

"Sector searches are most effective when the position of the search object is accurately known and the search area is small. Examples of this situation include a crew member seeing another crew member fall overboard from a ship or a reported distress from a craft which provides a very accurate position. Sector searches are used to search a circular area centred on a datum point, as shown in figure ... [below]."

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13 A Yes

 $\ensuremath{\mathsf{Q}}.$ Would you still say that the sector search was an 14 15 appropriate type of search in the circumstances?

16 A. Other than the --

Q. In the circumstances, given that you were searching 17 18 around the Sandettie Lightvessel, would you say that 19 a clover -- a sector search would have been appropriate

2.0 in those circumstances?

21 A. That's very hard to say. Yes, it is -- it is

2.2 a recognised and appropriate search pattern, but in this

23 instance, it was better to use the expanding square

2.4 search to cover the area more extensively. So this is

25 an initial look, but where it was -- this is on

2 things are happening, can you cover this area, then 3 the expanding square search was more appropriate at that 4 point. 5 Q. Yes. And it would have been more appropriate because the position of the search object was not accurately 6 7 known. So the examples given in the IAMSAR manual, 8 a crew member seeing someone else falling overboard --9 A. Yes. 10 Q. — or a ship reported in distress from — with a very 11 accurate location --12 A. Yes. 13 Q. -- that didn't apply in this case; is that right? A. Not as appropriately as the expanding square search. It 14 15 mentions there small search area, we're talking three to 16 five miles out on each leg and then you turn and back 17 in. So these legs, even at a reduced air speed so you 18 can look out and see, do not take a long time. 19 The expanding square search is a more thorough investigation of that area and expanding out so that you 2.0 2.1 can do it, but it takes a bit longer. 2.2 Q. And in the circumstances, why would you say 2.3 the expanding square search was preferable to 2.4 the parallel? 25 A. Because we knew that the -- as you've pointed out,

the night of the incident, this is where we believe

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1 the Valiant was within an area and had seen boats, so that seemed an appropriate place to start, to spread out 2 3 from that point to see if there were others in that vicinity.

5 Q. Thank you

If I could have {INQ006370/1}, please.

And would you confirm that that's the expanding square search undertaken, as far as you can recall?

9 A. As far as I can recall, ves.

10 Q. This is an image taken from the iSAR?

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Q. Thank you. 12

And the call with —— and the radio transmission with Neal Gibson at 3.52, would you accept that he did not set $\,--\,$ give you further parameters, so for example track spacing?

A. I can't answer that. I would have thought he would have 17 18 done. We wouldn't necessarily undertake stuff without 19 that parameter set. But if it hadn't been sent, then we 2.0 would have adopted a sensible track spacing, which is 21 the bit for us within the aircraft . to enable us to 2.2 search effectively with the visibility we had and 2.3 the effectiveness of the devices.

2.4 Q. How would you have determined the track spacing? How 25 would you have determined what track spacing was

appropriate?

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the probability of detecting an object, a certain type of object, and it's computed based on the object you're looking for. The idea of track spacing is that you turn and then on to a different track so that the sweep

So the -- if I may, sweep width is determined upon

7 widths overlap. This gives you the best probability of 8 detecting something within that search area. So if

9 you're looking for a person in the water, then the sweep 10

width you'd want to be is about -- and, again, these are 11 off the top of my head and $l\mbox{'m}$ happy to be corrected by

12 the manual, but it's between sort of 800 metres to half

13 a mile, something like that. So therefore your track 14 spacing, to enable that to overlap, would be something

15 like 0.7 to 0.8 of a mile so that the distance between

the two legs that an aircraft flies , the actual visible 16

17 difference overlaps and gives you the best probability

18 of detection, which you want to be 1 in an ideal

19 situation. And there are other factors that come into

play, ie sea state, visibility , time of day, etc. So in 20

21 determining for us in the aircraft what would be 22 the best track spacing, we would need to say it would be

23 about that which gives us a lot of legs to cover but

2.4 enables us to cover each part of the ocean or the sea.

2.5 sorry, as we go over to the best of our ability.

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1 Q. And would you refer to any guidance or any documents when making that determination of what the appropriate 2. 3

track spacing would be?

A. At that point in the morning, no.

5 Q. And so it would be --

A. So we would be -- sorry, if I may. 6

7 Q. Yes.

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8 A. We would look to direction as to how big a track spacing 9 should be and that is normally passed to us. In this 10 instance, as you're saying, would we just make it up?

11 No, it is based on experience, and what we're actually

12 looking for and the conditions of the day.

13 Q. And you used a track spacing of 0.7 nautical miles, 14 didn't you?

15 A. I can't remember. I'm afraid.

16 Q. If I could take you -- if I could take you to the MCA's internal review. So if I could have document 17 18

 $\{INQ004344/1\}$, page 80, please $\{INQ004344/80\}$, and

19 paragraph 5.2.6, it says: 2.0

"R163 decided to complete an expanding square search with a track spacing of 0.7nm¹

2.2 Do you have any reason to believe that that's

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2.4 A. Not inaccurate. 0.7 is the minimum that the equipment 2.5 to the helicopter can take, and that is based on

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1 the physics and geometry of flying, that you cannot fly achievable at all times, so this is a guide as to what 2 - an expanding square search any closer than that, you should be trying to achieve. However, within that 3 the helicopter would just be turning on its own axis, 3 first two legs, you are in a very small area, so you are 4 hasically 4 covering, utilising the equipment as best as you can, and visual, so you are saturating that area and 5 Q. Can I take you to Bristow's flight manual, so 5 the concurrently flight manual? It's at {INQ005343/1}, sanitising it as you go round. 6 6 and if I could take you to $\{INQ005343/17\}$, please. At 7 Q. I understand that, but is it likely that Bristow's 8 manual will specify a track spacing that its helicopters 8 the bottom there, section 1.1.7, that gives guidelines 9 for the FLIR camera searches when it's searching 9 were incapable of meeting? 10 10 overwater patterns, and my understanding from A. I would say unlikely, and have to refer, as I say, to 11 the mission report is that the FLIR was used on this 11 the actual aircraft operating manual and cross-reference 12 12 search flight. it with this table, which I've not been able to do. 13 If we could turn to the next page, please, 13 MS ONABANJO: Thank you. $\{INQ005343/18\}$, there is table 1-2 there, which says: 14 14 Sir, I'm conscious that the stenographers require 15 "FLIR Camera Search Guidelines for Thermal Searching 15 a break. I don't propose to be more than about 16 Overwater " 16 15 minutes 17 17 SIR ROSS CRANSTON: About? Could you explain what the table sets out? 18 A. It gives guidelines for the operator to set the --18 MS ONABANJO: About 15 minutes, so I don't know whether 19 the best chance of finding an object. 19 20 20 SIR ROSS CRANSTON: I think that might be all right. 2.1 A. And -- and these are based on the operator's experience, 21 Yes, it is.yes. $\ensuremath{\mathsf{MS}}$ ONABANJO: If I could take you back to the May report, 22 so -- of which, mine is very limited, because I don't 22 2.3 normally operate the FLIR, so I take advice from 23 please, it's $\{INQ010445/78\}$. It's the second —— if you 2.4 2.4 the technical crew in the back as to what -- what to do. could zoom in, please, on the second paragraph and there 25 Q. Ah, so you mean the operators of the FLIR, the crew 2.5 we find a summary of the MAIB's findings -- this is 143 1 members who operate the FLIR? 1 the Maritime Accident Investigation Board and 2. A. Yes 2 the investigation they conducted the investigations into 3 Q. And is it correct that the suggested track spacing for 3 the event the Inquiry is investigating, and they say: man overboard, dinghy and life rafts, and vessels less "R163's expanding square search was conducted in 5 than 25 feet, is 0.5? 5 the appropriate area and was demonstrably effective in 6 A. That's what the manual says, yes. 6 detecting small boats as it found three migrant boats." 7 7 Q. And so when you say that the helicopter wouldn't be able And then it refers to the fact that it didn't detect 8 8 to fly less than 0.7, would you accept, based on this, people in the water. It says, if I go down five lines: 9 9 that that can't be correct? ... the occupants of the swamped migrant both 10 A. Again, I would have to reference the technical manual 10 Charlie were not detected until many hours later when 11 for the aircraft, not the technical manual for 11 the victims were found by a French fishing vessel. This 12 the search, to confirm that figure has to go down. But 12 may have been because the search pattern's track spacing 13 you want to achieve as close as possible to that to 13 of 0.7 aligned with the IAMSAR recommendations for 14 enable you to cover across, as the -- as the manual 14 searching for boats, not people in water, and 15 15 the likelihood of the victims being detected by says. 16 I'm not answering that particularly clearly, I'm 16 the helicopter was therefore much reduced." 17 afraid, but -- but there is -- the actual geometry and 17 And then if we skip down, it says, the next 18 physics of flying it might not necessarily, in that 18 sentence: 19 first part, be -- be accomplished. If you imagine 19 "Effective detection of people in the water required 2.0 2.0 flying a first leg on a direction of, say, quarter of a lower track spacing than that required to detect small 21 21 a mile, and then turning right for another quarter of boats and the IAMSAR manual recommendation given

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a mile, which is the first start of the expanding square

search, and then you expand the third leg, which goes to

half a mile. Actually getting an aircraft to turn that

tightly in wind, across wind, etc, etc, is not

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the visibility on the night was for a sweep width of

A. I cannot comment on whether we were tasked initially, at

Would you agree with that?

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1 that point, to look at people in the water.

the expanding square search.

2 Q. No.

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3 A. So therefore the track spacing at 0.7 nautical miles was 4 both a physical and a predicted calculation. The -the sweep width of 0 nautical miles means you have to 5 fly over the same piece of ocean all the time in order 6 7 to find it, so -- or be in the hover and looking right down on -- onto something. So that's what IAMSAR does, 8 9 so you have to apply a little bit of logic and knowledge 10 to this, to say, in order for us to cover an area and 11 search an area, we have to do a recognised search 12 pattern, and carry on and do as we did and fly

The IAMSAR recommendations are that, and conditions can vary from each job to each job. So at that point, I would suggest that we were doing the best we could, based on the direction we'd been given and the conditions we were faced with on the day. And the fact that you can look out and probably see a little bit further than the sweep width is -- is suggesting -would mean that we were giving as best coverage as possible. As I said before, you're looking for a coverage of 1. It's not always possible to achieve that coverage of 1 in order to find somebody, in probability terms.

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2 people in the water, how would that have altered 3 the decisions you made in relation to search parameters? A. That's a very good question and I'm not sure I can give 5 a complete answer, because it is always done on a dynamic basis as to what you're faced with at the 6 7 time. If there had been a report of, "People in

Q. If you had been given the information that there were

8 the water, roughly this point", then we would have gone 9 and searched that point, initially, on top of the datum. 10 and then with whatever search pattern is given to us or 11 predicted. We can suggest search patterns, but as 12 I said before, it is down to the controller of 13 the incident to -- to actually give the specific 14 instructions.

> Now, if we saw somebody in the water, or something in distress, then obviously we can respond to that and go to that position and make an assessment of what the next best course of action is . I stand by the -the actions that we took in conducting that expanding square search such that it had provided us the greatest probability on the night of detecting something and covering an area to minimise the probability that that object was outside of where we were looking.

2.4 Q. In his evidence yesterday, Mr Gibson suggested that 25 the appropriate track spacing, for example, for

searching for multiple people, so for example 40 people,

- might be higher than that for searching for one person.
- 3 A. That is true.
- 4 Q. And why is this?
- $A. \ \ \text{Because they are a larger target} \, .$ 5
- 6 Q. And --
- 7 A. So you might see one person out of that group of 40, but 8 there are 40 more chances of seeing one person.
- 9 Q. He also suggested that the clothing worn by the target 10 would be relevant --
- 11 A. Sorry, could you say ...?
- 12 Q. The clothing worn by the target --
- 13 A. Oh, yes.
- Q. -- would be relevant in determining the appropriate 14 15 track spacing. So he suggested, for example, that 16 the detection range dramatically increases for someone
- 17 wearing a bright orange life jacket, for example.
- 18 A. And protective clothing, yes.
- 19 Q. Thank you.
- 2.0 How would your knowledge of the fact that a vessel 21 was in distress $\,--\,$ how would that have affected your 22 response on the night?
- 23 A. In terms of what aspect, please?
- 2.4 Q. In terms of -- in terms of your decisions you made in 25

terms of the search pattern, the search parameters,

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- 1 would that --
- A. Oh. I see. 2.
- 3 Q. -- have impacted your --
- A. Actually on the scene?
- 5 Q. On the scene, yes.
- 6 A. I think if we'd been given a specific position to go to,
- 7 then we would have started and saturated the area either 8 by just standing off a little bit to allow the equipment
- 9 to look, because obviously if you're right over the top
- 10 of it, you're not giving the best horizon to look at to
- 11 see. And then we would have performed some sort of
- 12 search pattern around that position, and as we've
- 13 discussed, the clover leaf position -- the sector search
- 14 is a good one to do, because it searches an area
- 15 quickly. But, again, if we had no detailed position of
- 16 it, then the expanding square search is also a good one
- 17 and would probably have been used.
- 18 What I will say is at that no stage within that
- 19 search pattern can you not stop and make a manual
- 2.0 manoeuvre to investigate something. So that's the whole
- 21 idea of it is, if you spot something outside of 2.2 necessarily the track you are flying, then you go and
- 23 investigate it. If it turns out to be nothing,
- 2.4 the aircraft equipment, we can then ask it to take us
- 25 back to that position where we stopped and carry on, and

1 it is the most effective way of sanitising an area 2 effectively and accurately so that you can say, "We have 3 searched this area".

4 Q. Thank you.

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The Inquiry understands that the Coastguard considers all small boats to be in distress because of the nature of them. Did you take the same view, take the same approach?

A. Yes. We treat each report of somebody who is in difficulty exactly the same and there's no deference put between any different one. If it is noted when we get there that they are not in distress, then we report that back and then carry on with the next part of the search that we are directed to do.

The advantage of being in the air is you get a greater look—down capability and you can see more of what's going on than you can directly in — on a horizontal line of sight, and we could see boats outside of the search pattern and reported those as such, as has been documented. And in other cases, we've been able to report vessels and investigate those vessels using the FLIR, admittedly in better weather conditions, and report that the state of the vessel itself and the people on board seemed to be less than potentially anything in distress.

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- Q. I've already mentioned that in your search you
 identified three vessels. Just to confirm, none of them
 were Charlie, which is the vessel that the Inquiry is
 concerned with?
- 5 A. As far as I understand.
- 6 Q. Yes

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Did you encounter any challenges in carrying out the searches that night?

8 9 A. Well, as we've discussed before in -- in this 10 deposition, the visibility is -- is a big factor. 11 Obviously it's dark. The -- the moisture in the air 12 does have an effect on the FLIR in terms of its 13 performance, and it will still work, but it is harder to 14 interpret the -- the picture that you get to a point 15 where it becomes saturated and won't work. It won't 16 look through cloud, and I'm sure the Inquiry has been 17 told that. And the fact of an uncertain area to search, 18 so you have to start somewhere. So those are the 19 difficulties which I think you're alluding to within 2.0 the -- within the question. And no two searches are 21 the same. Obviously the mechanisms are, but the

conditions and the objects, etc, are always different.

Q. If I take you to {INQ010445/27} of the document that we are currently on, the MAIB report, so if we could go down, please. So, in the third paragraph, it says that:

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"... R163 relayed the position of a third migrant 2 3 And then, in the third line, it says: 4 '... however, the helicopter had since lost sight of the boat due to a fault with its infrared camera." 5 Do you recall that being an issue on the night? 6 7 A. Not specifically that piece. There are a number of 8 things that that could relate to in terms of the --9 the camera is -- is obviously stabilised and refers to 10 references using a gimbal system. If you're constantly 11 manoeuvring that, it is possible to confuse that gimbal 12 system, and so the best way is you give it a reset. 13 there are a number of electronic things that could go 14 wrong, as seemed to go wrong with computers, and again, 15 a reset, whether it's just a period of stability on 16 a single bearing or whatever it may be, and that allows 17 it all to reset and the sensors to realign and it can do 18 — then be reused In terms of this paragraph, I'm not sure exactly 19 20 what the fault was on the night, I'm afraid. 2.1 Q. Thank you. 22 And I note that you came off the tasking at 6.30 in 2.3 the morning --2.4 Α

-- were you asked to carry out a further tasking that \$151\$

1 morning?

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2 A. At that point, when we had to go back for fuel, we were

3 asked to conduct a further visual search as light was

- 4 coming up along the coast, and you'll see from the trace
- 5 that there seems to be a dog leg within that where we
- 6 investigated another contact and we flew closer to
- 7 the coast on a non—specified search pattern before
- 8 returning to Lydd for fuel.
- $9\,$ $\,$ MS ONABANJO: I have no further questions. Thank you.
- SIR ROSS CRANSTON: Well, thank you very much, Mr Trubshaw,
- both for your statement and also your evidence this
- 12 afternoon. It's been very helpful, so thank you.
- 13 Ms Le Fevre, I understand we're back on Tuesday --
- 14 Monday.
- 15 MS LE FEVRE: Monday, yes, my Lord.
- 16 SIR ROSS CRANSTON: 10 o'clock?
- 17 MS LE FEVRE: 10 o'clock.
- 18 SIR ROSS CRANSTON: So 10 o'clock on Monday.
- So thanks very much to everyone and we'll see you on
- 20 Monday.
- 21 (2.45 pm)
- 22 (The hearing adjourned until 10.00 am on Monday,
- 23 10 March 2025)

24 25

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