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TRANSCRIPT OF PROCEEDINGS TRANSCRIPT-IN-CONFIDENCE

INSPECTOR-GENERAL AUSTRALIAN DEFENCE FORCE INQUIRY INTO THE CRASH OF A MRH-90 TAIPAN HELICOPTER IN WATERS NEAR LINDEMAN ISLAND ON 28 JULY 2023

PUBLIC INQUIRY

THE HONOURABLE M McMURDO AC AVM G HARLAND AM CSC DSM

COL J STREIT, with FLTLT A ROSE and MAJ L CHAPMAN, Counsel Assisting

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0930, FRIDAY, 16 AUGUST 2024

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DAY 21

Signed

TRANSCRIPT VERIFICATION

I hereby certify that the following transcript was made from the sound recording of the above stated case and is true and accurate

Signed ______ Date _____ (Chair)

Signed _____ Date _____ (Recorder)

Date

08/09/24

(Transcription)

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MS McMURDO: Yes, COL Streit.

COL STREIT: Good morning, Ms McMurdo, AVM Harland. For the assistance of the Inquiry, and for Counsel representing, in terms of what can reasonably be achieved today, we'll finish the evidence of D9, and Counsel Assisting will then call and finish the evidence of D1, and that will conclude the witnesses for this hearing phase.

The witnesses that were not reached in this hearing phase, of which there are three, will be called in the October hearing phase.

MS McMURDO: Thank you.

COL STREIT: I understand LCDR Gracie has a matter to raise.

MS McMURDO: Yes. Yes, LCDR Gracie.

LCDR GRACIE: Ma'am, I just want to put on the record something that follows on from what I raised on the first day of this block of hearings in 20 relation to the DFSB report. At that first day, I raised my concerns about the reasons and the timing of DFSB releasing to the families of the deceased the contents, some of or all of – I don't know – the DFSB interim report when, firstly, it was the very week before this block of hearings. Secondly, it was not disclosed to Counsel representing, as far as I'm aware. But it 25 was, again as far as I'm aware, provided to Counsel Assisting and, I expect, the Commonwealth, and perhaps others. Thirdly, when I expressed my concerns of such conduct by MAJGEN Jobson, as the owner of the DFSB report, I said that it may, at a theoretical level, have the consequence that it could impact or influence the evidence before the Inquiry, and the conduct 30 of the Inquiry. It was just a possibility, given the circumstances that surrounded its release to the families.

And, ma'am, quite correctly, with respect, you said, "Look, the DFSB investigation is separate to this Inquiry". That's how it should be. But it's not, because the contents of the interim report, having been disclosed to the families for whatever reason, hasn't been disclosed to the Inquiry or Counsel representing.

MS McMURDO: Well, it has been disclosed to the Inquiry, as I 40 understand it. I understand the Inquiry has the material. As far as I can ascertain, the Inquiry has the material that the family has been given, but on a non-disclosure basis.

LCDR GRACIE: Yes.

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MS McMURDO: So we're unable to provide it to you.

LCDR GRACIE: I accept that, and understand that, and there's the dilemma for me as Counsel representing the interests - - -

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MS McMURDO: Or to anybody else.

LCDR GRACIE: Yes.

10 MS McMURDO: We can't disclose it.

LCDR GRACIE: And there is the problem in terms of my duty to represent the interests of CAPT Lyon. So, unfortunately, however - - -

MS McMURDO: It is difficult for you, isn't it, because in representing the interests of CAPT Lyon, you are naturally working closely with his family?

LCDR GRACIE: Yes.

- MS McMURDO: Although not representing them and their interests, and they have that information and you don't. The other thing that makes it difficult for you and I appreciate this is one of the concerns that the Commonwealth raised initially in asking us not to proceed with the bulk of the Inquiry work until after we received the final DFSB report, one of their arguments was that it meant that we might go down chase red herrings and raise matters that weren't, in the end, relevant but might cause distress to other people. And, of course, that's something that now confronts you.
- The Inquiry is informed, and so is less likely to do that. And that's a very good thing, and I commend those in charge of the DFSB material for that cooperation. But it does leave you, as the Counsel representing the deceased's interests, in a difficult position, and it might make it less likely that you would fall into that path if you had the same material that the family had.

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So I understand your position, but you understand it's not in my power to do anything about it. But I have placed those words on the record for you.

LCDR GRACIE: Thank you, ma'am. Could I now just make a submission that takes the matters one step further, with respect? The contents of the interim report appear to have filtered into the hands of not only, say, certain Counsel representing – I don't know who – and it's being used to postulate hypothetical scenarios that I can only assume come from that report.

Now, I don't know, but there has been a line of questioning repeatedly which has been – I don't mean this disrespectfully – but it has been indulged by Counsel Assisting without objection, that has pursued a line of hypothetical questioning, which raises matters that I can't deal with because I don't know what the relevance of it is. I don't know the source of it. But the available inference is that, without objection to that line of questioning, those hypotheticals are somehow put on a particular basis. There's no evidence of issues going to the RADALT - - -

MS McMURDO: I guess there are two options: that might be because they know the contents of the report, but it might be because they don't know the contents of the report.

LCDR GRACIE: On my instructions, the - - -

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MS McMURDO: Either way, I suppose you're in a difficult position.

LCDR GRACIE: I am, ma'am. But, as I said, I'd like to take it just one step further. In my respectful submission, the selective release of the contents of that DFSB interim report either had the intentional or inadvertent effect of causing a line of enquiry in this Inquiry of which there is no evidence, but which points very squarely at possible pilot error in circumstances where my client was either the flying pilot or, at least, the Captain in charge. And cutting to the chase, I'm talking about the RADALT, and I'm talking about the decision height limit.

And, ma'am, could I say this: the perception that I hold is shared by certain others, and it does suggest that this leaking of the DFSB information has impacted on the evidence before the Inquiry. It's impacted on a line of enquiry that I can't deal with, and it does seem to have been a possibly deliberate attempt to deflect from certain other issues that the Inquiry is looking into.

MS McMURDO: Well, I can assure you that there has been no leaking of this material from the Inquiry, or from those involved in the Inquiry who have been permitted to see it.

LCDR GRACIE: I accept that wholeheartedly, ma'am, and I wouldn't suggest otherwise. But what it's done is create an unequal playing field in that if there are Counsel representing here – not just the deceased – but there are Counsel representing who know the contents of that report and I don't, I cannot properly represent the interests of CAPT Lyon and ask questions about those matters where I don't know the source of it, I don't know the relevance of it, and nor do I know anything from a technical point of view

from the evidence as to its relevance. And I feel very concerned that I can't fulfil my duty to CAPT Lyon's interests.

MS McMURDO: Well, you are not making an application for me to do anything.

LCDR GRACIE: No, ma'am. You can't; I appreciate that.

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MS McMURDO: You appreciate that. So your application is, what, really calling on the Commonwealth, who has possession of the material, to give you the same information that's been given to the family members and the Inquiry? Is that what you're asking for?

LCDR GRACIE: Ma'am, no. It's really just following up what I put on the record last Monday, or Monday last week, which has – recent evidence and recent lines of questioning has confirmed the very fear I had on day one, that there would be an unintended or deliberate attempt to have this information filter into the Inquiry in a very select way, and a way that is adverse to my client's interests, that I cannot properly protect or represent in the way that it's coming out. Thank you, ma'am.

MS McMURDO: Did you have anything to say, COL Streit?

COL STREIT: Thank you, Ms McMurdo. First, can I deal with one 25 thing? It should be abundantly clear to any Counsel representing that the last thing I do is indulge anything. Second, it should be recalled, my comments as to the role of Counsel Assisting, which I articulated fairly clearly at the May hearing about fairness to everyone. That includes Counsel representing asking questions that they consider are matters 30 affecting the interests of their client. I found some of the questioning of Counsel representing unhelpful, but I have resisted objecting as a question of fairness because their questioning may be leading, ultimately, to a matter. I have indicated to Counsel representing that my approach in relation to their questioning - and this is yesterday - approach in relation to questioning and objections that we may raise will now change. That's the 35 first two points.

The second issue is, I recall I said formally on the record to the Inquiry that it's open for all Counsel representing to apply to MAJGEN Jobson, or the DFSB, for access to the material. I understand that's not been done. Raising it with the Inquiry is one thing, but taking actual positive action that Counsel Assisting has recommended, it's unfortunate and disappointing that that hasn't occurred. It's really a matter for the Commonwealth, in the circumstances, given decisions that persons within the Commonwealth may have made concerning this material.

And I would reinforce the points I have repeatedly made: raise it with the Commonwealth. If you wish to gain access to whatever material that's within the Commonwealth's remit to hold, raise it with them. If you are dissatisfied with their response, then perhaps it's something you can revisit with the Inquiry in due course. Thank you.

MS McMURDO: Yes. Well, ultimately the Inquiry does expect, when the final report is provided to the Inquiry, to investigate some of these issues publicly before any final report from this Inquiry is given.

COL STREIT: Certainly. And - - -

MS McMURDO: So that may provide some comfort.

COL STREIT: Well, the Inquiry would also recall my comments in the hearing in May where I indicated on the last day that the intent of Counsel Assisting is to call evidence in relation to the DFSB final report. So that will include the Director of DFSB, the Officer in Charge of the investigation, and potentially subject-matter experts that made a contribution to the final report. That's certainly well and truly fixed on my radar, and that will occur when the final report is actually provided to this Inquiry.

MS McMURDO: Right.

LCDR GRACIE: And could I just be clear on one thing: the expectation of being provided that report, in circumstances where this Inquiry has not disclosed it, would suggest to me that the chance of me being provided with a copy of the report, and utilising it in this open forum, is nil. Not even the families have a copy of it. And it was provided on a confidential basis. So even if I was to be provided with it, there's nothing really that I could properly do with it. And so, in that respect, I think it would be a forlorn hope that I would be provided with it.

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But the second is, it was more over my concern that the release of its contents in the way it was done had an impact on the nature of the evidence before this Inquiry, without it actually being evidence. And it's very speculative, and it's unhelpful. But it doesn't take much to read between the lines as to the source of some of those questions. Thank you, ma'am.

MS McMURDO: Well, I'm still a bit puzzled as to what you want me to do about it?

LCDR GRACIE: I just wanted to put it on the record, ma'am, because it bookmarks what I said on day one about my concerns about the conduct of those from DFSB. We already know from Exhibit 12A, the 60 Minutes report, that there was a criticism of DFSB for being the approving – or being involved in the approval of the symbology upgrade. I'm not sure of his rank and I don't think he's a D but one of the flying pilots in the OPEVAL is a DFSB Board member. So, as the 60 Minutes report said, all that time ago, "Who's actually impartial and objective in terms of the DFSB approval for this upgrade?" Now, I can't go any further than that. But, it does raise concerns about the impartiality of DFSB.

MS McMURDO: But those are matters you can raise in your examination of witnesses.

15 LCDR GRACIE: They are, ma'am, when the - - -

MS McMURDO: I don't see that that's a - - -

LCDR GRACIE: Well, when the witnesses do turn up. But the other problem, of course, is that we are really going around in circles a little bit in terms of what eyewitnesses saw. We're seeing lots of conflicting evidence but we know that there is the objective data recording of the tracking and who did what. And I know it's the nature of the Inquiry to investigate these things - - -

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MS McMURDO: Look, that's unfair. I mean the data recording, when it becomes available, will show one aspect of things, but - - -

LCDR GRACIE: Yes.

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MS McMURDO: --- the people who flew that night, naturally we have to hear from them. And as you well know ---

LCDR GRACIE: I do.

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MS McMURDO: --- when you get people who are giving eyewitness accounts, they vary.

LCDR GRACIE: I'm not critical of that, ma'am. What I am critical of is that the objective data recording is available and has been selectively released to the families.

MS McMURDO: Well, I think the families might be very pleased to have that information.

LCDR GRACIE: Yes, but the consequence - - -

MS McMURDO: And that's why it was given to them, because it was felt that they had a right to be informed about it.

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LCDR GRACIE: Ma'am, with respect, so does my client, not just the families. My client, his interests, has a right to know about that. If the families have a right to know, surely my deceased client's interests would be impacted - - -

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MS McMURDO: Well, I agree with you on that. I agree with you on that. But there's nothing I can do about it. I mean you've had your say, and you've said it several times. So I just want to be sure that you're not asking me to do anything?

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LCDR GRACIE: No, ma'am.

MS McMURDO: Which makes the whole statement to me rather puzzling, except that you obviously would like to have these things in the public domain. And now they are in the public domain.

LCDR GRACIE: Yes. Thank you.

MS McMURDO: So that's done. All right, we can get on with it now. 25 Yes, COL Streit?

COL STREIT: Thank you. The witness is just outside.

30 <D9, on former affirmation

EXAMINATION-IN-CHIEF BY COL STREIT, continuing

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COL STREIT: Thanks. D9, please take your seat. And you've got a glass of water there. Now, if your statements could be returned to you, please? And when you have those statements, if you could just turn up your Inquiry statement, thank you, and go to paragraph 8? So at paragraph 8 you identify, from your perspective, some of the advantages and disadvantages of the MRH-90, as you experienced them. And you identify that the advantages – so, first of all, you give some evidence that the MRH-90, from your perspective, was a complex machine?

45 D9: Relatively, yes. COL STREIT: And that it provides a lot of automation and information to aid it in decision-making?

5 D9: That's correct.

> COL STREIT: You considered, however, there was a disadvantage that at times the information can be overwhelming with the automation and mode awareness and, with the mode awareness, that becomes vital.

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D9: So just to summarise that, there is a lot of information. So as you're learning the machine, the importance of prioritising the input of that information is vital and, as part of the awareness of that information, understanding the modes, like, in the flight control computer or the Flight Management System, is important to understand the behaviour of the helicopter.

COL STREIT: Now, you've mentioned some matters concerning formation flights at paragraph 10. I just want to turn now to paragraph 11, 20 where you deal with difficulties when operating as the third aircraft. I understand that you address certain matters in another statement which is not in the public domain. But just in relation to your experience, have you flown in a sortie as the third aircraft?

25 D9: I have.

COL STREIT: And has that been at night?

D9: It has.

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COL STREIT: And in terms of that experience, what are the particular things from the way you fly the aircraft that you needed to be mindful of when you're the third aircraft in the sortie?

- 35 D9: So common in that formation type as the third aircraft is the areas that you get your cues information from are slightly nuanced depending on which station you are in formation. So as you go from flying as a single helicopter day instruments to night, the cues that allow you to get the orientation of not only your own aircraft but other aircraft change, 40 depending on your position within the formation.
 - So in the second aircraft you're primarily getting your cues from the aircraft in front, or inside your own cockpit and bubble. In the third aircraft, the same cues are available, it's just a split between getting them from the second aircraft and the first aircraft. So you'll hear people refer to that as

your scan. To get that information, you just need to scan the different cues, which is not dissimilar to other types of flying.

Just the location you're getting, your information from either in your HMSD visor or the instruments are slightly nuanced, depending on where you're operating with information.

COL STREIT: And so when you're the third aircraft in the sortie, you need to keep visibility where the first and second aircraft are; is that correct?

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D9: That's correct. And, I guess, to provide specific/non-specific examples, you can get your height cues, as an example, off the lead aircraft, and then you can get your position cues from the second aircraft - - -

15 COL STREIT: Sure.

D9: - - - where, in the second aircraft, you get both your height and position cues from the lead aircraft.

- 20 COL STREIT: And in terms of executing a turn, whether it be left or to the right, are there particular things that you're doing in maintaining visibility of the lead aircraft and the second aircraft?
- D9: So, in heavy left, there is the ability to look out to your right, let's call it, and only have small head movements to keep both of those aircraft in your field of view. So when I kind of refer back to the scan, it actually requires very little movement, if that makes sense, to actually pick up the information cues that you need to fly.
- 30 COL STREIT: Yes.
 - D9: When it's in a turn, what generates is kind of a term called "closure", and that's exactly what it sounds like, that the aircraft in front of you gives an apparent indication that it's closing, and that's because it's turning towards you. So at times when you're initially learning to do that, it can be uncomfortable because it requires a lot of power setting in the aircraft, or it requires you to use your arc of freedom to maintain your formation spacing. However, that's a kind of normal technique in any kind of turn towards when you're in formation. Because when you're the second helicopter in this instance, with a right turn, that same apparent closure rate gets generated.

Just in the third and fourth aircraft, the reduction of power, collective, to reduce that apparent closure rater, I should say, is slightly more to anticipate

a tighter radius turn. But everything else is similar, just different nuances on your cues.

- COL STREIT: Now, because you're keeping it's important to maintain visibility of the lead aircraft and the second aircraft, whether you're flying straight and level, whether you're heavy left, turning left, or heavy right, turning right, you'd accept it's important to keep eyes on the lead aircraft and the second aircraft?
- D9: Correct. And, essentially, it's the preceding aircraft's responsibility to maintain safe separation with the aircraft in front of them.
 - COL STREIT: Sure. That means, does it, from your experience, that you're spending more time as the flying pilot eyes out, scanning, than you are eyes in, looking at the instruments?
 - D9: Not necessarily, no. And it will vary depending on environmental conditions, and other factors. But the difference between where you get those cues from and I'm trying to think of a better way to explain it, sorry.
- COL STREIT: Well, perhaps if I could put it this way: you'd be more inclined to keep your eyes out, looking at the lead aircraft and the second aircraft when you were executing a turn, than looking in at your instruments?
- D9: And I genuinely can't put a likelihood on it. But the technique is to maintain a scan of both the aircraft in front and flight instruments, depending on what information you're getting or what is prioritised be it closure, which is essentially related to airspeed. If you're getting that information outside, you would continue to get that information outside. Whereas if you need to have a quick scan inside to confirm if a closure rate is generated, what your angle of bank is, or something like that, you'll just have a quick scan down and back out.
- And the way the cockpit is set up, it's not like a head movement, like that, it's a quick glance down and then you're kind of still eyes out, looking, making sure - -
- COL STREIT: Sure. But I suppose perhaps my questioning is a bit clumsy. It's the case, isn't it, that when you're flying in formation, you may be doing a quick scan down to the instruments every now and again to check things you've just identified. But the practical reality is, is that you're spending a lot of time with eyes out because you need to work out and keep in vision the lead aircraft and the second aircraft to maintain your spacing, don't you?

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D9: Yes.

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COL STREIT: Because if you lose visibility of the second aircraft, that is, you've lost them, you have to take an action, don't you, to avoid the risk of running into them?

D9: That is correct. And I think what I'm trying to explain is you can also get relative awareness of your flight instruments from those aircraft. So it's not to say in order to safely operate a helicopter you have a certain percentage of time scanning your instruments and a certain percentage of time scanning outside. There are different areas, depending on your spacing and formation, where you actually don't need to spend as much time inside because you can get it from the aircraft in front of you, or the horizon, or other information. But, yes, practically, you are spending a portion of time outside, looking at the aircraft in front.

AVM HARLAND: I mean, the two-rotor diameter, night visual ANVIS system, low-level formation, where would you be putting most of your attention?

D9: So you'll be spending most of your attention – a large percentage of your attention at the aircraft in front. But because the cues, at that point, are very good because you have clarity of what's occurring, you're getting the majority of information you need to safely operate the helicopter from the helicopter that you're looking at in front of you.

AVM HARLAND: So you are primarily visual in that night-vision sense for that type of formation?

D9: Yes. Absolutely, sir.

AVM HARLAND: Just one more follow-on question there. If you were in a heavy left formation, you talked about the left-hand turn, if you're in the 3 position, you need to slow down to maintain your spacing. If you're in heavy right, is that a more comfortable formation to fly for a left-hand pattern?

D9: I guess there's an important point to note here about heavy left, and you specifically referred to airspeed, sir. The other option you have to not reduce airspeed is your arc of freedom. So you can essentially increase your ground track to maintain your spacing. It becomes the exact opposite issue if you're in heavy right, in a left turn. Then you need to increase power, airspeed, cut a corner using your arc of freedom to maintain your

spacing. So it is a different problem-set – not even a problem set. It's just a different technique to maintain your position.

AVM HARLAND: Which would you assess as most comfortable or 5 easiest to fly?

D9: I think that they're both the same because from my perspective, when you're on an inside of a turn, you need to reduce power, and that's the thing that a lot of people find uncomfortable. But then when you roll out of the turn, you need to increase power which kind of is a comfortable to maintain position vice when you're on the outside of a turn. You increase power and then when you roll out of a turn it's – not a substantial change, but you need to reduce power, change your attitude, wash some airspeed off, which will generate then closure, or you need to reposition back to the outside of the formation.

AVM HARLAND: So broadly the same in terms of complexity and comfort?

20 D9: Correct, sir.

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AVM HARLAND: Thank you.

COL STREIT: Now, you've lost situational awareness on one occasion in 25 an MRH-90. That's correct?

D9: Correct.

COL STREIT: And that's because you were the flying pilot in the Jervis 30 Bay ditching in March 2023; is that right?

D9: That's correct, sir.

COL STREIT: And that's where there was an engine failure on the aircraft that you were flying which ultimately caused the aircraft to impact the 35 water?

D9: That's correct.

40 COL STREIT: Now, just in relation to that particular matter, at the time, did you subsequently learn after that ditching, in a briefing, that there was in fact an issue with the engines on that MRH-90, in the sense that they required an upgrade to fix an internal issue to the engine?

D9: I did. And to be clear on the language, that an upgrade was available to rectify a known defect rather than require an upgrade.

COL STREIT: So an upgrade was available to rectify a known defect, but 5 you only learnt of that known defect after the ditching in the Jervis Bay. Is that correct?

D9: Correct.

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10 COL STREIT: And can you just explain how you became aware of the known defect?

D9: I guess, in a sequence of time immediately following – let's call it 48 hours post-incident – informally through a professional inspecting the engine, he highlighted that the cause was likely as a result of turbine blade failure, which was a known defect. And then, subsequently, we became aware of a brief that there was an upgrade program in place across the entirety of the DOD, including the Navy helicopters, and then some informal discussion amongst, essentially, peers and other people operating the MRH.

And then, subsequently, there was a release of a Special Flying Instruction directing that certain flight profiles were restricted until that modification is in place in the helicopters that we're flying. And then, finally, there was a formal briefing highlighting, essentially, the known failure modes and defects later.

COL STREIT: So I take it that – perhaps to state the obvious – what happened in the Jervis Bay ditching when you were in the aircraft with the engine failure, that would have been significantly confronting to you as a pilot?

D9: As in was I anticipating that to occur at that point in time? Is that the question?

COL STREIT: You weren't expecting it to occur, were you?

D9: No. And to continue on from that, engines do fail in helicopters. We're not naive enough to go flying in these aircraft and think that material failure cannot occur. But you never think it's going to be you, and the flight profiles and – you minimise exposure time in flight sequences where you can't fly away, as an example. But at certain times you can't avoid that, and it's just a sequence of events where I guess the statistics didn't line up where an engine failed at a time where we were unable to safely fly away in that emergency.

MS McMURDO: Well, it failed because of a known risk that wasn't known to you as the pilot, isn't that right?

5 D9: That is correct, ma'am, yes.

> COL STREIT: So when you learnt this about this known risk which ultimately manifested and was the reason why the turbine in one of the engines of the aircraft you were flying failed, causing the impact of your aircraft into water, and endangering your life, everyone on board, and people in the water, when you learnt that, what was your initial reaction to first learning of that information?

D9: So I guess the initial reaction, there was some form of emotional 15 response, and what emotion that was varied from curiosity to a small amount of disgruntledness.

MS McMURDO: What was your reaction?

20 D9: I was somewhat surprised and also curious to understand it a little bit more.

MS McMURDO: Not angry?

25 D9: At a period of time I would have been, but I wouldn't describe that as my overwhelming reaction, ma'am, no.

COL STREIT: So were you frustrated that you hadn't even been told of this known risk?

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D9: Yes, I think that would be a good description, sir, and I think I'll also add I – on a level, I understood that these decisions needed to be made within the airworthiness system, and that there was a lot of information that was input to these decisions, and there was a lot of complex things to manage. But something like that was something that I would have liked to have known, yes.

COL STREIT: You mentioned a Special Flying Instruction, or SFI, that was published afterwards which restricted certain profiles when you were 40 flying with an engine that had that defect or fault. In your understanding of the SFI, would that profile you flew in Jervis Bay have been available to you under that SFI, or would you not have been able to fly that profile?

D9: We wouldn't have been able to fly that profile, sir.

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COL STREIT: Thank you. Can I turn now to your experience with TopOwl?

D9: Yes.

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COL STREIT: This commences at paragraph 14 of your statement.

MS McMURDO: Sorry, could I just clarify that before you go on to that topic?

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So at the time of the Jervis Bay incident, are you saying that there weren't enough helicopters that had had the two engines modified to deal with the fault to have undertaken the exercise? Is that what you were saying?

15 D9: I'm not sure, ma'am.

MS McMURDO: Do you understand what I'm asking?

D9: I don't think so, sorry, ma'am.

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MS McMURDO: Okay. The SFI, didn't it indicate that only helicopters with the two engines modified to correct the fault that was the cause of the accident when you were flying the plane in Jervis Bay were to be used to fly in exercises overwater? Wasn't that the effect of the SFI?

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D9: It was. But that SFI was not in.

MS McMURDO: Yes, of course. Of course. So what I'm asking you is, at the time of the Jervis Bay incident, were there helicopters available that had their two engines rectified?

D9: I'm actually not sure, ma'am. I wasn't posted to 6 Avn at the time, last year.

MS McMURDO: So you don't know. So why do you say the profile couldn't have gone ahead?

D9: So, retrospectively, if that SFI – backwards step: in that specific helicopter, we wouldn't have been able to conduct that profile without modified engines when flying - - -

MS McMURDO: Not in that helicopter.

D9: Correct.

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MS McMURDO: But other helicopters may have been available which had had the two engines modified.

D9: Yes, that's correct, ma'am, if the engines were modified, we could have conducted the profile.

MS McMURDO: Yes. Thank you.

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COL STREIT: How would you describe your tolerance for risk in the conduct of Aviation operations as at March 2023?

D9: I think my tolerance for risk was measured in the sense that I am very aware of the risk that's involved in Aviation and don't choose to unnecessarily expose myself, anyone in the crew, or any Ground Force that we're supporting, to said risk.

COL STREIT: So if you had known of this risk of failure to the engine which was subsequently learnt after your accident in the aircraft, if you'd known of that risk, it would have been a factor, would it not, that you could have injected into your mission planning?

D9: I think hindsight is interesting in this one, sir.

COL STREIT: It's a hindsight question, yes.

D9: Yes. And at no point is there a deliberate decision to spend any more time exposed in those profiles, regardless the reliability of the engine. So if that data was known, my assessment is that the, I guess, risk calculus in the Risk Management Plans for the conduct of those operations would have been reviewed. And if that changed the risk calculus, i.e., elevated the risk beyond what was acceptable at the unit and Brigade level, then it would

have changed the profile. But if that risk calculus remained the same with that information, it wouldn't have necessarily changed the profile because we always minimise our exposure time, regardless of the reliability of the engine.

COL STREIT: Having gone through that experience, and in the immediate aftermath of it, did that undermine your confidence in the airworthiness system, that there might be other things wrong with the aircraft you're not being told about?

D9: It didn't undermine my confidence. I had the thought, as mentioned in my statement, like, "Is there anything else?" But it wasn't anything more, because I did have confidence in the airworthiness system that I thought that I had internally - - -

MS McMURDO: Surely if you're doing the risk profile for that Jervis Bay incident – put yourself in this hypothetical scenario – you're doing the risk profile for it; you've got helicopters that have had their engines modified, and those that haven't. It's going to be flying overwater. You've got people, as I understand it, from ropes, dangling on helicopters. If you can use the helicopters that have had the modification and don't have that risk, surely you would use them?

10 D9: We would, ma'am, yes.

MS McMURDO: Yes, thank you.

D9: And I hope what I just said wasn't interpreted as that. I think you would, of course, reduce the exposure in every mechanism that you had available, but – and that's why I mentioned hindsight at that point in time.

MS McMURDO: Yes, it's a hypothetical I'm putting to you.

20 D9: Yes.

MS McMURDO: That if you had known of the risk, or you had known then that you had helicopters available that had the modification, you would have used them in the Jervis Bay incident.

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D9: Absolutely.

MS McMURDO: Yes, thank you.

30 COL STREIT: Because that would be a quick fix, just to eliminate the risk altogether of that particular failure, wouldn't it?

D9: Well, it reduces the likelihood of the event occurring, which limits the exposure.

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COL STREIT: Well, it would eliminate the risk because the engines had been upgraded – in relation to a turbine failure, would it not?

D9: That specific failure mechanism, correct.

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MS McMURDO: But there's always a risk that engines can fail.

D9: There's always a risk of engine failure, yes, ma'am.

COL STREIT: Now, just coming back to TopOwl, you've had the benefit of using TopOwl on the armed reconnaissance helicopter; is that correct?

D9: That's correct.

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COL STREIT: And TopOwl on MRH-90; correct?

D9: Correct.

10 COL STREIT: Are they two different systems?

> D9: So the display module and basic helmet are the same, but the information display is different.

15 COL STREIT: I see. In relation to the MRH-90 TopOwl version 5.10, which was the version in Service at the time of the accident on 28 July 2023, the Inquiry has received evidence about a condition whereby things appear closer than they are at a certain distance when using TopOwl on MRH-90. And, first, do you accept that that is so?

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D9: I do.

COL STREIT: Did you have the same experience on TopOwl in the armed reconnaissance helicopter?

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D9: I did, and it was a result of the design feature of the display module and where Image Intensifier Tubes were placed.

COL STREIT: When you transitioned from armed reconnaissance 30 helicopter flying to MRH-90, was that an easy adjustment for you to get used to MRH-90 TopOwl with that particular feature, because you'd already been exposed to it on an armed reconnaissance helicopter?

D9: It was a familiar adjustment. There was a period of time in the 35 middle, between where I flew on ANVIS tubes as well, but the application of, I guess, how an MRH is operated is slightly different to Tiger. So to answer your question, I was aware of it. I had techniques to fly with that available to me from Tiger, which is slightly again nuanced to the cockpit configuration and out-roll of the MRH.

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COL STREIT: I understand. Now, you were, in 2022, the BM at 16 Aviation Brigade; correct?

D9: Correct.

COL STREIT: You did a transition to MRH-90 in 2022; is that right?

D9: That's correct.

5 COL STREIT: And you then undertook flying at 6 Aviation Regiment in the first half of 2023; is that correct?

D9: For approximately a week a month, yes, sir.

- 10 COL STREIT: A week a month. And in terms of that skill in getting used to the effect of TopOwl 5.1 with objects appearing closer than they are at a certain distance, did you find that there was a loss of your ability to deal with that issue when you weren't doing regular flying?
- D9: No, I wouldn't say there was because it was kind of the concept to fly what you see, and you're still seeing the same image when you fly on TopOwl.
- COL STREIT: Sure. We've heard it described in evidence that getting used to that issue of things appearing closer than they are is, when you've had a bit of downtime flying, a bit like riding a bike. It's something that you don't necessarily forget when you get back into the MRH-90. Would you agree with that?
- 25 D9: I think that's fair, sir, yes.

- COL STREIT: But even riding a bike might take a little bit of time. You get the fundamentals, but might take a little bit of time to ride the bike perhaps as proficiently as what you might have done if you'd been regularly riding a bike?
- D9: I agree that the concept of recency definitely makes any skill and, in this instance, flying is a skill easier, yes.
- 35 COL STREIT: Were you aware of any limitation in relation to TopOwl when you looked off-axis?
- D9: I and I could not remember the nomenclature I wasn't necessarily aware because I wasn't flying the aircraft when we transitioned from the previous versions to the new versions. That's not to say it wasn't included in the training. It's just not anything that I noticed or affected me in the cockpit, once I transitioned on MRH.

COL STREIT: Do you understand what the limitation is though? That when you're looking off-axis, the attitude information can be different to what the instruments of the aircraft are saying?

5 D9: I subsequently have been made aware of it, yes, sir.

COL STREIT: And when were you made aware of that?

D9: It was, I think, around the time of the 60 Minutes - - -

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COL STREIT: Program?

D9: --- program into this.

15 COL STREIT: The 60 Minutes program was earlier this year. Do you accept that?

D9: Yes.

- 20 COL STREIT: So up until that point, you were not aware of the limitation that the attitude information displayed by TopOwl when you look off-axis would be different to the attitude information displayed by the aircraft's flight systems?
- 25 D9: It wasn't anything that affected my flying, nor had I necessarily acknowledged in training as a factor. So, yes.

COL STREIT: Now, can I take you to paragraph 15, please? You say:

- 30 Flying at night, in a low contrast and illumination environment, is a difficult task, regardless of the equipment, and something that can be uncomfortable. It becomes easier with experience and training.
- 35 Was that your experience and opinion as at July 2023? Noting that there was the grounding of the fleet post the accident, so there was no further flying on MRH-90.
 - D9: Yes. And, generally, when you're first exposed to those lower contrast environments, it can be uncomfortable.

COL STREIT: You give some examples of a low contrast environment with low lunar illumination overwater, over the dessert or over a heavily wooded area. Is that correct?

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D9: That's correct.

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COL STREIT: Can I just turn to fatigue, which commences at paragraph 17 of your statement. I appreciate you were not posted to 6 Aviation Regiment in 2023, although you were attending there, on your earlier evidence, about one week in every month to undertake flying. How would you characterise your level of fatigue in that first six months of 2023?

D9: So I think it ebbed and flowed with regards to my own personal work tempo and the demands of being the BM, along with trying to balance flying. And there was also that kind of increase to travel, amongst other things.

COL STREIT: Sure. In your experience, from your observation before you became the BM of 16 Aviation Brigade, is that position normally filled by an aviator; that is, a pilot?

D9: As 16 Brigade BM is, yes.

- 20 COL STREIT: And that could be a pilot who might be an armed reconnaissance helicopter pilot, a Chinook pilot, or, at that time, an MRH-90 pilot?
- D9: Correct. And because it was located in Brisbane, it's not a role where you'd have access to aircraft to fly routinely, and is often a non-flying role that's filled by pilots.

COL STREIT: Sure. Prior to the accident in July 2023, as the BM of 16 Aviation Brigade, did you have any involvement in the development of any fatigue management policy at the brigade level?

D9: Specific to policy, no.

COL STREIT: Now, in 2022, did you have any awareness that 6 Aviation Regiment had made a case to conduct a sleep survey and they were seeking funding from 16 Aviation Brigade for that survey?

D9: I didn't, no.

40 COL STREIT: I just want to deal with paragraph 20, where you deal with fatigue reporting culture, and you say:

I believe for aircrew in flying roles there was an open culture to discuss fatigue, but it was on the individual to manage and report if there were - - -

I presume you mean "they" –

if they were experiencing fatigue and related performance degradation.

Just in relation to that aspect, so it was on the individual to manage and report their own fatigue. Was there any responsibility for Command to manage fatigue?

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D9: There absolutely was. And I think specific to that is Command sets, I guess, and implements, the policy. And then, as OC, I'll be responsible for application of that policy specific to my context and environment. What I'm specifically referring to, from a reporting culture here, is I can understand the, I guess, cues when I can see that a member of my team is experiencing some sort of performance degradation by getting to know my team. But they know themselves best. And their own kind of personal performance-related triggers are what I rely on for them to report to me, because I can ask the question, I can put mitigations in place, but at the end of the day, it's an open conversation.

COL STREIT: So from an individual perspective, would you accept that that's a subjective assessment? That the individual assessing their own fatigue is subjective?

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D9: Correct.

COL STREIT: And that the Command responsibility is then to objectively assess that individual member's fatigue level by undertaking whatever Command needs to do to make that assessment?

D9: So I think fatigue is one part of the objective analysis that Command's doing when we're talking about this.

35 COL STREIT: Sure.

> D9: And I think when we look specific to flying, whilst we're essentially talking collective human performance. And other factors that speak to that are stressors on the individual, distractors, external factors, and fatigue. And all of those things can manifest in an individual's performance in the same way. So it is, as I kind of said, a conversation, observation and understanding that the teams actually know if, I guess, the box is set right from a fatigue management policy perspective. But it also needs an open dialogue to understand what factors are actually affecting a human's performance, and if it is sleep, or if there are other factors that are affecting

sleep, fatigue management, duty cycles, and the like.

COL STREIT: It's got to be more than just an Aircraft Captain, or a supervisor, saying to one of the aircrewman, "Are you good to go, mate?", and then just getting a positive response back, "Yes, good to go", and then you jump in the aircraft and fly. It has to be more than that, doesn't it?

D9: Yes, correct. And when we look at fatigue management within Aviation, there is the nested policy that we're directed to follow through SIs and SFIs, and then there's subsequent training that we received through non-technical skills, and what I would define is the box is what is set out through policy and instructional procedures in SIs/SFIs, and that's what is directed for our local flying environment. And then underneath that, is much more both a subjective and objective assessment by both Command to understand the pressures on the individual, and also the individuals to accurately communicate the stressors that they're experiencing.

COL STREIT: Now, you were the BM at 16 Aviation Brigade in 2022. In 2023, you're doing some training at 6 Aviation but you don't take up a command responsibility until about, what, November/December 2023. Is that correct?

D9: That's correct.

- 25 COL STREIT: When you were the BM of 16 Aviation Brigade in 2022, were you aware of a Defence Aviation Safety Regulation in relation to fatigue management?
- D9: I was aware that there was a Defence Aviation Safety Regulation in relation to fatigue management, but I wouldn't be able to speak to the detail.
 - COL STREIT: Could the witness please be shown Exhibit 37, please? And if that could be brought up on screen, thanks?
- The document that you've just been provided, which is Exhibit 37, is a Fatigue Risk Awareness Tool published by the Defence Flight Safety Bureau. Have you seen that document before?

D9: I have.

COL STREIT: And when was the first time you recall seeing that document?

D9: It was probably late last year.

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COL STREIT: So late last year is end of 2023?

D9: Correct.

5 COL STREIT: Do you understand the context in which you saw the document?

D9: I do.

10 COL STREIT: And what was that?

D9: It was on release of an Aviation Command SFI.

COL STREIT: Prior to that release, had you any awareness of that 15 document?

D9: Honestly, no.

COL STREIT: And so we don't need to go into the Special Flying 20 Instruction because of its classification, but what I would like to ask you is, is that document that you have in front of you, is that now used in 6 Aviation Regiment?

D9: It is.

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COL STREIT: And how is it used?

D9: It's used prior to, essentially, starting a duty period for flying-related duties, where members will essentially look at the tool, fill the tool out, and then, if they trigger certain criteria on the tool, it'll be a conversation with the Authorising Officer to, essentially, manage, become aware of, change the profile, if required, based on where the scores are set and the complexity of the operational task they're conducting.

35 COL STREIT: Is the document that's then completed by the member, is that then kept as a record somewhere?

D9: It is.

40 COL STREIT: Do you have the qualification to be an Authorising Officer for the conduct of flights at 6 Aviation Regiment?

D9: I do.

45 COL STREIT: Is this a process you do; that is, the individual comes to see

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you in relation to the document they've completed?

D9: It is. And they don't bring the document with them. It's just part of the process to confirm any fatigue-related issues that have arose as a result of the FRAT, and report their FRAT scores. So it can be a conversation with the Aircraft Captain on how to manage that.

COL STREIT: So you're the Authorising Officer. A member of the aircrew about to fly, they don't bring the Fatigue Risk Awareness Tool completed to you at any point in time to have this discussion?

D9: There's a centralised folder where they're located. But as an example, a member may come as part of the authorisation brief when discussing fatigue and be, like, "We're two ambers today", and then have a discussion around what they are amber for. And if it's to do with duty period or awake time, there is a conversation on how they can manage that. And if it's to do with alertness, we can identify potential friction points in the sortie where we can put additional controls in place as a whole-of-crew to mitigate that, if required.

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COL STREIT: Have you had anyone, in your experience, since this tool is being used, fall into the red side, the caution?

D9: I have not, from memory.

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COL STREIT: The information in the document completed by a member of the aircrew, is that also provided to the Aircraft Captain? It's not just you as the Authorising Officer, but the Aircraft Captain?

- 30 D9: Yes, correct. So the authorising process is primarily with the Aircraft Captain, when it's a single aircraft. And when it's a formation, it'll be a collective thing. So the Aircraft Captain is definitely aware, and the Authorising Officer is definitely aware.
- 35 COL STREIT: We've had some evidence in relation to an organisation that flies helicopters external to Defence that one of the processes they use is a similar tool, but the discussion in relation to the outcome of the tool by each member is had within the aircrew that's flying. So they're eyeballing each other and having to indicated that they're good to go or they're not 40 good to go, which then engages the discussion. So it's about encouraging honesty in reporting. Do you see some benefit in that process from a 6 Avn perspective?
- D9: I do. I probably wasn't clear in my evidence that that occurs prior to 45 the authorising process, if that makes sense, with the Aircraft Captain in

mission planning, where he has to have that conversation with his crew. I would expect them to come with any additional amendments to the sortie profile based on the fatigue of their crew, in a mature sense. And where it's not as an, I guess, experienced crew, I'll have that conversation with them on ways to think about how to manage that as a crew.

COL STREIT: Because some of the other evidence the Inquiry has received, in broad terms, is a real desire by aircrew to achieve the mission tasking; a knowledge that if they were to pull out from the mission because of fatigue, that the training might not, or the mission might not, go ahead. And so perhaps a difficulty that they might just say they're good to go, when they're probably not good to go, from a fatigue perspective. How might that risk be managed within 6 Aviation Regiment today?

D9: So I think context is key when asking that question. And when we speak specifically to risk and we're referring to fatigue as a component of risk in this environment, the Aircraft Captain, Authorising Officer – it's a consistent balance to try and get that, I guess, process correct, to ensuring that the tasking and objectives can be met as directed and encouraging an open reporting culture, which I firmly believe we have.

We generally have a group of smart and motivated individuals at 6 Avn Regiment. So when I say "context is key", right now we don't have those pressures, so I have the ability to say, "No". I have the ability to really control the duty days. So I would – I am being very clear to the team that, like, right now, in the context that we operate within, being no operational tasking and we don't have a directed training outcome in the immediate sense, that we need to talk about this now. We need to get it right. We need to take the time to reconstitute, so that we can be continually evolving in our Risk Management processes to understand it better.

COL STREIT: Just in terms of authorisation, you're an Authorising Officer. I take it you don't authorise flights that you yourself are participating in?

D9: Not routinely, no. I have had to, as we were developing and implementing procedures and policy, just based on being the only individual with the experience and qualifications to authorise flights. So if I was flying and I had to, as a result, authorise myself to fly, but as part of that process there would be a third-party experienced aviator who may not be qualified on type, I would have a conversation/discussion and see if there was anything that I was missing as a check and balance to me when I was self-authorising.

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- COL STREIT: Does that person, in those circumstances, have the ability to terminate the mission or the sortie going ahead because they're not satisfied of certain things that you might be satisfied about?
- D9: I guess, direct answer to your question, unless there was some sort of breach of policy, Direction, or procedure that I had missed, and then if I had, I would terminate the sortie myself anyway. I would ultimately be the decision-maker on that.
- 10 COL STREIT: It's not, would you agree, best practice for you to be the Authorising Officer of a sortie that you're going on without a check and balance from another Authorising Officer as to whether the sortie should go ahead?
- D9: When you say "best practice", I think that context was again key in that where that isn't available, you would use all of the resource that you had available to you, be it even internal to the crew or formation, to ensure that the not the process, but the appropriate procedures are being followed.
- 20 COL STREIT: I guess what I if I put it this way: best practice might not always be achieved, but would not best practice be an Authorising Officer authorises a sortie, and if the Authorising Officer has intended to fly, then somebody else who's not flying is the Authorising Officer?
- D9: So best practice and this is also included within policy is that the Authorising Officer isn't participating in the formation of the flight. But, again, I think when we look at policy, the policy then needs to be applied and have the flexibility to the local environment, so when not available, there is still the ability to authorise sorties.
- COL STREIT: The difficult position you're in is that and I think you've said the evidence earlier, that when you're the person that only possesses the relevant qualifications to authorise a particular flight and you need to be on that flight as an Aircraft Captain or a flying pilot, the difficulty is that you're then authorising the flight, and that protective mechanism of having the Authorising Officer outside who's flying which policy suggests occur that's put to one side to achieve mission or task outcome, isn't it?
- D9: So to be clear, policy does allow people to self-authorise, but best practice is there is an external Authorising Officer to the formation.
 - COL STREIT: Policy doesn't recommend it though, does it?
- D9: No. And, I guess, further to that, it's not the case that anyone can self-authorise. There are certain positions who only hold those requisite

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qualifications, who are then trained in the right considerations so you can self-authorise.

COL STREIT: One final question on this matter. The reason, is it, that there is the Authorising Officer is ordinarily a person who is not flying in the sortie they're authorising, it's a safety mechanism in the airworthiness framework, isn't it?

D9: It is.

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AVM HARLAND: What are the reasons why you would need to self-authorise?

D9: So within the qualifications, experience, appointment of an Authorising Officer to authorise certain events, sorties, profiles, you need varying levels of qualification. Where you are the only person available at that point in time, whether it be because you're the only person with qualifications, the only person in the time and place who can be communicated with, you'll be required to self-authorise.

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AVM HARLAND: Are Authorising Officers appointed on the flying program?

D9: They're appointed through routine orders.

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AVM HARLAND: But are they allocated for the flying program? So do you have an Authorising Officer for a day, or for a flying wave, annotated on the flying program?

- 30 D9: Not to my knowledge, but I wasn't routinely involved in like, right now we understand who is within 173's context now, which is different. We, 24 hours out, will ensure that there is an Authorising Officer available to authorise the sortie, and that the Aircraft Captain knows who the Authorising Officer is going to be for them. And I'm not sure what the process was exactly prior to that.
 - AVM HARLAND: Because, I guess, what I'm trying to get at here is whether the allocation of Authorising Officers for a daily flying routine is actually part of planning, or whether it's just something you figure out on the day?
 - D9: Ensuring that there is an available Authorising Officer in barracks is part of planning. However, when people take leave, are unavailable, or deploy away from barracks and it's even part of the deployability planning, where practicable that will be considered in planning, yes.

AVM HARLAND: And is it annotated on a flying program?

D9: Not to my knowledge.

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AVM HARLAND: And how often would you self-authorise, in your experience?

D9: For myself, we were conducting, I guess, a very unique training process at the start of this year. So I was required for probably about a three-month – correction – three-week period to self-authorise every time I went flying. But part of the introduction to that, and the main priority, was to get more Authorising Officers qualified and current so that we could have that. And it was also a very simple – we weren't – it was a simple tasking machine that we were operating through that process.

AVM HARLAND: What safety net was in place for you to self-authorise for that period?

20 D9: That was the third-party engagement with an experienced aviator.

AVM HARLAND: Just a question on fatigue. So the conversations we've had about fatigue have been primarily about what I'd consider to be reactive controls. So, yes, it's down at the formation and the crew level to put their hand up and say that, "I'm fatigued". Noting that you were the Brigade Major at 16 Brigade and would have had, I expect, insight into the kind of thought processes of the hierarchy, can you describe the kind of proactive approach to fatigue management which would really be about managing priorities and workload? What sort of proactive controls were implemented to ensure that you didn't overspeed people and then leave it to them to put their hands up to say, "I'm now too tired to fly"?

D9: Yes, absolutely, sir. So the main levers that I observed could be controlled at the level of 16 Brigade were primarily with regards to reduced tempo periods and attempting to control the task load from external tasking on units. And a couple of examples I'll give specifically to reduced tempo periods is they were directed to have three a year, and they could only be essentially tasked within on Direction of either the Brigade Commander or the delegator, the CO on occasion, depending on the circumstance where that delegation was required.

Additionally, from tempo management, the main, I guess, tempo-related things that we could control in planning was ensuring that units only had a specified number of directed taskings for the year when it comes to joint collective training, so that we're not overtasking units to do every training

event in support of Army; and also minimise time away where possible. The lever that we couldn't control was any unplanned tasking. And where there was an unplanned tasking, sir, the then subsequent plan – even if we were within, I guess, planning windows for events – those events would be changed.

An example I'll use is after C Squadron was deployed, their participation in a joint collective training activity, and Force generation activity, was reduced so they had time to reconstitute. And it was reduced by them remaining in Townsville and at home, and not deploying outfield with the rest of the Force, as an example.

AVM HARLAND: So what you're talking there, is an active approach to trying to manage the workload that flowed down to the unit? Is that a correct summary?

D9: That's correct, sir.

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AVM HARLAND: Now, you've talked about the operational tasking there – or the – yes, the kind of, like, delivery tasking. Was there any other consideration to do with the administrative overheads that the Squadron was under in terms of just the day-to-day management? We've heard from other witnesses' descriptions of significant overheads in – yes, the non-flying-related tasks – in them just going about their normal business. It was almost overwhelming. And I think it's almost been described as more primary than their flying task. Can you describe measures that were put in place proactively to address that?

D9: Yes. I think – and I guess this is just awareness; it wasn't necessarily things that I was actively involved in. It was things that I was aware of. And I think what's interesting is, where we kind of speak to DFSB or, I guess, DASA Regulations, is it was an attempt to synthesise the amount of flying Regulations that people had to be aware of. And, in reality, the goal is – the bible for aircrew is Standing Instructions. So we're aware that DASRs exist. We're aware that higher-level publications exist. But how they feed into aircrew was through Standing Instructions, and subsequent Special Flying Instructions.

AVM HARLAND: No, I'm comfortable with the flying. I'm talking about all the other administration. The managing of, yes, your day-to-day business, getting Special Duties Flying Allowance. All of those – Special Forces Duty Allowance, or whatever it – all of those kind of administrative overheads. Because the way I've heard other witnesses describe it is that that was really almost, like, their primary role, and flying is something they did in the gaps between. So how was that addressed?

D9: I'll just take a second to think about that, sir.

AVM HARLAND: Or was it just an accepted norm?

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D9: I think it was a combination. And I'll also say that, as BM, I was more involved in the operations side of the house and – I was aware of the difficulties faced by units, but I wasn't in a position to influence that, other than to provide feedback as it was an issue. So I don't contest the points. And right now, as an OC, there is a lot of administration that I have to cover-down on. I just am not aware of -I believe there were processes in place to rationalise that; I just don't know what they were, sir, because it wasn't kind of within my sphere of influence.

15 AVM HARLAND: Okay, thank you. COL Streit.

MS McMURDO: We'll just take a five-minute break now. Thank you.

20 HEARING ADJOURNED

HEARING RESUMED

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MS McMURDO: Yes, COL Streit.

COL STREIT: Thank you, Ms McMurdo.

30 D9, can I just take you to paragraph 23 in relation to snapshot surveys? That's a reference, is it, to the DFSB snapshot surveys that occur annually in the Aviation space?

D9: That's correct.

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COL STREIT: You say:

Prior to departing on Exercise TALISMAN SABRE, the previous *OC* gave me a paper – a copy –

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I'll start again -

the previous OC gave me a paper copy of the snapshot survey from 2023 to review, and we briefly discussed that there were -

where you say "indications", I presume you mean "indications of a high-volume of tasking and constant change in the results". Can you just recall what the "constant change in the results" – what is that a refence to?

- D9: So, I guess, for some context on the snapshot survey, it's data capture addressing a whole bunch of Aviation-related factors in the workplace. And it was a very brief conversation where I was like, "Hey, this is something we probably need to chat about in the future". And there was certain feedback that literally were around high workload and indications of, I guess I wouldn't say turbulence, but change. I don't really know how to better describe that, both kind of on a micro sense and a macro sense, with regards to platforms and the like as well.
- COL STREIT: So the effect of change of platforms pilots being trained on one platform, reaching a level of experience, and then downing tools and having to be trained on another platform and step through the process again?
- D9: That specific wasn't necessarily discussed at that point in time. It was more around that there wasn't necessarily a clear and defined pathway for everyone. So it was beginning to understand an expectation for information on starting to frame how that change was going to occur.
 - COL STREIT: And fatigue was one of the issues expressed in the snapshot surveys an outcome?
- D9: I can't specifically recall what was on the sheet of paper.

 Subsequently, I've received the snapshot survey from this year, and it provides feedback on last year's scores, and it just is a scale that provides a deviance, or a normalised deviance, against the scale, and fatigue was on the scale.
 - COL STREIT: Where was fatigue on the scale?
- D9: From memory, it's kind of it was a score of around 4 to 5, with 10 being the best and zero being the worst.
 - COL STREIT: So zero being the worst in terms of fatigue, 10 being the best in terms of the workforce not feeling fatigued, and the score was about 4 to 5.
 - D9: And that's to the best of my recollection, yes.
 - COL STREIT: And was that 6 Aviation Regiment-specific?
- 45 D9: Correct.

COL STREIT: And that's in the context of not flying for, effectively, six months of last year because the MRH-90 was grounded?

5 D9: Yes.

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COL STREIT: And then transitioning into this year, where there's a transition to get people trained up on Black Hawk. Is that correct?

- 10 D9: Take a backwards step. So the fatigue score I'm specifically referring to, from the best of my recollection, was from – because it compares from the last year's results. So the 4 to 5 was last year's. And then it was only marginally better for this year's. And I haven't had a chance to – I only received it recently, so haven't had a chance to kind of debrief and dig into 15 the data on it.
 - COL STREIT: Now, you set out at paragraph 24 the actions that you've taken to manage fatigue since the accident in July 2023, and within the Squadron you've dictated flying windows to be 10 hours from first briefing until 30 minutes after landing of the last aircraft. Is that correct?

D9: That's correct.

COL STREIT: What was the previous flying window?

D9: So it was – I actually don't recall specifically what it was. It was within the limits of the policy; I just don't fully recall the nuance. Noting that there'd been a significant period since we'd been flying, when I took over.

- 30 COL STREIT: You've also directed – well, you're striving to release the next month's flying windows duty periods to allow people to plan, including planning their lives?
- 35 D9: Yes, that's correct. And I think I'll provide a little bit of context there, too, because it specifically says "actions since the accident".

COL STREIT: Yes.

40 D9: I'm then applying the policy, as in SIs and SFIs, to my local context, and right now my context is very, very different.

COL STREIT: Sure.

D9: So the way I'm looking at this, and the reason that I'm doing this is, I'm looking at people's career over the 10 to 15-year timeframe, and I've told the team that, "This is what we're doing, so you can know when you're going to pick your kids up. You can take 12 months, 18 months to rest and recuperate", because at some point in the future there is a change that I'll have to ask them to work towards the limit of policy. But I have the flexibility to provide this to the team right now, so I'm absolutely taking it.

COL STREIT: Now, I'm just going to read out some information that you 10 have recorded in your statement concerning CAPT Lyon, LT Nugent, WO2 Laycock, and CPL Naggs, and I'd simply just ask you to confirm the accuracy of what I've read out.

You say this at paragraph 25, that you met CAPT Lyon on December 2020 15 at the Army Surf Riders Association development camp in Bendalong, New South Wales. You flew with him approximately four times in total, including the transit to Proserpine. You thought he was a confident and motivated pilot, who strove for improvement. He was continuing to develop his skills as an Aircraft Captain, and sought every opportunity to 20 develop himself and his junior pilots. He was a passionate aviator. He was very knowledgeable, specifically with regards to the MRH-90. As a Troop Commander, your observations were that he acted with the best interests of his people as the centre of his decision-making. Is that correct?

25 D9: That's correct.

> COL STREIT: In relation to LT Nugent, did you regard him as a professional, young officer, with enormous potential?

30 D9: I did.

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COL STREIT: You never flew with him?

D9: I did not, no.

COL STREIT: In relation to WO2 Laycock, you can't recall when you first met him, but it was prior to your posting to 6 Aviation Regiment. You flew with him approximately four times in total. You considered he was an excellent aircrewman. He provided great mentorship, knowledge and professionalism. You thought he was exactly what a pilot needs in an aircrewman, and provided a calm and reassuring presence. In your view, those matters, along with his passion for the Regiment's mission, is what made him a great Standards Warrant Officer. Is that correct?

45 D9: That's correct. COL STREIT: And in relation to CPL Naggs, you say you met CPL Naggs in 2023. You can't recall the exact first meeting. You flew with him twice. You considered CPL Naggs was at the expected standard as a junior aircrewman. He was quiet, but a positive presence in the crew. That's correct?

D9: That's correct.

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- 10 COL STREIT: Can I just turn to your involvement – or presence, rather, at a Regimental Officers' Intermediate Course in 2022. This was a course conducted when you were the Brigade Major at 16 Aviation Brigade; is that correct?
- 15 D9: That's correct.

COL STREIT: Did you instruct on that course?

D9: I had two directed learning periods, I guess.

20 COL STREIT: You say, at paragraph 29, that the first period of instruction included an address from BRIG Thompson, who was the Commander of 16 Aviation Brigade at the time. Is that correct?

25 D9: That's correct.

> COL STREIT: And that the SO1 Operations, who you've identified there, was also present. Is that correct?

30 D9: That's correct.

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COL STREIT: Now, in terms of paragraph 30, you say this in relation to a discussion:

35 I will note that the exact details of the specific instruction and discussion I do not recall clearly as it was nearly two years ago, and at that point in time I was supporting events like this routinely, which means the exact detail of specific periods is difficult to recall.

What you do recall is, you did encourage open and frank discussion and can remember -

the themes discussed where a decrease in the ability to conduct our corps missions as a result of increased support to the civilian

community and disaster events; a reduction in experience of pilots within the Regiments; a high workload; increasing pressure on pilots due to limited personnel; and the effects of a convoluted governance system increasing churn and making it more difficult to do their job.

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So these points you've just raised are those matters that the students on the Regimental Officers' Intermediate Course – they're raising in discussions with senior leadership when you were present?

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D9: So specifically how that sequence of events occurred in the first period of instruction was the Brigade Commander and SO1 Operations and myself were present. The Brigade Commander made his address; he departed. The SO1 Operations made his address and then I spent the remainder of the period of instruction hitting on specific learning outcomes, and then a period of discussion with just myself.

I genuinely can't remember exactly at what point in time those individual points were raised in that forum. And, as I said, I just kind of remember the themes because, yes, I think back at that point in time it was about the fourth time I'd given that brief in a two-month period.

COL STREIT: But you remembered CAPT Lyon being on that course?

25 D9: I do.

COL STREIT: If you turn the list over, do you remember D15 being on that course?

30 D9: I do.

COL STREIT: Do you remember a CAPT Jackson being on the course?

D9: Yes, subsequently post writing this statement I do.

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COL STREIT: CAPT Rogan?

D9: Yes.

40 COL STREIT: Now, D129, was he on the course?

D9: Yes.

COL STREIT: The Inquiry has received some evidence that CAPT Lyon expressed concerns in relation to high workload and the effect on his ability

to maintain proficiency on the MRH-90, and was a Troop Commander at the time. Were you present at all in relation to anything he raised along those themes with senior command at the Brigade?

- 5 D9: They're kind of consistent with the themes that I recall being raised. But as I said, I can't remember the exact sequence and who was present.
- COL STREIT: So you recall the themes being raised by students on the course; correct?
 - D9: And I guess some of them were raised specifically to me, and others were raised to myself and SO1 Operations, and others were raised to the three of us. If that makes sense?
 - COL STREIT: You don't recall whether or not Commander 16 Aviation Brigade was present when those things were raised?
- D9: I know he encouraged open and frank discussion, but I can't recall the detail of what was raised in the room.
 - COL STREIT: You say at paragraph 31 on page 7, at the top, that you took the feedback you say you:
- 25 took the feedback with the SO1 Operations and improved the means of communicating unit tempo into the Commander Update Briefs.
 - What does that mean, when you say that?

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- D9: I guess it was all about continuously improving communication. And I do mention it, that I'd kind of encouraged them to take the view that I took at the time, which was to look at what you can influence within these issues, because they are large and at times overwhelming issues. So my understanding is specific to tempo, that people were aware and there were mechanisms in place to start adjusting unit tempo. And I just looked to massage some communication tools, as a result, to enable better communication and understanding of the pressures from the staff specifically at that point in time.
- COL STREIT: Is the Inquiry on safe ground, therefore, to understand your evidence to be that you took the matters that were being fed back to you by the students on the course in relation to the themes you've identified at paragraph 30, you took those matters with SO1 Operations, you took those matters and fed them into the Commander 16 Aviation Brigade during

Commander Update Briefs?

D9: This was more as a rectification cycle. And I think at the time, why I was supporting these events was essentially as, I guess, a barometer to understand if there was something at my level in communication with my peers that may be being missed. And seeking continuous improvement in process, it was more information that, like – the themes were somewhat common, that there was some stressors as a result of (a) the civil community tempo – all the things that I highlighted – but my assessment was the Commanders – plural – were aware of that. It was just a way to synthesise and synergise the communications in a more simplistic way.

COL STREIT: Let's just bring it down to basics. Did you brief the concerns that were raised by participants on that course to Commander 16 Aviation Brigade?

D9: Not specifically, no. Not to my recollection.

COL STREIT: What does "Not specifically" mean?

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D9: Did I, as an outcome of the ROIC, go into his office and say these were the specific concerns that were being raised on that course? No.

COL STREIT: Do you know if SO1 Operations did?

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D9: Don't know.

COL STREIT: Now, given the themes you've identified, what, if any, changes did you see in the way, at all, to address those themes post the course?

D9: Across the course?

COL STREIT: Post the course.

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D9: Post the course. I think that the themes that I raise here, and they were observing – because they're the ones that stick in my mind – were understood. And as I highlighted before, there was both active and passive mechanisms to manage tempo. The one that hasn't been addressed specifically is aid to the civil community. With regards to the governance piece, I kind of highlighted where my understanding at the time was, from the airworthiness system. I also understood that there was other work in place being conducted within the Brigade that was attempting to rectify these issues moving forward. But were they incremental? Yes.

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COL STREIT: What work was that?

D9: As I highlighted before, a synthesis of, in my awareness, the flying-related governance and OIP. Then, as I said, I'm not aware from the other – that's administrative governance – processes, or what work was 5 being done.

COL STREIT: As the Brigade Major, was that a role where you felt empowered to raise concerns by pilots on the course to the Commander?

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D9: It was. I think I'll also say there that if there were outliers that I thought required his attention, I would've raised them to him in my assessment.

15 MS McMURDO: What do you mean by "outliers"?

> D9: If there was anything that I thought was latent in the system, that people weren't aware of broadly – not necessarily specifics – in the sense of - - -

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MS McMURDO: You mean Command, by "people"?

D9: Yes, correct, at the lower level. And when I say "Command", that's just not the Brigade Commander specifically, it's also amongst my peers and amongst kind of unit COs as well.

MS McMURDO: From your Command?

D9: Correct.

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MS McMURDO: From your Command Troop Commanders?

D9: Probably not. I guess the Troop Commanders – I was aware – I guess it was a common theme across the Troop Commanders, but as the BM at 35 the time, my main engagement was with either my peers or other ages across 16 Brigade.

MS McMURDO: You talked about communication. So did you also communicate down, so that those who were raising these issues understood the problems of Command within the Regiment?

D9: I did. My main mechanism of communication was through the Operations chain side of the house, if that makes sense, through synchronisation meetings. That's where I'd explain to the Operations Officers of the Regiments the processes that were in place to attempt to minimise tempo, and along with that, I guess the complications and the efficiencies we were seeking to gain through what was an overloading amount of aid to the civil community in that year.

5 MS McMURDO: So to those in the public who don't understand operations, who would be the Operations Officers you explained that to? What roles?

D9: Sorry, the Regiment Operations Officers.

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MS McMURDO: All right. Thank you.

COL STREIT: Paragraph 31 on page 7, second-last sentence, you say:

15 Whilst I agree with the points raised around governance and limited workforce, I felt it was understood by the chain of command and outside of what I could influence as the Brigade Major.

I'm not suggesting at all that you're responsible for fixing these things that 20 people are raising. So as far as you were concerned, what was being raised on the course at times when you were present, in terms of the themes you've identified at para 30, you were confident that those matters were understood by your chain of command? That's the chain of command above you.

25 D9: Correct.

MS McMURDO: Up to where, and to what point?

D9: In the chain of command, ma'am, I only had direct engagement with the Commander of the Brigade. 30

MS McMURDO: Who was?

D9: BRIG Thompson.

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MS McMURDO: Now, you said it was outside your sphere of influence to fix this issue that was raised; is that right?

D9: Yes.

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MS McMURDO: There was nothing you personally could do, other than to raise it with the chain of command?

D9: Yes. And it's not kind of learned helplessness I'm trying to 45 communicate there. What I'd try to communicate to members on these courses are they are big problems that require the whole Command to be doing their little part, so I looked at what I could tackle, and continued for continuous improvement in what I could influence.

- And specifically to governance, it was in the administrative Army side of the house that I couldn't influence. I know from a limited workforce, recruiting and retention has been a priority at multiple levels of Command above me for a long period of time now, to address the workforce issues.
- MS McMURDO: So nothing that you could do, apart from discussing it with the chain of command, up to BRIG Thompson. So was there anything practical done? I think COL Streit asked you this, and we didn't really get a direct answer about that. Was there anything practical done to address these issues?

D9: So, as a direct result of those conversations, no, because, as I said, there was work being done around the outside and that was specifically regarding tempo management, ma'am, and with regards to communicating the impact of an increased burden – not burden – an increased tasking request, in the response to emergency relief and disasters.

MS McMURDO: So communicating that up the line, into the Defence Ministry, and the Executive, and the legislature. Is that what you mean?

25 D9: Correct.

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MS McMURDO: Correct, okay. So that was done to communicate the impact on unit tempo but, at least up until the time of the incident, nothing practical was done to alleviate things?

D9: I kind of understand the question you're asking, ma'am, but - - -

MS McMURDO: You kind of understand. Well, I'm just asking you, for the people who raised the issues, did they see anything practical happen as a result of their complaints, by 28 July 2023?

D9: I think in a macro, large scale change, probably not, yes.

- MS McMURDO: Okay, thank you. Now, of course, you're in a very different space and it's quite a different period that you're managing, and the high tempo isn't really an issue at this particular point in time?
- D9: Within my sub-unit? I think to provide additional context, as a kind of Staff Officer in a Brigade at that point in time, I kind of now understand that there are a whole bunch of issues that can get raised, and sometimes

the resources are available to rectify those issues immediately; other times, they're a longer burn, and we can only take incremental change.

- I kind of assessed after this, as I said, that there was for those issues that were raised or in place, that they were aware and people were working 5 towards solutionising them, but the resources may not have been available at the time. That was also part of the communication that I was trying to have with the team; that the problems are definitely there as they observe it, because that was their reality. I'm not contesting that for a second. I just 10 wanted to encourage them, that there were works in place, occurring, that may not be visible, because a lot of these changes take a long time. And when you're a Troop pilot, particularly on ROIC, it's hard to see incremental change at levels of Command outside of the unit.
- 15 MS McMURDO: So just to sum up then, there were no practical changes. The Command was making efforts to reduce the workload through the Department of Defence Executive and the legislature?

D9: Yes.

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MS McMURDO: Through educating them?

D9: Yes, and through their chain of command.

25 MS McMURDO: Communicating with them.

> D9: I didn't see external communication, outside of the DOD, but I was aware that it was occurring.

- 30 MS McMURDO: So at the moment you're in a quiet period, but as you train up with the new Black Hawks and you start to gear up and move into exercises and community emergencies again and so forth, there's every chance this same high tempo issue could arise again, isn't there?
- 35 D9: There's always that chance, ma'am, yes.

MS McMURDO: Are you any better prepared to deal with it than you were back in 2023?

- 40 D9: I intend to be, by the time that event rolls around. But it's a resourcing - like, that event is still a time away that I can't disclose, but there is training plans in place and mechanisms in place to hopefully better prepare for that?
- MS McMURDO: Are you able to say what they are in terms of fatigue 45 management?

D9: I think, specific to fatigue management, are you referring to, I guess, acute fatigue or cumulative fatigue management?

5 MS McMURDO: Both.

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D9: So I think when we look at acute fatigue, I think that there is processes in place that have been implemented to help better communicate stresses being put on the workforce. The levers that I control, and I intend to control, are the - - -

MS McMURDO: So can I just clarify that? Communicate up or down?

D9: Both, I would say. And the - - -

MS McMURDO: Because communicating down won't relieve the fatigue, will it?

D9: No, but I think communication and explaining why things were 20 happening helps relieve the stress which contributes to fatigue.

MS McMURDO: It makes you feel perhaps – I suppose the argument is it makes you feel less neglected.

25 D9: And I think more heard as well, ma'am.

MS McMURDO: More heard, yes. More agency, yes.

D9: I believe that was occurring, but I just – the levers I can control are 30 communication, and I can control trying to provide the ability for the workforce to plan for change and movement of duty periods, and then apply the policy as it exists within the local environment to achieve the task that we're likely to be tasked with, which is to support Army in a very different context.

AVM HARLAND: You can say no? Can you say no if the workload is, as you assess, unacceptable? Looking forward into the future, can you say, "No, I don't think this task is a good idea"?

40 D9: I can, yes.

AVM HARLAND: How would that unfold?

D9: I think the discussion we were having with Ms McMurdo is kind of 45 interesting in the sense that it's a balance of risk. And I understand the risk that I can make a decision to proceed with, as an example. And then it's about communication of a plan or a better option, rather than just saying, "Hey, no, I'm not doing this". I think it's a, "I can't do this now, but I can do this with a plan to rectify in the future".

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That's the communication that I feel I'm in a position to have with my current chain of command, absolutely. But I guess as a person who's an OC right now, there are a whole – there are issues being raised of varying levels of complexity every day. As a CO, those number of issues increase in orders of magnitude as you go up the chain of command.

I intend to provide to both subordinates and higher levels in the chain of command, I guess, a solutionised "No", if that makes sense, rather than just a "No". Because I feel that that aids in their decision-making and, where the problems that they get on a daily basis become overwhelming, it makes them easier to prioritise and balance. Whereas if I just walk into offices and say "No", I think I'm letting my Commanders – plural – down at that point.

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AVM HARLAND: I'll finish here – and correct me if my statement is incorrect – but what we've heard during the Inquiry to date is a consistent theme of fatigue being expressed as an issue through snapshot surveys, through feedback from various individuals, including this ROIC, to the chain of command. So the idea of fatigue being an issue is certainly not new, it's enduring. And from what I've heard from you, is that the organisation's response is that it'll try harder to do what it's been doing in the past, but there is no specific program or structure or framework for actually addressing fatigue in a bigger way as we move forward. Is that a correct statement? Is there a plan X that is about addressing tempo management, fatigue?

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D9: Not that I'm aware of within my current context.

AVM HARLAND: Thank you.

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COL STREIT: I'm just going to turn now to Exercise TALISMAN SABRE. That commences, in your Inquiry statement, at paragraph 33. So on 24 July 2024 (sic) you flew to Proserpine, did you?

D9: That's correct.

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COL STREIT: Just in relation to sleeping conditions at Proserpine, you set out certain matters at paragraph 35. So you were housed in tents, approximately 18 people per military tent, on stretchers. Is that correct?

45 D9: Yes, approximately.

		Approximately.	Were you in w	hat the Inquiry	understands
D9:	I was.				
COL	STREIT:	That was the ten	t that CAPT L	yon was in; is	that correct?
D9:	That's cor	rect.			

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COL STREIT: You've set out at paragraph 35 that one of the difficulties you found in staying asleep was when the temperature during the day rose; is that correct?

15 D9: Yes.

COL STREIT: I take it there was no air-conditioning in the tent?

D9: There was not.

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COL STREIT: Was the tent also a mixture of people doing both day and night duty?

D9: I actually don't recall. But there were people outside of the tent walls 25 on day shift, if that makes sense.

COL STREIT: When you look at paragraph 37 of your Inquiry statement, you flew additional sorties on Exercise TALISMAN SABRE prior to the incident. That's correct?

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D9: I did.

COL STREIT: Your purpose in undertaking those sorties, was that to gain any particular qualifications?

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D9: The first sortie was not, the second sortie was as part of the training and to gain qualifications, yes.

COL STREIT: In terms of the sortie that occurred on 28 July 2023, you 40 were undertaking training for that sortie to gain the qualification of Air Mission Commander?

D9: That's correct.

COL STREIT: That was a necessary qualification to assume your role as the OC of the Squadron later that year?

D9: That's correct.

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COL STREIT: You say at paragraph 38, you did not feel unnecessarily fatigued, fatigued to the point that you were concerned about your performance; is that correct?

10 D9: That's correct.

> COL STREIT: Was that something – a baseline you had during the time you were at Proserpine, or was that simply how you felt on 28 July?

15 D9: That was a baseline, I would say.

> COL STREIT: We understand that the deployed 6 Avn Forces transition to a night routine upon arrival on 24 July; is that correct?

20 D9: That's correct.

> COL STREIT: How did you find that adjustment, to transitioning to a night routine?

- 25 D9: I don't find - I wouldn't say it's something that's natural, but I've done it enough times now that I understand the processes that work for me and don't find it that difficult.
- COL STREIT: When do you say that you were comfortable that your body 30 had transitioned to a night routine? At what part during the week?

D9: Usually it was, I would assess, about 48 hours after arrival.

COL STREIT: So that would be the Wednesday, which is the 26th?

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D9: Yes.

COL STREIT: Obviously, given your experiences in terms of the sleeping arrangements at Proserpine Airport on Exercise TALISMAN SABRE, now 40 that you're the OC and no doubt will at some point in time participate in another Exercise TALISMAN SABRE, is there something you might do different in relation to the layout of the sleeping accommodation, or equipment you might take up?

D9: I have time to assess that decision. And I think the tension I currently have in assessing that decision is the helicopters in Army Aviation exist to support the Army and, by default, the Ground Force, which at times requires us to deploy forward in close proximity or with the Ground Force, which implies more austere living conditions than may be available at an airport, as an example.

When I've done that previously, and with all of, I guess, the training that has been conducted, like, I understand the considerations that need to be applied, and it's just a balance of risk. And I look forward to recommendations on ways that we can improve that, but I don't have to fully assess that decision right now.

But it's kind of part of the reason Army Aviation exists, is to provide that capability to the Commander, and how it's managed and mitigated, it can always be better. It's just what's available and what's practicable, and then managing the workforce within that. And I look forward to more information on how we can better do that.

- COL STREIT: And just dealing with paragraph 38, which is the third sentence, "With regard to sleeping accommodation at Proserpine, I will acknowledge that it could have been improved with climate control in the tent"?
- 25 D9: Yes.

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COL STREIT: So one improvement going forward, if – and accepting that your Squadron needs to deploy on occasion in some austere conditions which might be in a remote airfield in a tent, but you'll have the ability to – in terms of managing your workforce's capability and availability to fly, you would have the ability to take an air-conditioner, wouldn't you, to ensure people have a comfortable, as much as you can, sleeping environment?

D9: Not necessarily. And that's – as I said, it's – well, I didn't actually say – it's conditions-dependent, and then there will be other mechanisms depending on location, weather, that may be available to me to mitigate that. But I won't necessarily have accesses to all the resources that I require to provide perfect sleeping accommodation.

So, as I said, I look forward to other mechanisms that will assist us in making decisions to improve that.

COL STREIT: But you accept that, to the extent you can, it's important to ensure your aviators have a place that they can rest in preparation for night flying?

5 D9: Within what is practical for the environmental conditions and resources available, I do accept that, yes.

COL STREIT: And you will adjust what you can, will you, in the circumstances, depending on what's available?

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D9: Yes, that's right.

COL STREIT: Because otherwise they're going to experience what you experienced, and that is difficulty sleeping, particularly in North Queensland, with temperature increases. Do you accept that?

D9: Yes. And that's part of fatigue management at large, is sleeping. And where I look at the specific sleeping conditions on TALISMAN SABRE, as I said before, you can definitely improve them. I've seen much worse, and people conduct 24-hour operations; I've seen much better. That's not to say we should be able to do it in worse than what we experienced, but it's a balance of what is available, what's practicable, and what's required, and then implementing that with the training experience, external stressors – all of the things I previously described – within what's available.

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- COL STREIT: The importance of ensuring an appropriate sleeping area whatever that might be is it's really a safety issue, isn't it, for the conduct of Aviation operations for aircrew?
- D9: And I think defining "appropriate" is the point that I'm trying to get across here. Yes, there does need to be an appropriate sleeping area, but I think what's defined as "appropriate" varies depending on the condition task and what's available within resource.
- COL STREIT: So TALISMAN SABRE, for example, is not an exercise that just arrives overnight; it's something that's planned many months out. Do you accept that?

D9: I do.

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COL STREIT: So for types of those exercises, there would be a greater ability to plan to manage risks associated with fatigue through lack of sleep by ensuring you have certain pieces of equipment available to you to help?

D9: You can request certain pieces of equipment. I don't know the background specifically here as to what occurred there, but we weren't the only people on Exercise TALISMAN SABRE, and they're a finite resource. And everyone across the Joint and Coalition Forces searching for air-conditioned climate-controlled sleeping arrangements – that resource is prioritised at a level that I'm not aware of.

COL STREIT: So to your knowledge, 6 Aviation Regiment doesn't have air-conditioning units within it to deploy with?

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D9: I actually don't know the answer to that.

AVM HARLAND: Excuse me, just a question there. Were you aware of any other facilities, tents, at the Proserpine base that were air-conditioned?

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D9: The CP tent was air-conditioned, and other than that, I'm not sure if any of the accommodation was or not.

AVM HARLAND: Where the life support equipment was stored?

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D9: Yes, it would have been, I think.

AVM HARLAND: So air-conditioners were available?

25 D9: Yes.

AVM HARLAND: Okay, thank you.

COL STREIT: Now, can I just ask you to pick up your Defence statement? 30 You set out at paragraphs 21, 22, 23, and up to 29, you describe certain things that you were involved in during the 25th, the 26th, and 27 July. Is that correct?

D9: That's correct.

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COL STREIT: Can I take you to paragraph 30? So this is dealing with the sortie that was to occur on 28 July 2023. You say at paragraph 30:

In my observation, the weather conditions were similar to on the evenings of the 26th and 28th July; however, the showers observed overland in the vicinity of Lindeman Island were more frequent and less isolated on the night of 26 July, as opposed to the night of 28 July.

45 Is that correct? D9: That's correct.

COL STREIT: So was your assessment therefore that in terms of the weather, although it was a matter that needed to be taken into account, the weather was actually a bit better than your experience on 26 July 2023?

D9: That's correct. The weather was a planning consideration, but I wouldn't say it was adversely affecting the mission.

10

COL STREIT: Sure, no, that's not what I asked. What I asked was but by comparison, the weather was a bit better on the 28th than it was on the 26th?

D9: In my observation, yes.

15

COL STREIT: And you were flying in the same area on the 26th and the 28th?

D9: Correct.

20

COL STREIT: Weather was a consideration, of course, in planning, wasn't it?

D9: Yes, it always is.

25

COL STREIT: It always is. At paragraph 30 you say -33, I apologise - you say that:

At the time, I was working towards obtaining the qualification of Air Mission Commander.

Can you just explain, by reference to that paragraph, what an Air Mission Commander is? Like, what that role is?

D9: In broad sense, when you look at an overall tasking that involves an Airborne Force and a Ground Force, the Air Mission Commander is responsible for ensuring that the Aviation element of that plan is successful, with the Ground Force Commander ensuring that the Ground Force component is successful.

40

COL STREIT: And D10 was the OC at the time in the Squadron, wasn't he?

D9: Correct.

COL STREIT: And he was to be the person who was assessing you in relation to obtaining that qualification?

D9: That's correct.

5

COL STREIT: D10 is the same as you?

D9: Yes.

- 10 COL STREIT: And in the Aviation context, is it fairly standard that you might – you are assessed by somebody in terms of a particular qualification concerning the aircraft you're flying on, that that person is more than likely to be the same rank as you?
- D9: Yes. And even, at times, they can be a subordinate rank to you, 15 depending on the qualification and context.

COL STREIT: At the time, did you hold the qualification of Aircraft Captain for the MRH-90, do you recall?

20

- D9: I did as an outcome of training, but training but I didn't hold it within the 6 Aviation Regiment Flight Management System to conduct Special Operations tasking at the time, no.
- 25 MS McMURDO: So does that mean you were a Captain but not a Special Operations Captain?

D9: Correct.

30 MS McMURDO: Right.

> COL STREIT: So you could undertake general flying in MRH-90 as an Aircraft Captain but, at that point in time, you didn't have the qualification as a Special Operations Aircraft Captain?

35

D9: Correct.

COL STREIT: Now, at paragraph 36 you say:

40 In my experience in the military, it is routine for somebody to act up and perform duties under supervision as part of the process of qualifying for that role.

Is that correct?

D9: That is correct.

COL STREIT: Was that your experience also at 1 Aviation Regiment in relation to armed reconnaissance helicopters?

5

D9: That's correct.

COL STREIT: At paragraph 37 you've identified the other aircrew involved in the mission. And at paragraph 38 you deal with –

10

mission planning continued until around midnight on 27 July.

Is that correct?

15 D9: That's correct.

COL STREIT: Were you involved in the mission planning?

D9: I was.

20

COL STREIT: In broad terms, are you able to say what your involved was?

D9: It was, essentially, in broad terms, ensuring that the conditions were set to meet both Aviation mission and the Ground Forces mission.

COL STREIT: Now, you say at paragraph 39 you went to sleep at approximately 1.30 in the morning that night. So that would be the early morning of 28 July?

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D9: Correct.

COL STREIT: How you'd been on night routine after your arrival at Proserpine Airport, and you had adjusted to that routine at that stage. Correct?

D9: Correct.

COL STREIT: At paragraph 42 you set out where, at about 1400 or 1500 hours, on 28 July, you attended combined mission orders. That's right?

D9: That's right.

COL STREIT: Those orders, were they given by D1?

D9: They were.

COL STREIT: D1 was also engaged in a process of gaining a qualification, was he? He was under the supervision of D2?

5

D9: Just for the function of planning and mission orders, whereas D2 was responsible in execution for his duties.

COL STREIT: D2 was the flight lead for the mission on the 28th?

10

D9: That's correct.

COL STREIT: Now, at paragraph 45 you identify some matters concerning weather, and that on departure route to Lindeman Island the sortie diverted south overwater, and that you also amended your post-extract routing based on an observed low cloud. Is that right?

D9: Were you speaking specifically to 45, sorry?

20 COL STREIT: Yes, we're at 45.

D9: So that was highlighting that there was a discussion that occurred during orders in the Rehearsal of Concepts – in the Rehearsal of Concept, I should say, on some actions and decision-making on how to factor the weather as part of planning that wasn't specific yet to the flight.

COL STREIT: Sure. At 46 you identify there was a US aircraft that was to provide reconnaissance during the mission. That's correct?

30 D9: Correct.

COL STREIT: At paragraph 47 you say:

On completion of orders –

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which you understood and believed was about 1600 or 4 pm -

the crews conducted a Rehearsal of Concept drill.

What's "a Rehearsal of Concept drill"?

D9: So it's, essentially, a method where it provides the crews the ability to walk the mission and confirm mission orders, as well as discuss any points of friction as they see it. Additionally, it allows us to walk through

contingencies as outlined so we can visualise occurrences to avoid having to think about them airborne.

COL STREIT: Now, for the mission – I'm looking at paragraph 48 – you were allocated to fly in Bushman 84, and D10 was the Aircraft Captain. Is 5 that correct?

D9: That's correct.

10 COL STREIT: D11 and D12 were the aircrewman in that aircraft? If you just check their names against the pseudonym list?

D9: That's correct.

15 COL STREIT: At 49 you say:

> *In my view, the extract mission was relatively simple and routine,* or standard.

- 20 And you set out the basis for that opinion. Would you accept or agree that flying overwater at night, in low illumination, with scattered rain showers, gives a certain complexity to what might otherwise be a fairly standard mission?
- 25 D9: Not necessarily. And to elaborate on that, are you speaking specifically about the conditions on that night, or just as a general question?
 - COL STREIT: Well, let's take the "general" first. So you've described the extract mission was relatively simple and routine. I am simply asking you whether what might seem a relatively simple and routine mission can be complicated as a result of external factors such as low illumination, travelling overwater, in rain.
- D9: They are factors that are considered in mission planning, but they're also circumstances where training is provided in that environment. So I 35 understand that - or I do agree that when we look at a single helicopter flying out of Bankstown by day, it is absolutely more complex than that. But the people doing that kind of work don't have the same level of training as the people doing this kind of work do.

COL STREIT: Now, on paragraph 51 you say at approximately 1830 you arrived at your aircraft, Bushman 84.

D9: Sorry, I might just take a backward step.

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COL STREIT: Sure.

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D9: And just to clarify why I wanted to separate out the general considerations from the specific considerations. Low illumination was – whilst the moon is always a consideration on NVD, the lunar conditions on that night were not something that I assessed, and by definition, were that of low illumination.

COL STREIT: Sure. But nonetheless, the rain showers were a feature, 10 were they not, that affected visual cues?

D9: At certain times they were, yes.

- COL STREIT: Now, at paragraph 51 you say at approximately 1830 you arrived at your aircraft, Bushman 83, and you set out certain things that 15 were conducted in terms of preparing the aircraft. You do so also at paragraph 52. At paragraph 53 you describe a refuelling process whereby Bushman 81s RADALT became unserviceable; is that correct?
- 20 D9: So just one correction: you just said "Bushman 83". We were in Bushman 84 at paragraph - - -
- COL STREIT: I apologise, Bushman 84. So, in terms of paragraph 53, you identify that Bushman 81, you observed – well, you subsequently 25 learnt, did you, that it had an issue with its radio altimeter and the crew had to swap aircraft.
 - D9: Yes. So they reported, on departing the FARP, so the refuel, that they had an unserviceable radar altimeter, and then, rather than rectify the issue, they moved to the spare aircraft.
 - COL STREIT: But just prior to departure, what did you understand, in broad terms, was the plan for search and rescue should something occur on the mission?
 - D9: In broad terms, an aircraft was allocated as the immediate response platform and then there was a staged response from the civil assets available if it were a more prolonged search and rescue.
- 40 COL STREIT: In terms of the civil assets available, what did you understand those assets to be?
 - D9: So there was a rotary-wing platform based at Proserpine and then additional, I guess, national platforms based in separate locations.

45

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COL STREIT: So the civilian rotary-wing platform based at Proserpine, who owned that platform?

D9: I don't recall specifically.

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- COL STREIT: Was the search and rescue your knowledge of the existence of that aircraft, how did you get that knowledge?
- D9: So it was as part of the overall Response Plan for the activity, and then prior I can't recall if it was prior to departure or on arrival, there was a desktop walkthrough of the Crash Response Plan, where it was identified how the sequencing would occur and what assets were available in the event that we had to execute it.
- 15 COL STREIT: Now, at paragraph 57 you say:

The Bushman formation was cleared to launch at approximately 2220.

Is that correct?

D9: That's correct.

- COL STREIT: How long, at that point in time, had you been on the tarmac, with your aircraft?
 - D9: So from APU start, until departure, was just shy of two hours, from memory. However, in that time, there was checks sorry, there was a run-up to flight on the main rotor and there was also a refuel for the formation that occurred in that period.
 - COL STREIT: Sure. You'd been out there with the aircraft since 1830, hadn't you? I'm looking at paragraph 51 of your statement.
- 35 D9: Yes, correct. That was bad math in public.
 - COL STREIT: So that's approximately just under four hours you were out there, at the aircraft, before you depart?
- 40 D9: Correct, yes. Apologies, I got my times mixed up.
 - COL STREIT: No, that's okay. And in terms of your experience of other types of missions or training activities, was that an unusually long period to be out there, waiting to launch, or was that fairly standard?

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D9: It's depending on the task, but it's not uncommon, and quite standard, yes.

COL STREIT: Now, at paragraph 58 you describe the planned route. And at paragraph 59 you describe your communications with the US aircraft 5 whilst airborne. That's correct?

D9: That is correct.

- 10 COL STREIT: Now, you say at paragraph 60 that, at the time of the incident, the cloud was scattered at an altitude that you say did not affect the flight, and you estimated the cloud to be at 2000 feet above water?
- D9: Correct. And I think also, as part of the communication with the US 15 aircraft, they confirmed the cloud base over Lindeman Island was approximately the same height.

COL STREIT: And at the last sentence of paragraph 60 you say:

20 We were at 200 feet. There was about 1800 feet between us and the cloud.

D9: So that was at the specific time of the incident. But there was a descent that occurred prior to being at specifically 200 feet.

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COL STREIT: At paragraph 61 you say that, during the flight, you'd observed isolated rain showers overwater; that these rain showers reduced visibility but, in your view, they were quite small and could be seen and avoided; and that the moon illumination was above 60 per cent. Is that correct?

D9: Yes, that is correct.

COL STREIT: Now, there was a change, wasn't there, to the briefed flight path, whereas you were going to move overland over a saddle but instead 35 deviated and went down around the peninsular as a result of something?

D9: So the cloud base that was described was low enough overland on departure that it was close to the mountains that were – or the saddle, as you highlighted. So, as a result of that, the flight was diverted south, through the cloud base, which is a common divergence to make when there is terrain such as that. It also gave us the awareness, as previously discussed, that we needed to amend an extract round at that point in time that communication was also made.

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COL STREIT: Paragraph 63, in terms of the second sentence, you say:

While we were flying overwater, approximately 10 minutes before the IP -

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which is the Initial Point. That's correct?

D9: Correct.

10 COL STREIT: So the Initial Point was the point where the formation went into – effectively, a racetrack process, before waiting for the green light to go to Lindeman Island to pick up a Ground Force. Is that correct?

D9: (No audible reply).

15

COL STREIT: And you say, at paragraph 63, you observed that both Bushman 82 and 83 were out of position and positioned slightly higher than you had expected. Is that correct?

- 20 D9: To be specific about the observation there, in formation, there's changes as people are making control inputs to maintain their station. And it's normal for there to be deviations in height and spacing as part of that process. And both 82 and 83 had some height variations that were enough to notice but not uncommon or remarkable in any sense, at this point in 25 time.
 - COL STREIT: Do you recall whether you, or the Aircraft Captain, D10, raised anything on the communication net between the aircraft to say something to the aircrew of 82 and 83 about what you were observing of their height?
 - D9: No. Because at that point in time it was not a it was a normal thing we were observing, that the crew were – I observed the crew to be managing.

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COL STREIT: Sure. And was that observation something consistent with your experiences on other occasions in formation flying?

D9: Correct, across aircraft types I've flown.

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COL STREIT: You go on to say, at 63:

However, I did not consider them to be positioned abnormally high, rather, in my view, both aircraft were rising and then

correcting back into position in a manner that can occur during flight and formation at night.

D9: Yes.

5

COL STREIT: So, paragraph 54, you say:

Before reaching the IP, I had confirmed with the GFE –

10 the Ground Force Element –

that they were ready for extraction, and as we were approaching the IP, as the Acting Air Mission Commander, I gave approval for the Bushman formation to execute the extraction as planned.

15

Is that correct?

D9: Correct, from memory.

- COL STREIT: This required the Bushman formation to manoeuvre to the north. As there was a shower to your east, you could see that the weather conditions towards Lindeman Island were good once clear of the shower. Is that right?
- D9: So as we were travelling towards the IP, which was generally a northerly direction, there was a shower off to our right-hand side. I still had visibility of Hamilton Island to the 12 o'clock, and then a horizon to about the 1 or 2 o'clock, but there was a shower passing. And at that point in time, the flight lead entered the hold with a left turn, (indistinct) to the north of the holding pattern at that point, to wait for the shower to pass.
 - COL STREIT: The plan was to execute a right-hand turn? That was briefed, wasn't it?
- 35 D9: Correct.
 - COL STREIT: And a left-hand turn was executed by the flight lead and all other aircraft, following flight lead, executed that left-hand turn?
- 40 D9: Yes.
 - COL STREIT: Did something come over the radio from the flight lead to say that he was going to do this?
- D9: To the best of my recollection, he briefed a "Left hold" over the radio.

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COL STREIT: Now, at paragraph 63 you say:

During the manoeuvre towards the IP, which was a left turn –

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you observed through your night-vision device -

that Bushman 83 appeared to be out of position and situated higher on the plane than was usual, or that I had observed already on the flight.

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So previously you gave some evidence about Bushman 82 and 83 being out of position and slightly higher than you had expected, but you simply regarded that as pretty normal in formation flying and they had undertaken actions to drop their aircraft back to be at the same height as the rest of the sortie. Correct?

D9: That's correct.

COL STREIT: But this was a little bit different, what you're observing with Bushman 83. Does this observation occur during the course of a left-hand turn?

D9: It was towards the end of the second left-hand turn.

25

COL STREIT: So the first left-hand turn is 180 degrees; correct?

D9: Give or take, but yes.

30 COL STREIT: Yes. And then straight and level flying for a distance, and then executing a second left-hand turn about 180 degrees?

D9: Correct.

35 COL STREIT: Then you continued then the straight flying to the LZ on Lindeman Island?

D9: That's right.

40 COL STREIT: That was the plan?

D9: Yes.

COL STREIT: So the second left-hand turn, about 180 degrees, that – during the course of the turn, was that when you observed Bushman 83 appear out of position and situated higher on the plane?

5 D9: That's correct.

COL STREIT: And you regarded that as unusual?

D9: I did.

10

COL STREIT: Was anything said between – that you can recall, was anything said between you and D10 about that matter?

D9: Myself and D10 were discussing that it was – like, "Hey, this is a little 15 unusual", yes.

COL STREIT: Did either you or D10 say something over the aircraft net - the net between - the radio net between the aircraft, telling 83 that their the concern you had?

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D9: Hindsight's great in this one. At that point in time, I was like, "Oh, I'll – when we roll out on the turn, I'll confirm that their operations are normal".

25 COL STREIT: Sure.

> D9: So my thinking was probably five to 10 seconds too late to communicate that. But obviously - - -

- 30 COL STREIT: I'm not being critical of you at all. I'm just trying to understand what you saw and whether anything was said between you and D10 in relation to the matter.
- D9: D10 and I had a conversation. We didn't communicate anything externally. 35

COL STREIT: You go on to say, at 65, you considered it abnormal because it was a higher than expected variation in the position that you had previously described in your evidence. Is that correct?

40

D9: Correct.

COL STREIT: I'm just going to read the next paragraph out. At paragraph 66 you say:

Moments later, whilst in the left-hand turn prior to the IP, I saw Bushman 83 suddenly pitch nose down and descend rapidly towards the water. The nose down pitch was the first time I observed a flight profile during the mission I considered was dangerous. I immediately thought, "This is bad".

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I heard D10 call over the radio for Bushman 82 to pull up, using the words "83, climb", or, "83, pull up"; I don't now recall which. Unfortunately, Bushman 83 did not recover and impacted the water. I saw an explosion upon impact. Bushman 83 impacted the water less than 10 seconds after I had thought to myself, "This is bad".

That's correct, what I've read out?

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D9: Correct.

COL STREIT: In terms of the description of you saw Bushman 83 situated higher on the plane than was usual in the left-hand turn and then you 20 observed, very suddenly, did you, the nose down pitch of Bushman 83?

D9: I did.

COL STREIT: Did Bushman 83 then pass between your aircraft and 25 Bushman 82 in the turn?

D9: It would've been between us both, but behind 82. If that's clear?

COL STREIT: Just taking a step back, before you entered the turn, what 30 was your observation of the spacing between 82 and 83, and your aircraft?

D9: It's not anything I've specifically thought about, so I'm just taking a second to consider.

- 35 COL STREIT: Sure. Perhaps I'll ask you this: some evidence before the Inquiry is to the effect that the sortie was to maintain seven rotor diameters as a consequence of the carriage of flares. Is that something that rings a bell?
- 40 D9: It is.

COL STREIT: So during the course of the sortie, does anything stand out in your mind as to whether Bushman 82 or 83 were closer than the seven rotor diameter?

D9: Yes, okay. So in response to that question, the seven rotor diameter was a specific spacing applied for a very certain component of the fly based on flare usage and some limitations there. The authorisation for the sortie, and the brief was, we conduct formation closer than that up until a limit at the discretion of the formation that was briefed by the flight lead and the Aircraft Captain.

As we approached the IP, 82 did kind of close their spacing and 83 looked to follow but not necessarily also close their spacing. And that decision-making is within what is briefed and up to the Aircraft Captain to position the aircraft to best achieve the outcome of the mission. And for us, we stayed at a looser rotor diameter. And it's all based on the Aircraft Captain's discretion as to where he's getting his cues from, as discussed before. And we could sufficiently see what we needed to see of the other three aircraft at the same spacing that we were at.

COL STREIT: In your experience, getting closer to the aircraft in front of you when you're flying at night overwater on night-vision device might be something that occurs so you don't lose visibility where that aircraft is due to weather?

D9: So, yes, that's one reason for it. And additionally, also provides more cues to fly, reducing the workload. Which may seem counterintuitive but getting closer is actually more comfortable once you're used to being close to another aircraft, because all of the information you need is right in front of you.

COL STREIT: To your observation, when you're seeing 83 suddenly pitch nose down and descend – and I understood you to say that they passed through between your aircraft and Bushman 82. Correct?

D9: That's correct.

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COL STREIT: Did it appear, from where you were, that when that sudden pitch down occurred for Bushman 83, that as they moved through the space between your aircraft and 82, as to whether or not they were close to 82, did it appear to you?

D9: It didn't appear that they were close to impact, from my perspective, no.

COL STREIT: And, to your observation, the sudden pitch down and descent to the water as they were flying – so they're flying in a left-hand turn. They're in a position elevated above the rest of the sortie, as you've described. They then pitch down. Was the pitch down straight down or

was it banking to the left or to the right? Do you recall?

D9: So I guess there's the perspective as I observed it, and then information that subsequently became available.

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COL STREIT: I'm just interested in what you saw at the time?

D9: Yes. So it was - where you say "straight down", it wasn't at 90 degrees nose down pitch attitude. No, it was a higher than usual nose down pitch attitude and, like, as I said, it was enough that I was, like, "That's substantial". And then at that point, they looked like they kind of impacted the water straight-on, from my perspective, which would've implied a correction back to the right at some point; noting that we were in a left turn.

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COL STREIT: I'll just take you through your evidence on this:

Immediately following the impact –

20 I'm looking at paragraph 67 of your statement –

> Bushman 83 impacted the water, D10 took over as the Air Mission Commander of Bushman 84.

25 Is that correct?

D9: That's correct.

COL STREIT: You continued as the flying pilot for a period of time; is 30 that correct?

D9: I did.

COL STREIT:

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Bushman 81 and 82 were subsequently directed to go to Lindeman Island and wait for further instruction.

D9: That is correct.

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COL STREIT:

And Bushman 84, essentially, conducted the immediate search and rescue, and management, of the incident site.

That's correct?

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D9: Yes. And I'll elaborate – highlight a sentence that's in here. So it wasn't a case that 84 immediately snapped a left-hand turn away from the formation.

COL STREIT: Sure.

- D9: It was kind of a safe separate was developed between 84 and 81 and 10 82, which took a few seconds, and then we made the left turn back and began coordinating commencing the immediate search and rescue.
- COL STREIT: Now, there's been a fair bit of evidence already before the Inquiry as to what then occurs from other witnesses. But you, at 15 paragraph 70, coordinated with the US aircraft to conduct a search and rescue using the capability that they had to assist in the search and rescue. Is that right?
- D9: Yes. So, essentially, D10 was primarily took control to coordinate 20 the overall response, resourcing, and begin the search and rescue. And then where I had capacity or there was additional efficiencies to be gained, I assisted where I could. And one of those actions was bringing the US aircraft, essentially, below the cloud base, which was 3000 feet at that point in time, so that they could assist with what they had.

COL STREIT: Subsequently, Bushman 84 handed over, did it, with Bushman 82, for Bushman 82 to continue the search and rescue while 84 returned to Proserpine?

30 D9: That's correct.

> COL STREIT: When you returned to Proserpine, Bushman 84 did not subsequently return to the search and rescue task at the time?

- 35 D9: No. Myself and D10 had a conversation that, considering our positions and experience, we were best placed in the Command Post, with the two Aircraft Captains being absolutely the right people to continue that mission.
- 40 COL STREIT: Now, there's been a fair bit of evidence about what occurs after Bushman 84 lands, including the continuation of the search and rescue operation. So I just want to turn now to you departed Proserpine in 29 July 2023; is that correct?
- 45 D9: Yes, correct.

COL STREIT: Do you recall, was that approximately in the afternoon, around 1430 or thereabouts?

5 D9: It's not in my statement.

COL STREIT: No. But do you recall?

D9: I didn't go with the rest of the Force. I took my own flight back to 10 Brisbane, which was where my family was located at the time. And I think it was around 1200; I can't recall exactly.

COL STREIT: So around midday on the 29th.

15 D9: Maybe after, but I don't quite recall.

> COL STREIT: Were you interviewed by Queensland Police at all before you departed Proserpine?

20 D9: I was not.

COL STREIT: Have you been interviewed by Queensland Police since?

D9: I've not, just provided the written statement to - a response to the 25 Coronial Inquiry.

COL STREIT: That's the Defence statement you're talking about?

D9: Correct.

30

COL STREIT: You've been interviewed by DFSB; is that right?

D9: A couple of times, yes.

35 COL STREIT: The first was immediately following the incident, and that was on - was that on - if you look at paragraph 43, you say:

Immediately following the accident on 30 July '24 –

40 I take it you mean 30 July '23?

D9: That's on - - -

COL STREIT: Paragraph 43, Inquiry statement.

MS McMURDO: Inquiry statement, yes.

D9: Yes. Sorry, yes, that's a typo on my part. Apologies.

5 COL STREIT: That's okay. So you were interviewed by DFSB on 30 July 2023 at Holsworthy Barracks?

D9: Correct.

10 COL STREIT: On the 29th, you flew home to Brisbane; correct?

D9: Yes, spent the night there, and then went to Holsworthy.

COL STREIT: Spent the night in Brisbane, saw your family?

D9: Correct.

COL STREIT: Then travelled to Holsworthy. How was it communicated to you that you needed to get to Holsworthy?

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D9: I was aware, departing Proserpine, that I needed to get back to Holsworthy for the commencement of this process.

COL STREIT: You also had an interview with DFSB over Skype in October. Was that October 2023?

D9: It was October 2023.

COL STREIT: You were interviewed by the persons you've identified at paragraph 43; is that right?

D9: That's correct.

COL STREIT: Now, at paragraph 45 you identify that since immediately following the incident you attempted to take a couple of weeks off in October on leave?

D9: That's correct.

40 COL STREIT: But that was consistently interrupted to prepare a statement and to conduct preparation for Comcare and DFSB interviews.

D9: That's, again, probably another typo. It was the Coronial statement which was subsequently provided to Comcare.

COL STREIT: You say at 42 of your Inquiry statement you were interviewed by Comcare on 22 February '24; is that right?

D9: That's correct.

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COL STREIT: We've dealt largely with the Jervis Bay incident, which is the last page of your statement. I just want to ask you a couple of questions in relation to the preparation of your Defence statement, if I may?

10 D9: Okay.

> COL STREIT: When you arrived back at Holsworthy on 30 July 2023, and any time thereafter, did anyone tell you that you were not to discuss your observation about what happened in the incident with any other person?

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D9: It was disclosed to me, but I don't remember exactly where it came from, for what purpose. But I was largely aware that, having previously been through an accident investigation recently, that my discussion is likely to hamper evidence.

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COL STREIT: So you had a level of familiarity because of the Jervis Bay incident in March, earlier in 2023, of what the likely DFSB process was going to be?

25 D9: Correct. And I can't remember exactly at what point it was disclosed to not discuss evidence at risk of tampering, but it was; I just can't recall when.

COL STREIT: Did you ever receive guidance or Direction from anyone to 30 start taking notes about your recollection of the matters leading up to the incident, and the incident itself?

D9: Yes. So, again, I don't recall exactly who, but basically when the component of our search and rescue was over, I got on a computer and just typed out the kind of key points that I knew were probably important from 35 my perspective. And then, two days later or so, in preparation – correction - one day later, in preparation for the DFSB interview, I kind of fleshed that

out a little bit more. And then that was the immediate recollection/holdings of the events.

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COL STREIT: Obviously – well, to state the obvious – you've just experienced an absolute tragic event. You're there with your colleagues on the morning of the 29th, before you fly home. So I take it there was discussion between the aircrew as to what on earth had happened?

D9: So there was – at times, there were individuals where I felt, to aid decision-making, we had a conversation about what happened. And then also there was an element of, like, "What just happened?", where there were elements discussed, yes.

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COL STREIT: I'm not in any way, shape or form being critical of you; I'm just trying to understand what was said.

D9: Yes.

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COL STREIT: It would be remarkable if there hadn't been any discussions, wouldn't it?

D9: And I appreciate that. I think, in the immediate sense, the concern in 15 the search and rescue was to make sure that we weren't going to reinforce the search and rescue in a negative way.

COL STREIT: Yes.

- 20 D9: So the conversations that I had with people were around, "What happened?", to make sure that we were still good to continue the search and rescue with the remaining helicopters.
- COL STREIT: Understood. I understood that would have been a concern 25 that needed to be addressed. Do you recall who you spoke with, when you look at the pseudonym list?
- D9: Primarily that conversation was D14 and then, on completion of the search and rescue, I had a conversation with D2 and D6, genuinely about 30 what had happened.
 - COL STREIT: Are you able to approximate when you'd been told by a person or somebody in the chain of command not to discuss your recollection of events of the incident in preparation for statements and the like?
 - D9: It was in the days following. I just can't remember if it was from DFSB, the chain of command, another – a different source.
- COL STREIT: Yes, sure. 40
 - D9: It wasn't something that I kind of I guess, I knew the information, so it's not something that stuck in my head at the time.
- 45 COL STREIT: Ms McMurdo, they're my questions. Thank you.

MS McMURDO: Thank you. Could I just ask one thing about the incident itself? There was a shower over to the east, which you were avoiding. Were you able to see 83 throughout the entire exercise? Were they invisible, they were in sight?

D9: I could see 81, 82 and 83.

MS McMURDO: All three of them?

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D9: Yes.

MS McMURDO: So are you able to say whether 83 at any point went into the shower on the east, or into shower or cloud?

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D9: Definitely, I can say with certainty, not in a cloud. And we had a similar perspective of the rest of the formation of – than 83 would have, based on our positioning. And we were, like, right on the edge, potentially in very light showers. But from my assessment, they might have been on the edge of it, because I could see through 83, 82, 81, and I could even see elements of the horizon. We were right on the edge of it. So I wouldn't say we were in the rain per se.

MS McMURDO: Sorry, what was the last bit?

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D9: We were not, like, in the rain. We were just off - - -

MS McMURDO: So they weren't in the rain?

30 D9: No.

MS McMURDO: No. But they may have been in a light shower?

D9: Yes, correct, ma'am.

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MS McMURDO: Thank you. Now, my only other questions are about post-incident. You've had to give a lot of statements to different people arising out of this. It's probably not ideal that you had to do that, but inevitable because there were a number of investigations going on because there'd been deaths as well as a serious flying incident.

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So, shortly after the incident, you had the foresight to type up the key points and then, the next day, flesh that out so that, in your mind, shortly after the incident, you had a good account of what you'd seen at that time. So that was a very sensible thing to do. Do you have those notes still?

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D9: I've got them saved on my DPN profile, yes.

MS McMURDO: Okay, great. So you probably looked at them when you were doing the statements, probably, for the Inquiry, but would you mind giving them to us?

D9: Absolutely, ma'am.

10 MS McMURDO: Thank you.

D9: I think, to provide some context – and, again, hindsight is nice – is when I wrote them at the time, I didn't write the information that I knew would be available elsewhere. I just kind of put down what I knew only I kind of had, with some amplifier remarks.

MS McMURDO: Yes, absolutely, and that was very sensible. Would you have found it helpful if early on, after you'd done that, you got some assistance to type up your recollection of what happened into a statement that could then be used as a primary statement by the DFSB, Comcare, and the Inquiry, so that you didn't have to go over that initial material all the time again, to different people? Would that have been of assistance to you, that they could then have just asked the extra questions that they needed, that covered their particular queries for their particular enquiries?

D9: So, in a sense, with the Defence statement, that was done in the immediate sense with some support from DRL.

MS McMURDO: What we call "the Defence statement" is the one that was prepared for QPS?

D9: Correct.

MS McMURDO: Okay. Yes, but - - -

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D9: But that was a month after DFSB, as an example.

MS McMURDO: Yes.

D9: So I think, in hindsight, it would definitely be helpful, noting from my understanding, there was a few different outcomes that DFSB, the Inquiry, Comcare are seeking.

MS McMURDO: Sure.

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D9: So I assume it will be a work in progress to ensure that all the information requirements – if they're a single source of truth, you could say, I think that would be helpful, yes.

- MS McMURDO: So that was the Coronial Inquiry statement for Queensland Police. So it would have been helpful if you'd done that statement first, and then that was then available, at an early stage, to DFSB. Then they could ask any additional questions they wanted, but they wouldn't have to go over the same ground yet again with you. Then that also would have been available to the Inquiry, which, in a sense, that's what the Inquiry did; they used the Comcare statement and then went over the additional material they needed.
- The next thing was, the first time you were taking some leave after this dreadful incident, was in October, and that was interrupted to prepare the statements and to the DFSB, and to conduct preparation for the QPS statement for the Coroner, and that was October. Did you have any option about that? I mean, you must have been a bit disappointed, frustrated, that you had to break your leave to do that.
- D9: Look, I was; I'm not going to say I wasn't. But it was a timing sense, and I made the decision myself not to take any leave until all four funerals were complete. And I also moved my family in this process, so I had a little bit going on. So I made that decision, and it was just unfortunate timing.
 - MS McMURDO: Yes. So you weren't given the option? They said, "We need you to do it this week"? You weren't given the option that you could have your leave and do it afterwards?
- D9: There was a date to respond to I can't remember what kind of notice the Coronial, that meant I kind of had to prepare it in that window.
- MS McMURDO: So you were also asked by COL Streit, naturally, that you discussed it with others because you'd all been through this terrible experience and they were upset, everyone needed to debrief and get the comfort and support from those people who had been through this terrible experience. You've told us about your conversation with D14 about search and rescue, and then afterwards with D6. Later on, in the months that followed, were there other conversations with other people?
 - D9: Not where I discussed the specific observations.

MS McMURDO: So just those two?

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D9: Yes. And as information came available during the investigation, people have asked, like, "Is that what you saw?", and it's kind of I'm going to respond to those questions, but other than that, there may have been a slip.

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MS McMURDO: There may have been times when you had those conversations because of the human need to discuss these things with each other at times when you're distressed, yes. Okay, thank you.

10 AVM HARLAND: I just have a few - - -

MS McMURDO: Yes.

AVM HARLAND: I just have a few more questions. If I could take you back to TALISMAN SABRE '23, please? Did you receive a mass Air brief before – or are you familiar with the concept of a mass Air brief before an exercise?

D9: I am, and we did, in Holsworthy, via Skype.

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AVM HARLAND: In where, sorry?

D9: In Holsworthy, via Skype.

25 AVM HARLAND: And when was that?

D9: It was prior to departure. I can't remember which day of the week.

AVM HARLAND: The week before?

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D9: Yes, the week immediately before departure.

AVM HARLAND: Who attended that?

35 D9: The aircrews.

AVM HARLAND: All their crew?

D9: That's my understanding. I don't know if there was a nominal roll or not, but it was a Direction to attend.

AVM HARLAND: Okay. So it was mandatory?

D9: Yes.

AVM HARLAND: Okay, thank you. Just on the night, you talked in para 63, if I recall correctly, about 2 and 3 basically just up and down in a very normal sense, of just effectively station-keeping in sometimes challenging conditions. So that wasn't really normal. Did you note anything else unusual about Bushman 83 in flight, given that you were formating on them for the period of the transit, or was it what you would characterise as a routine transit?

D9: Other than the variations, which as I said, were normally abnormal, if 10 that makes sense, there was nothing else remarkable.

AVM HARLAND: Thank you. And in terms of the visibility, I think Ms McMurdo touched on it, but just to confirm would you expect that Bushman 83 had similar visibility to you in Bushman 84, in that last minute prior to the crash?

D9: I would. And where I say I could see through the shower off to the 12 o'clock, and the three preceding aircraft, whilst 83 may have been in marginally heavier showers, from the perspective I was looking at them through, they would have had the same line of sight through to the horizon and the preceding two aircraft as I would have.

AVM HARLAND: So they were slightly closer to the showers than you were?

D9: So we were in the left turn and we were the closest inside the turn, so they would've been, by virtue, but I couldn't assess how much more, other than I could see the horizon through them still.

30 AVM HARLAND: Yes, and you could see all other aircraft in the formation?

D9: Yes, that's correct.

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- 35 AVM HARLAND: Thank you. If you can put your mind back to that time in that kind of – like, get in that – while you were in that holding pattern, were there any other distractions like background, cultural lighting, or boats and anchor lights in the area at the time, that could have created distraction?
- 40 D9: Look, not that I explicitly recall. You could see Hamilton Island – you could see some lights on Hamilton Island, off in the first turn kind of left. And in the second turn, you could kind of start to see Lindeman Island opening up as we turned back towards the IP. There was a spray of cultural lighting; there may have been a boat or two around, but nothing that was,

like, a light source that was giving any sort of kind of single point NVD visual illusion to me. But everyone's perspective is different.

AVM HARLAND: Okay. Yes, terrific, thank you. In your experience using TopOwl, particularly in formation flight, was it routine that the individuals, when they did their debriefs, would have different experiences in terms of the endless visibility during the flight, by virtue of their Image Intensifier Tube performance, or would everyone generally have a similar picture?

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D9: Everyone will generally have a similar picture, sir, and you'll focus your goggles to within a serviceable limit. And if they were serviceable, from my experience, there might be marginal variations, but nothing that was substantial after you had them focused. At times, you might get a goggle that is outside of limits to focus, and you just get a different one. But once you're happy with it, they're within a kind of variation of normal.

AVM HARLAND: And in terms of imagery and contrast, would you see a wide variation, or would a wide variation be reported?

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D9: A wide variation would be reported, yes.

AVM HARLAND: The contrast?

25 D9: Yes.

AVM HARLAND: So it wouldn't be unusual for somebody to have a different picture through their TopOwl than somebody else in a formation? Like, for example, a degraded contrast picture?

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D9: It would be unusual for that to occur.

AVM HARLAND: It would be unusual?

35 D9: Yes.

AVM HARLAND: So, typically, the TopOwls that you've flown and when you've flown in formation, people would report having similar contrast and a similar picture?

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D9: Yes, we're all broadly seeing the same thing.

AVM HARLAND: Thank you. Just a final question. Just regarding cockpit management for flying with respect to loose equipment, is there a checklist item, for example, in your start/taxi/take-off checks, or in your

pre-descent checks, or pre-tactical phase checks, that requires you to, effectively, tidy up the cockpit, stow loose equipment to ensure you couldn't get any issues with failing controls through FOD?

- D9: So part of your before movement checks, from memory I can't 5 remember if it was pre-taxi before movement – you would confirm no loose articles, door locked, harness secure front right, and the aircrewman would confirm that the cabin is secure.
- 10 AVM HARLAND: Yes.

D9: You'd also do a full throw of the controls, just to make sure that they're full and free. Noting in MRH at that point in time, they're not physically connected by control tubes to the main rotor because it's fly-by-wire, but it's a kind of confirmation of FOD check that there's no binding in the bottom of the control arm.

AVM HARLAND: Do you do a similar check before you commit to, like, a descent or a tactical phase?

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D9: So as part of FENCE checks, we'll conduct – we'll, essentially, configure the aircraft for the mission, and noting I don't have as much experience as some. Was it something that I had explicitly confirmed again when the FENCE checks were conducted basically straight after departure?

- 25 No, because the aircrewman and pilots had just done it at that sort of time. You would confirm loose articles were secure when the cabin condition changed for any reason, i.e., ingress of Troops or egress of Troops.
- 30 AVM HARLAND: Yes.

D9: But if you'd just done it prior, I wouldn't do another check personally, no.

35 AVM HARLAND: Okay. That's all, thank you.

MS McMURDO: Now, there will be applications to cross-examine?

LCDR GRACIE: Yes, ma'am, just a few minutes.

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LCDR TYSON: About 10 minutes, ma'am.

SQNLDR GILES: 10 minutes, ma'am.

45 COL GABBEDY: About five minutes, ma'am. SQNLDR NICHOLSON: 10 minutes, ma'am.

MS McMURDO: Would you prefer to continue or to have a break now and come back and do the cross-examination after lunch?

D9: My math there, it was about an hour, ma'am, so maybe we maybe have a break.

MS McMURDO: Sounds good. All right then, we'll adjourn until 1.15.

HEARING ADJOURNED

HEARING RESUMED

MS McMURDO: LCDR Gracie.

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LCDR GRACIE: Thank you, ma'am. Could I revise my estimate up to three minutes, from two.

MS McMURDO: The clock's ticking.

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LCDR GRACIE: It is.

< CROSS-EXAMINATION BY LCDR GRACIE

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LCDR GRACIE: D9 , my name's LCDR Malcolm Gracie, representing the interests of CAPT Lyon. I just want to go back to a little bit of your evidence to recap on these and clarify a couple of matters. You were saying towards the end of the second left 180 degree turn that you were discussing with D10 that the height of Bushman 83 was a little unusual.

D9: That's correct.

25 LCDR GRACIE: At what height was 84 at that time?

D9: So we were co-level with the rest of the -81 and 82, so it would have been approximately 200 feet.

30 LCDR GRACIE: What height did you estimate, if you can, at the time or now, that you see Bushman 83 rise up to?

D9: I couldn't make an estimate, it was just abnormally high, from my perspective and experience, but I understand the exact height is available through reports.

LCDR GRACIE: Understand. I just want to ask, was it a sudden pitch up or flaring of the aircraft, or was it a more gradual ascent?

D9: It was a more gradual climb and then a sudden pitch down.

LCDR GRACIE: Just help me here to remember, at that particular time you were the flying pilot or was D10?

D9: D10 was the flying pilot at that particular time.

LCDR GRACIE: When you said that you saw 83 suddenly pitch nose down, you used the expression that "83 passed between 82 and 84". I just want to understand, because 83 is already between 82 and 84. So when you say "passed", you mean "passed under 82", or "passed back under 84", or what do you mean by "passing"?

D9: I'm not sure I explicitly used the word "passed", and I apologise, but they went straight down in the formation position, essentially, so laterally between 82 and 84. There wasn't, I guess, a closure underneath or behind either of the proceeding or receding aircraft.

LCDR GRACIE: From your observation – because you said you could see the other three aircraft – was 82 in incorrect formation in terms of height or attitude?

D9: No, they were in relative position and all positions have a standard level of variance.

20 LCDR GRACIE: So in terms of height, what was 82's relative position in the formation?

D9: Relatively on plane, plus or minus a deviation, from my recollection.

25 LCDR GRACIE: And in terms of attitude?

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D9: They were somewhat nose level or as expected and I guess at that explicit point in time, I wasn't paying a whole bunch of attention to 82, other than they were roughly in position.

LCDR GRACIE: But in terms of your assessment, with that hard-left formation, 81 and 82 were in relative correct positions?

D9: With heavy left, yes, and I think where I say "relative", we kind of discussed previously the available spacing to them and their arc of freedom. So they were within a standard deviance of height and in position from an arc of freedom and spacing perspective, yes.

LCDR GRACIE: Other than the unusual height, 83 was also in relative expected position?

D9: With the perspective that I was looking at it from, noting as I previously described, you need to get your cues from multiple different aircraft. And at that point there was no – not "no" – but there was limited relativity of 83's position to 82's. So they looked like, from a spacing

perspective, they were in position but just high with a higher perspective on it. So as far as the GPS position relatively – to 82 and 84, I can't explicitly speak to that.

- 5 LCDR GRACIE: Just in terms of your discussion with D10 about the height of 83 being a little unusual, did you discuss what might have been the cause of that?
- D9: We and I know my brain mixes up things that were said and things that were thought during this, so to the best of my recollection, we were having a conversation that the standard response when when I say "conversation", we were acknowledging the fact that climbing is a normal thing to do at night when people are starting to experience a level of discomfort because you kind of want to get away from them.

So it's like, "Oh yes, like that's normal kind of. They're climbing a bit, come back down, climbing a bit, come back down". Then at the point that it was abnormal, as I said, that was when it was, "This is no longer a normal thing for flying at night", if that makes sense.

- LCDR GRACIE: So did you discuss with D10 or form your own independent view that there was perhaps a loss of visual awareness on the part of 83?
- 25 D9: I hadn't had the time to inform I guess, inform an assessment of what was occurring in their cockpit, other than they might be working a little bit harder than they previously were.
- LCDR GRACIE: Just one other thing, you were asked some questions about the distancing throughout the formation. I'm just not sure you quite gave the answer in terms of rotor di's. Could you give an assessment in terms of rotor di's of the distance between 82 and 83 at the time that you saw 83 starting to climb?
- 35 D9: It would be an estimate, at best, I would offer.

LCDR GRACIE: Yes.

D9: Maybe five.

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D9: We were also about five from 83.

LCDR GRACIE: And 82 to 81, pinched up or you couldn't see?

LCDR GRACIE: Five, okay. You said 84 was a bit looser.

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D9: They were slightly pinched inside of that, but I couldn't tell exactly.

LCDR GRACIE: Thank you. Thank you very much. Thank you, ma'am.

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MS McMURDO: Six minutes, LCDR Gracie.

LCDR GRACIE: Three each, I think, ma'am.

10 MS McMURDO: Yes, LCDR Tyson.

> LCDR TYSON: I was going to object, ma'am, to LCDR Gracie going over time, but I didn't.

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< CROSS-EXAMINATION BY LCDR TYSON

LCDR TYSON: My name is LCDR Matthew Tyson. I appear for 20 CPL Alex Naggs' interests. I just want to focus on some of the detail of your evidence following up some of the questions by COL Streit, and also by ma'am. In relation to ma'am asked you a question about could you see the other – and clearly my questions are focused on the sortie on the evening of 28 July 2023 – so ma'am asked you a question about whether you could 25 see the other three helicopters in the Bushman formation. I want to explore with you what you actually could see about those helicopters.

So, first, the helicopters have got organic lights, and they've also got APLs. Can you confirm that you could see the lights on the preceding helicopters in the formation?

D9: I could see the lights, but I don't recall exactly if it was the power lights or the formation lights, but I could see lights and orientation of all three aircraft in front.

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LCDR TYSON: And can you explain what you can actually see – so, for example, are you simply seeing the silhouette of the three helicopters, or can you make out, with a degree of granuality, things such as, for example, the camouflage pattern or, for example, whether doors are open? What's the extent of what you can see about the other helicopters, please?

D9: So it will vary with distance, and at that point in time – so one of the methods, to understand orientation, is looking at the rotor disc. So I could see the rotor disc of 81 and 82 to confirm that we're in a left turn. I couldn't see the camouflage. 83, I could confirm orientation. And, I guess, the

crease in the kind of tail boom where it goes straight – if you're familiar with an MRH – was about what I could see.

LCDR TYSON: And you gave an answer to COL Streit; I think that you said that conditions on the night were not low illumination. Is that right? Is 5 that the answer that you gave?

D9: That's correct.

10 LCDR TYSON: Can you just explain what you meant by that, please?

D9: So we now - excuse me. There is now a definition for "low illumination" – previously it was a bit of a subjective assessment – which is two millilux, which is essentially limited to no moon, clear night, starlight. And on the night of that night there was in the vicinity of 60 per cent illumination and there was not a cloud deck, so there wasn't – the lunar illumination was not being blocked substantially. There was just patches of cloud, which still saw some illumination coming through.

20 LCDR TYSON: And the cloud cover at the time of the crash was about, what, at about 2000 feet?

D9: When you say "cover", the scattered cloud, which implies between one-quarter and one-half of a visible sky, was at about 2000 feet, yes, and the US aircraft confirmed it was, in Lindeman Island, which we were within vicinity of, at about this – I can't remember the exact figure, but it was about 2500, was what they reported.

LCDR TYSON: And what do you mean, please, by "scattered clouds"?

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D9: So between one-quarter and half of the visible sky has cloud in it.

LCDR TYSON: I just want to ask you in terms of your Defence statement - I don't know whether you've got that handy. I think it's Exhibit 57C. It's the November one. Have you got that?

D9: I've got it.

LCDR TYSON: Just in terms of paragraph 64, please, you said there that 40 – in the second sentence:

> I gave approval to the Bushman formation to execute the extraction as planned.

So during your role as AMC during the sortie, did you have some sort of a checklist of things that you were going through as part of that role?

D9: Part of the role was ensuring that conditions are set, and the exact methodology for that we'll have to discuss separately.

LCDR TYSON: But just in terms of that, the "approval to the formation to execute the extraction as planned", can you just explain what does that actually mean? Does that mean, for example, that over the radio frequency applicable to the formation, you told the other three something, and what was that, please?

D9: Exactly the mechanics, we'll have to talk about separately. But there was words communicated over the radio that meant the conditions have been set, that we could continue with the mission.

LCDR TYSON: And do you remember whether you got an acknowledgement from the other Aircraft Captains?

20 D9: To the best of my recollection, I did, yes.

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LCDR TYSON: Then, in relation to paragraph 65 – and you've given some evidence to COL Streit and some others about the high on the plane situation – I just want to ask you, doing the best you can, thinking about what you saw, what was the attitude or the pitch of Bushman 83 when you saw the Bushman 83 high on the plane?

D9: It looked like it was an attitude commensurate with the airspeed that we were at. So, to use a technical term, it didn't appear to be any sort of cyclic climb; it appeared to be a collective climb. And what I mean by "cyclic climb", like, if you pitch the aircraft nose up, it'll trade airspeed for altitude. If you collectively climb, the attitude maintains level, and you'll maintain airspeed, essentially.

LCDR TYSON: And doing the best you can, what was the duration of the period for which you saw Bushman 83 as being abnormally high on the plane?

D9: Probably seconds that I could count on one hand.

LCDR TYSON: And sorry to go back in the chronology, but earlier on, in paragraph 63, when you're talking about both Bushman 82 and 83 being out of position, positioned slightly higher – just going back to that – can you recall the frequency of those circumstances? For example, was it five

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or six times; 10 or so times; two or three? What's the frequency, to the best of your recollection?

D9: I can't recall.

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LCDR TYSON: And in terms of communications that you received from Bushman 83 during the sortie, did you receive any communications from them that, for example, they were ever having difficulties in maintaining formation?

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D9: No. No, the only communication received was acknowledgement of the radio calls, and none of the radio calls went unacknowledged.

LCDR TYSON: And just to confirm then, nothing, for example, "We've got an instrument failure issue", or "We've lost visual on" – anything like 15 that? Nothing like that?

D9: Nothing like that, no.

20 LCDR TYSON: And was there anything that you ever saw in relation to Bushman 83 that it was doing, for example, an unusual attitude drill, or an IIMC drill, or anything like that?

D9: Nothing that appeared to be similar to that.

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LCDR TYSON: You've given some evidence about what D10 said over the radio just shortly prior to the crash. I just want to give you some other evidence that the Inquiry has received, and I think it comes from one of the crewman of Bushman 84, and it's this:

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Just before the crash, I heard someone say, "83, you're starting to flare a bit. Slow it down". The next thing I heard was D10 say, "83, come up. Come up".

So just in relation to that first piece of information, "83, you're starting to 35 flare a bit. Slow it down", do you remember either yourself or D10 saying something like that?

D9: I don't recall, no.

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LCDR TYSON: Is it possible that it was said, but you simply don't have a recollection?

D9: I don't think I can answer that. I don't recall it being said, and I can't estimate the probability of it or not. As I said, there's an immediate trauma event that follows, so memory is not exactly clear.

5 LCDR TYSON: And, finally, I don't want to get into the detail of it, but can you just confirm that I think the day after you prepared your Defence statement, you actually heard the cockpit data – the voice recorder for 83?

D9: It was actually subsequent to the submission of my Defence statement.

LCDR TYSON: But you've heard the whole of the - - -

D9: I have heard one of the tracks, yes – sorry, for 84, but not 83.

LCDR TYSON: Not 83?

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D9: Correct. Only 84.

20 LCDR TYSON: Okay. Thank you. Nothing further, ma'am. Nothing, sir.

MS McMURDO: Thank you. Could I just ask you, at paragraph 40 of your Inquiry statement, you mention there about a change in speed to 80. Is that 80 knots?

D9: It is, yes. And "KIAS" is knots indicated airspeed.

MS McMURDO: Thank you. It was communicated over the radio. Did you slow to 80 knots? 30

D9: So I don't recall if it was communicated.

MS McMURDO: If it was or not, yes.

D9: But the holding speed is 80 knots.

MS McMURDO: So at that point, did your aircrew open the doors, or - - -

40 D9: We did give an order to open the doors, correct.

> MS McMURDO: And that was so that your aircrew could assist with situational awareness and - - -

45 D9: That was in preparation to land.

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MS McMURDO: Preparation to land. But doing that in preparation to land was so that they could assist with situational awareness and assist, you know, eyes out and helping the pilots do their job.

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D9: That is one of the benefits of doors open, yes, ma'am. But the decision at that point in time was specifically as part of the process to configure the aircraft to land, which a subsequent second order effect is they are now eyes out with the door open and can assist.

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MS McMURDO: Thank you. Yes, SQNLDR - - -

SQNLDR GILES: Giles, ma'am.

15 MS McMURDO: --- Giles, yes. Thank you.

< CROSS-EXAMINATION BY SQNLDR GILES

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SONLDR GILES: D9, my name is SONLDR Giles. I represent the reputational interests for LT Max Nugent. I want to take you back to your Defence statement, paragraphs 63 and 65. And I can probably summarise this for you. Approximately 10 minutes before the initial point you noticed that Bushman 82 and 83 were slightly out of position, but you didn't hold any concerns at that point for the two aircraft. However, at paragraph 65 you observed, through your NVDs, that Bushman 83 appeared to be out of position, situated higher on the plane, and that's when you had your concern.

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Now, prior to this – and this is my question – between take-off and that point in time, did you have any concerns in relation to the attitude of 83?

D9: Just to confirm. So, essentially, between take-off and the first left-hand turn into the hold is the period of time you're - - -35

SONLDR GILES: Well, I can probably make it easier. Between take-off and what is said at 63, which is that 82 and 83 were slightly higher, did you have any concerns about the attitude of 83?

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D9: No.

SQNLDR GILES: Now, we've heard during these proceedings the term "TAC mode", or tactical mode. Are you familiar with this term?

D9: I am.

SQNLDR GILES: When would you engage tactical mode on an aircraft?

D9: It's essentially at the flying pilot's discretion, within bounds of a few procedural mechanisms that we have in place in certain phases of flight. But it's a way that the autopilot holds the attitude of the aircraft without having to push any buttons. So some individuals use it in formation, others don't like using it in formation because they like something to fly against. So it's, essentially, personal preference and can be used low flying, or in formation, or general flying, if used.

SQNLDR GILES: And during the period of the incident, did you or the other flying pilot, D10, in your aircraft ever engage tactical mode?

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D9: No.

SQNLDR GILES: Is there any reason why you would ever engage tactical mode overwater?

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D9: There could be a reason. As I said, it holds the attitude of the helicopter and at times you need to push less buttons, and some people find it easier, some people don't. So I personally didn't use it overwater, but that's not to say that others did not.

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MS McMURDO: Does tactical mode mean flying manually?

D9: No. Kind of but not, ma'am.

30 MS McMURDO: You better tell us what you understand by "tactical mode"?

D9: So the, I guess, default operation of the helicopter has attitude hold mode, which if you put a control input in and then release the controls, the aircraft will self-recover back. Tactical mode is if you put that control input in and let go of the controls, that attitude will be maintained rather than the reference data that it comes back to.

MS McMURDO: I see. So that's tactical mode, that in between point; you're not flying manually, but you've just - - -

D9: Both are kind of flying manually, but it's what the autopilot sees is the attitude reference for the helicopter.

45 MS McMURDO: I understand. Thank you.

SQNLDR GILES: And from a process point of view, how is tactical mode actually engaged?

5 D9: There was a button on the cyclic, from memory.

SQNLDR GILES: Is it something that both the co-pilot – sorry, I should say, the flying pilot and the non-flying pilot can do independently or is it a button in the middle, or - - -

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D9: There's a button on each individual cyclic; however, you can't have separate modes selected for both sides of the cockpit. So the aircraft will need selected to TAC mode, not the right-hand cyclic or the left-hand cyclic.

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SQNLDR GILES: And is it something that you announce to the other pilot?

D9: Traditionally, yes.

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SQNLDR GILES: Now, I want to discuss the issue of decision height. Now, can the pilot set the decision height for the co-pilot and vice versa? How does it work?

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D9: So there's two independent settings in the cockpit; one attached to the left-hand side of the cockpit, and the other attached to the right-hand side of the cockpit. And they are independent, but they give the same oral warning. So the purpose of decision height is to, essentially, recognise any insipient, unrecognised descent.

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And that means whether it's the aircraft descending or if in the desert – as an example – just another low contrast environment – the ground kind of comes up to meet you, if that makes sense? So the decision height can go off and simply let you know the aircraft is below a certain altitude and then you either acknowledge it, is one of the standard responses, and continue, or you recover the aircraft back to a safe altitude.

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If you have two different settings in the cockpit, you will get – correction – a different setting in the cockpit between the left-hand pilot and the right-hand pilot, that will go off at two independent times. So either they'll be set to the same thing or one side will set it to zero and the other side will set it at – I'll stipulate it as 10 per cent below the authorised height. The reason that is, is so there's only one tone going off at one point in time rather than two independent tones going off, or the same tone going off at two separate times.

SQNLDR GILES: And why would you set the decision height to zero?

D9: If the other one is not at zero, as I just outlined, it stops it going off twice.

SQNLDR GILES: Do you ever set it so - say, for the example that you gave, one was set at - through the evidence that we've heard through these proceedings it was quite common to set 10 per cent below 200 feet, so being 180. And then the other decision height, what would that normally be set at?

D9: It was very normal to set it at zero.

15 SQNLDR GILES: Okay.

D9: And I think my understanding of the reasoning behind that, and my logic behind it personally, was the non-flying pilot would set the decision height and that way if there was a change in decision height, the flying pilot didn't have to come off the controls, scan inside and reset it. So one side is at zero and the other pilot then has control of the decision height setting.

SQNLDR GILES: And for this particular mission, what were the settings that you had in your helicopter?

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D9: We, I assume, had set 10 per cent below the authorised height, which would have been 180 feet, from the best of my recollection.

- SQNLDR GILES: And did you have another height set or just the one height?
 - D9: Again, process-wise, we would've had the other one set to zero is my assumption, but I actually don't explicitly know.
- 35 SQNLDR GILES: Now, I'll turn to the area of RADALT, which I'm sure you're familiar with. Did you have the RADALT set to any particular height in your aircraft for this particular mission?
- D9: Are you speaking to the AFCS component of the RADALT or the instrument itself?

SQNLDR GILES: The AFCS component.

D9: So I just want to make sure, so the RADALT mode on the AFCS, not the RADALT itself, we had set and engaged - - -

SQNLDR GILES: Yes.

D9: --- in the cockpit, yes.

5

SQNLDR GILES: And what was it set at?

D9: The reference datum would've been probably 200 feet. And that would've been adjusted as we descended into – as I'd kind of mentioned, we did descend at some point prior to the IP, and it would've been adjusted as we came overwater. It would've been set and then subsequently reduced as required.

SQNLDR GILES: I've got no further questions, ma'am.

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MS McMURDO: Thank you. Yes, COL Gabbedy.

< CROSS-EXAMINATION BY COL GABBEDY

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COL GABBEDY: G'day, D9 . I'm COL Nigel Gabbedy. I appear for MAJGEN Jobson. There's just a few topics I'd like to explore with you. Could I talk to you first about engine failure. I understand that that's always a risk when you fly an aircraft.

D9: Yes.

COL GABBEDY: And is it the case that actions on a potential engine 30 failure are always briefed prior to a take-off?

D9: Correct.

COL GABBEDY: Now, we know in the Jervis Bay incident now that a 35 known defect was this turbine failure that occurred and caused engine failure on that occasion. Are you aware that that was known prior to the Jervis Bay incident, that the defect was known?

D9: After the incident, I became aware of it, yes.

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COL GABBEDY: Did you become aware that the planned remediation for that known defect was simply to replace the engine or replace the componentry during deep maintenance?

D9: Subsequent to becoming aware of the issue, I was aware that that was the remediation plan, yes. COL GABBEDY: I assume you're now aware, as you would be, that Aviation Command revisited the issue post-Jervis Bay and the fix then was to issue an SI and to ensure that all the engines on the aircraft for 6 Avn were modified?

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D9: I'm aware, and I believe I've provided that as evidence already.

COL GABBEDY: Do you believe that was an appropriate fix?

D9: I assessed it was an appropriate fix with the resources that were available, yes.

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COL GABBEDY: And I think you said that you had confidence in the airworthiness system. Why is it that that's the case?

D9: To speak colloquially, because there is a lot of smart people working 20 on a lot of complex problems, trying to solve them, and I have faith that everyone's trying to do their best - the best they can, to solve those problems.

COL GABBEDY: If I turn now to the question of fatigue, and we've 25 looked at approaches and tools and things like that. Could you tell me whether this is your understanding of the Command approach to fatigue: you need to know your people? Is that right?

D9: Correct.

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COL GABBEDY: And I think you said that you have an "intelligent and an aware workforce"; is that right?

D9: That's correct.

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COL GABBEDY: Would it be fair to say that you've got a relatively small team?

D9: Well, relatively, yes.

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COL GABBEDY: And would it be the case that, as OC of the Squadron now, that you would be comfortable to say that you know your team well?

D9: Yes. My team is relatively smaller than it was. It's shrunk since this accident. And whilst I do know my team well, I also have faith that – in the 45

hierarchical nature of a Squadron, I'm not going be able to know every single person and in the level of detail required to see if they're affected in their performance — there's also trust in the other, I guess, Squadron Executive and key appointments, that they'll also be supporting me in that endeavour.

COL GABBEDY: Yes. No, I accept that. I accept that you'll get support from those below you to help you do your job in that regard. Part of the process is to ensure that there's open dialogue, isn't it?

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D9: Correct.

COL GABBEDY: And part of the process is to set the right culture, isn't it?

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D9: Correct.

COL GABBEDY: And how would you describe the culture that you set within your Squadron?

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D9: I believe the culture set in my Squadron, specifically to fatigue, is that people are willing to have a conversation about it; people are willing to be open and honest in their reporting in the FRAT, and know that they won't be disadvantaged if, for any reason, they're too tired to fly. And I, myself, in March, cancelled a couple of sorties because I was either too distracted or had been at a high enough tempo that I couldn't fly – I didn't want to fly on a couple of nights. So there was no requirement for me to do that.

COL GABBEDY: Thank you for that. And there's a couple of things that flow out of that, I think. One of them is that the culture's a "safety culture", isn't it?

D9: Yes.

35 COL GABBEDY: Safety is always paramount when you're talking about Aviation?

D9: Fair.

40 COL GABBEDY: And the other is that there's always a subjective element to the assessment of fatigue, isn't there?

D9: Yes.

COL GABBEDY: You're relying on your people, even when they complete a tool like the FRAT, to be open and honest with you?

D9: Like, are you asking a yes/no question, or - - -

5 COL CARRET

COL GABBEDY: Yes.

D9: Okay.

10 COL GABBEDY: Unless there's a "maybe"?

D9: No. Yes, that is part of the process. Yes.

COL GABBEDY: And so the FRAT's a useful tool, but it simply enhances the FACE checks that were already occurring, does it not?

D9: Yes.

COL GABBEDY: Just to move on to something different, you were talking about fatigue management and your ability to manage fatigue within your Squadron, and that can be impacted upon by external factors over which you have no control. That's right, isn't it?

D9: Correct.

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COL GABBEDY: One of those factors would be DACC tasks?

D9: Correct.

30 COL GABBEDY: They're imposed by government?

D9: In a sense, yes.

COL GABBEDY: And they can interrupt mitigation procedures that might otherwise have been put in place to ensure appropriate rest times?

D9: Yes.

COL GABBEDY: And there's not much that you can immediately do about that, apart from trying to adjust programs post completion of that task. Is that right?

D9: Yes. And I also provided evidence, from my understanding, that that process has been in place, and was in place?

COL GABBEDY: Yes. And I think in response to one of the Air Vice-Marshal's questions, you don't, to an extent, have an ability to say "No". Is that right?

5 D9: I think that's counter to what I said.

COL GABBEDY: Okay. Sorry, correct me.

D9: I said that currently, in the context, there is absolutely an ability to say 10 "No". However, as part of that process, it's not just about saying "No"; it's about understanding the impact, widely, to the workforce or organisation, and then communicating an appropriate remediation plan, rather than just coming to people with problems and saying "No", as part of solutionising the issues that we're presented with.

15 COL GABBEDY: So that's part of the Command process, from the bottom up, and down again. You look at a reasonable solution to the problem, rather than simply a "Yes/No" answer?

20 D9: Correct.

> COL GABBEDY: But in some circumstances you are able to say "No", aren't you? You can't fly outside of designated safety parameters?

- 25 D9: What's outlined in policy and other orders and instructional procedures. That's exactly right. And it's not part of the process, at all, to do that.
- COL GABBEDY: And, look, an example of that would be this particular 30 night in July of last year, when the other aircraft in the element conducted the search and rescue mission. That would've taken you out of acceptable flying limits, so there was a need to go up the chain of command in order to get approval to do that?
- 35 D9: Yes. And that occurred.

COL GABBEDY: So those protections, I suppose, are in place.

D9: Yes.

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COL GABBEDY: My final topic for you just relates to the deployment itself, and the need to sleep in tents. I think you said in your evidence that Army Aviation supports the broader Army mission; is that right?

D9: Words to the effect. I said that Army Aviation exists to support Army and, as a result, the Ground Forces within Army.

COL GABBEDY: Do you think that there is a benefit in terms of acclimatising Army Aviation to a tented or an austere environment because that may well be an environment you're required to deploy into?

D9: Can you explain what you mean by "acclimatise"?

COL GABBEDY: Sir, what I mean is that, for example, if we use this TABLISMAN SABRE Exercise as an example, requiring Aviation to sleep in tents that might not be air-conditioned will, in part, teach them strategies like the use of Softears, like the use of eye protection, like the appropriate use of medication, so that people can get used to that sort of environment, rather than if you're deployed on operation or exercise for the first time, having to deal with those issues on top of having to do your job.

D9: I do agree with that. And I think what I wanted clarification there is the term "acclimatisation". I don't think that we need to go and operate out of tents indefinitely and acclimatise the workforce to working out of tents. I think it is a learned skill, in operating in more austere conditions. Everything from how you configure your sleeping gear, to what you eat, your caffeine intake, as a Fatigue Management policy, is a learned skill. I do agree that it is a necessary skill for a Military Aviation element to understand the knowledge and procedures that go into operating from an austere environment, yes.

COL GABBEDY: Thank you very much, D9 . I have nothing further.

30 MS McMURDO: Yes.

SQNLDR NICOLSON: I've just got two topics to cover.

MS McMURDO: Thank you.

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< CROSS-EXAMINATION BY SQNLDR NICOLSON

SQNLDR NICOLSON: Good afternoon. SQNLDR Nicolson. I'm appearing for D10 in these proceedings, which is the former Officer Commanding. I've just got two topics to cover-off, just to clarify a few matters that haven't been raised before.

Can I just turn to your Inquiry statement at page 5 of 11, paragraph 2, where you've referenced the snapshot surveys? That was the discussion you had with D10 prior to the exercise, as I understand it.

5 D9: Correct.

SQNLDR NICOLSON: Did you recall receiving a follow-up email from D10 on about 18 July in relation to the snapshot material?

D9: I couldn't recall if I got an email or if I read his draft email, but he was working on a response to the snapshot survey, yes.

SQNLDR NICOLSON: He was engaging with you as the incoming OC?

- D9: Yes, I felt he was definitely engaging with me not necessarily as the incoming OC but that was a nice benefit but as someone who can assist him/help him solve the problem. Yes, and I was very I was wanting to be quite engaged in that process.
- SQNLDR NICOLSON: And on the topic of the snapshot surveys, you'd indicated in your statement there's a high volume of tasking and constant change. In that discussion or your observations when you were at 6 Aviation, did you note that some high volume of tasking is since the Jervis Bay incident, until July, there'd been a complete engine change to 6 Aviation to do with the turbine issue?

D9: Sorry, what do you mean?

SQNLDR NICOLSON: In terms of the helicopters at 6 Aviation, after the Jervis Bay incident, before the exercise, did you recall, when you were attending 6 Aviation, that there was that maintenance exchange of the engines?

D9: I am aware that it was occurring, yes.

SQNLDR NICOLSON: And that was done by the maintenance team at 6 Aviation, to your knowledge?

D9: To my knowledge, yes.

SQNLDR NICOLSON: And at that time, in '23, were you aware about issues relating to the platform change from the MRH into the Black Hawk?

D9: Correct.

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SQNLDR NICOLSON: The other question, just on fatigue, is you've mentioned in your evidence about the roles and responsibility of Commanders in terms of fatigue management. Do you see, as you're Officer Commanding, that the Troop Commander is a part of that Command team?

D9: I've highlighted that.

SQNLDR NICOLSON: I just want to talk to now just the second topic, 10 just in terms of the mission on the night. Did you, at any point during the flight, lose sight of Bushman 81?

D9: Not that I recall, no.

15 SONLDR NICOLSON: Your evidence was that you attended and assisted with the mission planning?

D9: Correct.

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20 SQNLDR NICOLSON: You attended to the mission orders?

D9: Correct.

SQNLDR NICOLSON: And also, is it the ROC, the Rehearsal of Concept 25 drill?

D9: That's correct.

SQNLDR NICOLSON: At that stage, did you have any concerns about the 30 mission proceeding?

D9: Did not at all.

- SQNLDR NICOLSON: You've given your evidence about in general from questions of Counsel Assisting, that generally it was a simple and 35 routine mission. Did that opinion change during the flight or the mission on that night?
- D9: Not until it had catastrophically changed. And even the complexity 40 of the mission had not. But hindsight, again, changes context. But even now, there was nothing up until the point of, let's call it a catastrophe, that ever flagged to me that it wasn't an achievable and supportable mission.
- SQNLDR NICOLSON: In fact, during the planning, the orders and the 45 rehearsal, if at any stage you had concerns, you could raise those concerns?

D9: I absolutely would have.

SONLDR NICOLSON: The Air Vice-Marshal asked you a question about 5 loose items in the aircraft. Is there an aircraft bag that you can put loose items in?

D9: Yes.

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10 SONLDR NICOLSON: Is there anything to do with mobile phones? We've heard some evidence about mobile phones. Are they permitted or not permitted?

D9: For this specific exercise?

SQNLDR NICOLSON: Yes.

D9: For this specific exercise, the mobile phones were, during flight, contained in a box in the CP until members returned from flight. Again, practice some of the austerity measures outlined previously.

SQNLDR NICOLSON: Just finally, you've talked about some FACE checks that you did at the start of the mission. After you returned after the incident, you returned to Proserpine Air Base. Did you do a subsequent FACE check back at the airport?

D9: I'm not sure if we explicitly conducted a FACE check, but we definitely checked in to see how each other were doing, yes.

30 SQNLDR NICOLSON: As a result of that check, did you make the decision to stay at the airport and work at the airport at the Command tent?

D9: Sorry, are you talking about the 28th?

35 SQNLDR NICOLSON: The 28th. So after the incident has happened, you've come back and returned to the airport.

D9: Correct.

- 40 SQNLDR NICOLSON: And you and D10 have made the decision, after checking the state of the tent and taking command of the Operations tent - - -
- D9: Yes, D10 took command and I looked for an opportunity to assist in 45 whatever way I could.

SQNLDR NICOLSON: Yes, thank you. Thank you, ma'am.
MS McMURDO: You mentioned mobile phones weren't permitted on this exercise and were kept in a box; is that right?
D9: So they were permitted on the exercise, but during – when we went and conducted flight operations, they would be stored in a box in the CP.
MS McMURDO: So what I mean is, they weren't permitted to be taken on the flight?
D9: Correct.
MS McMURDO: That was communicated to everybody involved?
D9: It was, yes.
MS McMURDO: Okay. Thank you.
AVM HARLAND: Was that checked as part of your, effectively, step checks, to go to the aircraft?
D9: Yes. So the box was, essentially, at the door of the CP and I would just kind of get my mission pack, get my flight bag and put my phone in that box.
AVM HARLAND: Was that checked as part of an overall formation, just like, "Everyone, phones away"?
D9: I don't recall it occurring as a formation check. So my assumption, that would be probably no.
AVM HARLAND: Did anyone on Bushman 84 have their phones?
D9: Not that I'm aware of. And there was – yes, not that I'm aware of.
MS McMURDO: So what was the rationale behind not permitting mobile

D9: I would have to discuss that separately.

MS McMURDO: I see. Fair enough. Thank you. Yes, anyone else? No further cross-examination. Any re-examination, please?

phones on the flight?

< RE-EXAMINATION BY COL STREIT

5 COL STREIT: Thank you, one question. In relation to mobile phones, when was it briefed that you weren't allowed to have them in the aircraft?

D9: I believe prior to departure.

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COL STREIT: How was it briefed?

D9: In orders, I want to say. But, again, that's best of my recollection.

15 COL STREIT: You're not really sure?

D9: I'm not, no.

COL STREIT: Could there be a risk of confusion with other missions 20 you've been on in relation to what might or might not have been briefed about mobile phones?

D9: There's always risk of confusion, but I'm pretty confident that mobile phones were in the box, if that makes sense.

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COL STREIT: Sure. But you're not sure how it was communicated?

D9: I can't recall specifically, no.

30 COL STREIT: Thank you.

> AVM HARLAND: Were they permitted in the aircraft for the deployment leg?

35 D9: They were, yes.

> MS McMURDO: Thank you very much for giving your evidence and for assisting the Inquiry. We know it's been very difficult for you on a number of levels and it's been very hard for you to have to recall these traumatic times. So the Inquiry greatly appreciates your assistance. You're free to go now, thank you.

<WITNESS WITHDREW

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COL STREIT: Ms McMurdo, the next witness is D1, who I understand is outside the hearing room, and he'll be taken by MAJ Chapman.

- LCDR GRACIE: Ma'am, just while we're awaiting D1, I don't want to sound like a broken record, but I've received some instructions that there was a further briefing of one of the families yesterday by MAJGEN Jobson, and I just thought I'd update you on that. And perhaps it's coincidental that we've now had yet another hypothetical introduced about the TAC mode, why it might be engaged over the water. So I'm just putting that, again, on the record, to raise my concerns.
 - COL GABBEDY: Sorry, I don't mean to take up too much time, but I should respond to that. I understand that's incorrect.

MS McMURDO: Look, it's most bizarre that I'm getting these updates. I'm not being asked to – there's no application. But anyway, there we go. Let's move on. Yes.

20 MAJ CHAPMAN: Ma'am, I call D1.

MS McMURDO: Thank you, MAJ Chapman.

25 **<D1, Affirmed**

< EXAMINATION-IN-CHIEF BY MAJ CHAPMAN

30 MS McMURDO: Help yourself to water.

D1: Thank you, ma'am.

35 MS McMURDO: Yes, MAJ Chapman.

MAJ CHAPMAN: Thank you, ma'am, Air Vice-Marshal.

Can you confirm that you've been assigned a pseudonym, D1, in these proceedings?

D1: Correct.

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MAJ CHAPMAN: And you just have next to you there a list of pseudonyms which I'll ask you to refer to. Can you just confirm, turning that over, that your name, real name, corresponds with D1 on that list?

5 D1: Correct.

MAJ CHAPMAN: Did you receive, for the purposes of this Inquiry, four documents? The first is a section 23 Notice requiring your attendance?

10 D1: Yes.

MAJ CHAPMAN: Second, a list of the Inquiry – or a statement of the Inquiry's Directions?

15 D1: Yes.

MAJ CHAPMAN: A copy of my appointment as an Assistant IGADF?

D1: Yes.

20

MAJ CHAPMAN: A Frequently Asked Questions document?

D1: Yes.

25 MAJ CHAPMAN: Lastly, a Privacy Notice?

D1: Yes.

MAJ CHAPMAN: Did you prepare, D1, a statement for the Coroner dated 29 November 2023?

D1: I can't recall the date, but yes, I did complete a statement for the Coroner.

MAJ CHAPMAN: I might just hand you a bundle of documents. You can confirm that. Just as I'm handing up, it's the third document in that pile there; should be a document 29 November 2023?

D1: It is. That is the correct date and that is my statement.

MAJ CHAPMAN: Thank you. Did you also prepare, for the purposes of the Inquiry, a statement dated 14 August 2024?

D1: Yes.

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MAJ CHAPMAN: Was there an Annexure A prepared, also of the same date, 14 August 2024, which essentially deals with "Official: Sensitive" matters?

5 D1: That's correct.

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MAJ CHAPMAN: Ma'am, can I tender that material? Perhaps the tender should be, for the Defence statement, one; and, subject to your convenience, the second being the Inquiry statement, noting Annexure A is a "Sensitive" document to that?

MS McMURDO: So Exhibit 58A will be the Defence statement of 29 November; B, the Inquiry statement; and C, the "Sensitive" statement.

#EXHIBIT 58A - DEFENCE STATEMENT OF D1 DATED 29/11/23

#EXHIBIT 58B - INQUIRY STATEMENT OF D1 DATED 14/08/24

#EXHIBIT 58C - STATEMENT OF D1 ("OFFICIAL: Sensitive")
DATED 14/08/24

MAJ CHAPMAN: D1, just so you're aware, I'll be referring to your 29 November 2023 statement, as ma'am has just indicated, as the Defence statement, and the Inquiry statement is your more recent one of 14 August 2024. I should also add that I don't propose to go through the Annexure A. I don't think that will be necessary during the course of the evidence.

D1: Understood.

- MAJ CHAPMAN: Could I just ask you also to be mindful of your security obligations while giving evidence, and if there's any responses or matters which are encroaching on the "Official: Sensitive", that you could raise that with me. Thank you.
- So I'd just like to begin, if I may, with some of your background and go into your current role. So this is paragraph 1, the first page of your statement. You are currently posted to 6 Aviation Regimental Headquarters in the position of S33, which is the current Operations Officer. Is that correct?

D1: Correct.

MAJ CHAPMAN: Going back to the accident on 23 July 2023, you were, were you, the co-pilot with D2 on Bushman 81?

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D1: That's correct.

MAJ CHAPMAN: If I could just take you to paragraph 7 of your Defence statement? That's the first one. It sets out some background there. So correct me if any of this is wrong, but you joined the ADF, commencing as an Officer Cadet with RMC in August 2015.

D1: Correct.

15 MAJ CHAPMAN: You had, by that time, completed a Bachelor of Health Science Paramedics at Victoria University, prior to joining.

D1: Correct.

- 20 MAJ CHAPMAN: Do we take it that between your completion of that degree in 2010 and your commencement with the ADF, a period of five years, what were you doing? Were you working in a paramedic role?
- D1: I worked as a paramedic from approximately 2005, initially in a 25 community support role, all the way up until I joined Defence in 2015.

MAJ CHAPMAN: Was that an aeromedical paramedic, or just it was a paramedic in an ambulance?

30 D1: I was a ground-based paramedic. Correct, yes.

> MAJ CHAPMAN: This is paragraph 8 of your Defence statement. You graduated RMC in September 2015, and commenced your Aviation training continuum.

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D1: That's correct.

MAJ CHAPMAN: And promoted to Lieutenant, and commenced your Aviation training as is set out at 9 until 14, really, of that statement. I'll just go through that very briefly. So you've qualified on a number of different types. Kiowa, yes?

D1: Confirmed, yes.

45 MAJ CHAPMAN: Black Hawk? D1: Correct.

MAJ CHAPMAN: And the MRH?

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D1: Yes.

MAJ CHAPMAN: And you've amassed, in your time, total flying hours, you say, in Black Hawk of 907.2 hours. Correct?

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D1: That's correct, for Black Hawk.

MAJ CHAPMAN: And in relation to MRH, 271.6 as at – noting 28 July 2023.

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D1: That's correct.

MAJ CHAPMAN: Then you go on to say at 13 that you have amassed over 1000 hours' combined experience across Black Hawk and MRH; is that right?

D1: That's correct.

MAJ CHAPMAN: Is it the case that you're presently converting to the new Black Hawk type? Is that correct?

D1: That's correct. I've completed my Aircraft Qualification Course in America, and I'm awaiting Australian Standardisation.

MAJ CHAPMAN: You say that at paragraph 2 of your statement. And you're a D Category Airbus EC135 helicopter pilot; is that right?

D1: That's correct. That's an interim platform, to keep skills up while I await Black Hawk Standardisation.

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MAJ CHAPMAN: Where you discuss, in your Defence statement, having over 1000 hours combined on MRH and the Black Hawk, if you go to paragraph 7 of your Inquiry statement, it there says, at the top of page 3, your total aircraft – your flying hours, as it were, in aircraft to be 1460.2. Do you see that at the top of page 3? Sorry, this is at your Defence – your Inquiry statement, rather, at page 3 of 30.

D1: Sorry, confirm the paragraph for me again.

MAJ CHAPMAN: So it's at the very top. You'll see "Total aircraft", and in the last column, "1460.2 hours".

D1: That's actual aircraft time. That is correct. That's - - -

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MAJ CHAPMAN: And then you have – sorry.

D1: Sorry.

10 MAJ CHAPMAN: And then you have simulated time beneath that; correct?

D1: That's confirmed.

- 15 MAJ CHAPMAN: Just going down to paragraph 9 of your Inquiry statement, noting that you have significantly more hours on the Black Hawk compared with the MRH presently, you explain this at paragraph 9, do you not, to indicate that while you are an experienced Special Operations pilot, you are one of the last, in summary, to move over to the MRH 20 conversion. Is that right?
 - D1: Certainly from a 6 Aviation Regiment point of view, I was one of the last transitioned from the S-70A-9 Black Hawk across to MRH, yes.
- 25 MAJ CHAPMAN: You say there, continuing on, on paragraph 9, that you had approximately 18 months' experience on MRH and almost four years as Special Operations co-pilot.

D1: That's correct.

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MAJ CHAPMAN: With that background, I'd like to now move to discussion of your secondary duties, which is from paragraph 10 of your Defence statement. So you say there that in 2023 you held the position of XO of 173 Squadron; is that correct?

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D1: That's correct.

MAJ CHAPMAN: That's a role which – when did you finish in that role and start your S33 role?

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D1: I handed over duties of the 173 XO in early November, before I went to America for the AQC, and I picked up S33 duties technically at the same time; however, I didn't perform those duties until I returned late February this year.

MAJ CHAPMAN: Could you just give, briefly, a sense of the role of the XO in that context?

D1: The XO is, essentially, the 2IC to the OC. They handle issues 5 including work, health, safety, welfare, and general Squadron governance.

MAJ CHAPMAN: Who was the OC during your time there as the XO, by reference, thank you, to the pseudonym list?

10 D1: The OC was D10.

> MAJ CHAPMAN: And the role of XO, we can take it under that heading, was a secondary duty, apart from your flying duties?

15 D1: For all intents and purposes, yes, but it was an appointed duty.

> MAJ CHAPMAN: Acknowledging that you're waiting on a type conversion – or, sorry, a standardisation – presently, do you have secondary duties now in your - - -

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- D1: Yes. So I am as we've already talked about, I am the current Operations Officer. As well as that, I have the extra Regimental appointment as our Social Club Treasurer.
- 25 MAJ CHAPMAN: How would you compare the role in terms of -Iwithdraw that. How would you compare the workload that you had as the XO compared with the duties, the secondary duties, that you have presently?
- 30 D1: The workload would be equal; however, the work is fundamentally different. Last year, I could work to my own schedule, which meant that I could balance my workload against my fatigue levels - or my workload levels, let's say. This year, I'm in a much more reactive job, and a much more time-sensitive job, which means I don't really get to control my
- workload. 35
 - MAJ CHAPMAN: You'd agree with the statement generally that, you know, your work as an XO, it was a very busy period for you during 2023?
- 40 D1: Exceptionally busy but, you know, it has been every year of my career at 6 Avn.
 - MAJ CHAPMAN: Just going back to remind us when you joined 6 Avn again.

D1: I posted into 6 Aviation Regiment in 2018.

MAJ CHAPMAN: I'm now turning to about paragraph 30 of your Inquiry statement, which commences at page 12 and goes on to page 13. But you talk there about, really, the people at 6 Avn being intrinsically motivated and proactive.

D1: Yes.

10 MAJ CHAPMAN: That there's a "get it done" culture, though that, to your observation, 6 Avn, and externally within the Aviation Corps, have relied on the goodwill of members, as opposed to – of the members, rather than sustainable resource planning. I was just hoping you might expand on that a little in terms of relying on the goodwill.

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D1: Sure. When I posted into 6 Aviation Regiment in 2018 there was a workforce in depth. What I mean by that is, it was well resourced in terms of an aircraft qualification stagger in that, you know, junior aircrew were really supported and could really develop through the system because of, you know, the mentorship and the experience of a lot of - you know, number (1) a lot of people, and number (2) great people.

When MRH was introduced – look, don't quote me exactly when – my recollection was sort of in 2019, you know, essentially, the command came 25 in – it wasn't a command at the time, but the chain of command came in and they almost split the resourcing in two - perfectly down the middle. You had a mix of, you know, really senior people and really junior people who went across to MRH at the time. And you had a heap of senior people and junior people, likewise, that remained on Black Hawk. What 30 that meant was obviously you had all of the same work to do on Black Hawk to maintain exactly the same, you know, governmental tasking, role and output, whilst they were developing and building up the MRH capability.

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There was a change point, obviously, in 2021 when S-70 Black Hawk was officially retired and MRH took over as the online aircraft. Unfortunately, in that time, people moved on, people posted out. People, you know, had given enough goodwill and were either not looked after for various different reasons and/or just had life circumstances get in the way that meant they posted out.

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I guess, what it meant was that at no point in time between '19 and 2021 was Black Hawk reinforced. And although I'm sure they were desperately trying to reinforce MRH, there was no overall increase in the resource – net increase in the resourcing in MRH, which mean people had to just work harder. And that was just accepted, that was the way it was.

MAJ CHAPMAN: More or less, trying to do the same, just with far fewer resources because they'd moved on to the other type?

5 D1: Split between two different types, that's correct.

> MAJ CHAPMAN: And you make the point also – this is at continuation of paragraph 30 – that it resulted not only in going to other Avn Squadrons but discharging or posting out, and you say "for respite". So it was a situation, was it, that people were operating at such an overloaded state that they actually chose to post out, where they could, for relief?

D1: Yes. In short, yes. It's complicated. It's complicated. It takes so long to develop a Special Operations pilot to the qualifications that we need them to be that, you know, you don't just grow them on trees. You can't replace them easily. As well, you know, you've got young people that are getting to that point in life where they're having children, or their personal life circumstances change, or they've just been in the organisation for so long that they just need a change of lifestyle, or their circumstances have changed such that they just want to live, you know, in a different city, in a different town or somewhere different, or just chase other opportunities.

MAJ CHAPMAN: And just to paint a picture of this particular workload while you were XO of 173 Squadron, you say later in the paragraph:

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With the exception of 2022, and with some mandated work from home during the COVID years - - -

I just pause there and say you're referring here, are you, to 2023, though it's not mentioned?

D1: No. I am referring to 2022. And my point there is that in 2022 I spent the first six months of the year transitioning to MRH-90, and then when I returned to the Regiment in about - I think it was mid-late June, I didn't have a formal appointed duty. I worked in ad hoc secondary roles until I was appointed as the Executive Officer in around about November 2022.

MAJ CHAPMAN: So while you were Executive Officer, do we take it you were working exceeding 55 hours working week? Is that right?

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D1: Except for 2022, I will have worked many, many weeks that would have exceeded 50, and most likely 55.

MAJ CHAPMAN: And the Inquiry has heard some evidence that Fridays 45 were generally non-flying days; is that right?

D1: They tried to quarantine Fridays from non-flying. We very rarely, unless we were on exercise or otherwise, flew Friday afternoon and/or night. Fridays were often used as a maintenance day to catch up and to try and make aircraft serviceable for the following weeks' flying schedule.

MAJ CHAPMAN: But for you, particularly as XO – and a number of others, no doubt – that was an opportunity to attend to your other work?

- D1: Technically yes, but no. Because Friday was always perceived to be a quiet day, many meetings and many other commitments were generally scheduled on a Friday. And from that point of view, Fridays up until mid-afternoon for Executive staff often became just as busy as any other day.
 - MAJ CHAPMAN: And you make the point here that whereas most would finish in the early afternoon, you would regularly eat into your Friday afternoons and later, just to get the job done?
- D1: That's correct.

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MAJ CHAPMAN: And you say then, over the page, you also refer to the duty system and how that was an additional impost on the time. And that those below the rank of Major had to fulfill the two positions as well: Duty Officer and Duty Driver. So you did that, did you, from time to time?

D1 That's correct. And the point I'm trying to make there is not so much that the duty system was fatiguing or that it contributed to a higher workload. The point I'm trying to make there is that in order that the flying system or qualifications or training was completed, you would often find that the people who are critically appointed – you know, the QFIs, the QAIs, the Executive staff – they would elect to do Friday and Saturday duties so that they didn't disrupt flying during the week.

- There's a subtlety there that the duty system you know, because you didn't meet a minimum rest period and I can't talk about that because it's above the classification of this forum but if you didn't meet the minimum rest period, you couldn't fly. And duty would contribute to you not meeting the minimum rest period.
- MAJ CHAPMAN: And can I take you to paragraph 34? It's a little further on in your statement. And we return to this workload fatigue theme. And there you say, around the middle of the paragraph, that up until and including the night of the incident you were working a total of 116 days. And that's from, really, the start of the year?

- D1: That's correct. So that was my workings out based on the parameters I've written there that, yes, I could've worked a total of 116 days.
- MAJ CHAPMAN: And you go over the page then, and you refer to your flying duties and that you flew 64 sorties in 38 days, making the point this is multiple events on the same day.
- D1: Yes, that's correct. And they would be day and night sorties, or afternoon/night sorties.
 - MAJ CHAPMAN: And if we go further on in that paragraph and summarise, you say that "on the days I flew both day and night, it made up 4.5 hours" of your workday, not including the associated preparation, which was considerable in its own right.
 - D1: Yes, it could be double or triple that figure there. So you could be looking at 12 to 13 hours associated with, you know, study preparation, flight admin and so on and so forth.
- MAJ CHAPMAN: And does that not include your XO duties at that point?
 - D1: That is absolutely outside of my XO duties, yes.
- MAJ CHAPMAN: So we're talking about 12 to 13 hours, not including XO. So we're now reaching, what, 15 to 16 hours in a day, on some days?
 - D1: That's correct.
- MAJ CHAPMAN: Unsurprisingly, you then say, by reference to those maters at paragraph 35 and following, that each working week at the end, rather, of each work week you were mentally drained?
 - D1: Correct.
- MAJ CHAPMAN: You say you were physically fatigued due to the sheer number of hours that you spent, but more commonly it was emotional fatigue. And I'll just ask you to develop that, if you would?
- D1: Yes. Yes, I physically spent a lot of time at work. But whether I was at home or whether I was at work, you know, the hours are the hours. So, yes, I was physically fatigued at times but far more prevalent in my work-life balance was emotional fatigue. What I mean by that is just the day-to-day stuff that goes on, what contributes to wearing you down.

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So, you know, if I use an example from earlier in my career, we didn't have a day-to-day schedule where, for example, you'd just start at 9 and finish at 5. We were getting text messages at sometimes 10 pm or 11 pm on the day before that you were expected to fly at – you know, pick a number – 9 am, 10 am, something like that. So it got to the point though where you were getting texts every other day, and when your phone made the message tone, your first thought wasn't, you know, "I'm curious to see what this is"; your first thought was, "What is it now?" Like, "What are they harassing me with now?" So that's an example of the type of emotional fatigue I'm talking about, where it's all these little things that go on, you know?

If I throw another example in the mix: you know, things that don't, I guess, go your way, or things that you find out that don't go someone else's way, just the general frustrations of decision-making and poor decision-making, and observing that's going on within your own Regiment and around the Aviation Corps, it just builds up to all these little 1 per cents of frustrations that just don't make you – you just don't understand why you work so hard for an organisation that seems to just let you down all the time.

20 AVM HARLAND: Right, I understand.

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MAJ CHAPMAN: You go on to say that you don't recall—or by reference, cumulative and acute fatigue, you don't recall any one period where you were acutely fatigued. However, you have no reservation in stating that you were weekly affected by cumulative, and that, indeed, you'd use the weekend to just prepare/ready yourself for the next week, for another onslaught of pressure?

D1: Absolutely. I could manage my own fatigue through the week, generally speaking, with just, you know, maintaining my own tempo. But, yes, I was spent at the end of the week, and I needed my own time in the weekend to rejuvenate, to recharge, to be ready to go again for the next week.

- MAJ CHAPMAN: You then talk about front of mind in the Executive team's decision-making was fatigue tempo and resources. How is it that you say that the Executive team responded to that adequately, in talking about fatigue when you were XO?
- D1: 2023 was the best Command team that I saw in terms of fatigue and resourcing being front and centre of decision-making. There were very real things that were trying to be implemented, to try and reduce, I guess, quick reaction or readily changeable commitments, to try and, you know, plan more the word I'm thinking of has escaped me but to try and plan more consistently and spread our workload across a greater time.

5	to burnout. Do you see that at the top of page 17? And that you felt a similar circumstance earlier in your career, which I take it is 2020?
	D1: That's correct.
10	MAJ CHAPMAN: Then you said you felt a similar circumstance in 2023; the same situation.
	MS McMURDO: I might get you to use paragraph numberings, because I think the page numbers might've changed in some of the copies.
15	MAJ CHAPMAN: I see, thank you, ma'am. Paragraph
	MS McMURDO: With redactions that have been imposed.
20	MAJ CHAPMAN: Paragraph 35 – and, unfortunately, there's not paragraph numbers on every paragraph.
	MS McMURDO: I see.
25	MAJ CHAPMAN: So it's at the top of
	MS McMURDO: Yes, paragraph 35. It's page 15 on the copy I've got.
	AVM HARLAND: Same.
30	MS McMURDO: So that's why if you could give us the paragraph numbers?
	MAJ CHAPMAN: Thank you, ma'am.
35	MS McMURDO: Thank you.
	MAJ CHAPMAN: In 2023, there was an event of burnout, from your point of view?
40	D1: From my point of view, yes.
	MAJ CHAPMAN: And that was the cumulative effect of this cumulative fatigue that you'd been experiencing; correct?
45	D1: That was a combined effect of a year-long of cumulative fatigue, and a short, intense workload, yes.

MAJ CHAPMAN: You talk about or refer to this intensity of work leading

MAJ CHAPMAN: Paragraph 36, you refer to:

I don't recall choosing not to fly due to being fatigued in 2023.

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D1: That's correct.

MAJ CHAPMAN: Can I just pivot then to discussing the FACE check? You're familiar with what I'm talking about there?

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D1: I understand the FACE check, yes.

MAJ CHAPMAN: And have FACE checks been in place as a procedure with aircrew throughout the time you've been at 6 Avn?

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D1: It has, yes.

MAJ CHAPMAN: When is the FACE check conducted?

20 D1: In my experience, the FACE check can be conducted in one of two periods. If you are the Aircraft Captain, you would usually discuss your FACE and your crew's FACE with your Authorisation Officer. Then you would usually top that up when you arrive at the aircraft, to make sure that nothing has changed and that your aircrew is what we call "FACE'd in".

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MAJ CHAPMAN: That's when you get to the aircraft. Is that assuming that you'd be departing soon after?

D1: That's correct.

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MAJ CHAPMAN: So would you also conduct a FACE check if you'd been sitting on the apron for a long period of time, waiting for a go order, for example?

- 35 D1: As a rule, I'd say no. But there have been times in my career where, absolutely, the Aircraft Captain would re-engage with the crew to say, you know, "How is everyone going?"
- MAJ CHAPMAN: Would you agree with the statement that the FACE 40 check, by its very nature, is really only as good as any sort of self-assessment?

D1: Fatigue, in general, is only really as good as anyone's self-assessment, yes.

MAJ CHAPMAN: Are you aware of what I'll refer to as the – or what's been referred to as the FRAT tool?

D1: I am now familiar with the FRAT tool, yes.

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MAJ CHAPMAN: Being the Fatigue Risk Awareness Tool. Can I ask for Exhibit 37 to be put up on the screen, please? Have you seen this tool before?

10 D1: I have seen this tool.

MAJ CHAPMAN: When did you first see this tool?

D1: I couldn't tell you exactly, but it would've been after the incident in 15 2023.

MAJ CHAPMAN: So just to confirm, you hadn't seen this tool prior to the accident?

20 D1: I can't recall that I had seen it beforehand, but I've definitely seen it after.

> MAJ CHAPMAN: But certainly, you were not using it as a process prior to the accident?

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D1: That is correct.

MAJ CHAPMAN: You use it now, or it's used in 6 Avn now?

30 D1: It is absolutely used now.

> MAJ CHAPMAN: When did that start, when was that introduced as part of policy, or how was it introduced, from your understanding?

- 35 D1: I am not the best person to ask that question, because I went to America in November. Yes, I couldn't tell you when or how it was implemented. It's just appeared since I've returned from that course in America.
- 40 MAJ CHAPMAN: Do you say, a little later in paragraph 37, that there is no doubt in your mind that aircrew have flown fatigued at times, particularly those members that have an appointed position, or critical qualification? Is that correct?

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D1: That is correct. But to clarify, I'm not trying to say there that aircrew have deliberately known they're fatigued and then gone flying. My point is to say that your own assessment of your own fatigue will have meant that at times – and that includes myself – that aircrew have flown fatigued.

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MAJ CHAPMAN: Which was a part of my earlier question about the FACE check being only so good as the self-assessment. And that the use of the FRAT tool such as is on the screen now, you'd agree, helps with a more objective assessment of fatigue because it produces the green, red or amber warnings?

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D1: I don't know that I agree that it does give a more objective reference. It's my opinion that this is a quantitative rather than a qualitative assessment tool. There is no doubt that it gets people talking about their fatigue. And there is no doubt that it uses, obviously, a traffic light system to have people try and understand their fatigue. But I don't know that it is a fantastic tool at actually helping somebody to identify their own fatigue.

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What I mean by that is, you know, if you look at the start, it says, "How many hours of sleep have you had in the past 24 hours?" I might've had greater than seven hours sleep, but I might also feel like that it was broken, or that it was not a great sleep, but that question is not asked.

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MAJ CHAPMAN: I see. So do I understand you correctly to say that it's perhaps better than a FACE check in terms of a tool, but it has its limitations?

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D1: It's a supplement to the FACE check, and I think that it's got room for improvement.

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MS McMURDO: So apart from not dealing with the quality of the sleep, are there other aspects that you would like to see improved?

D1: To put me on the spot like that, ma'am - - -

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MS McMURDO: I didn't mean to put you on the spot.

D1: I don't know. I have not used this that much myself because I have not flown that much this year. But if I was to really sit down and evaluate it, I'm sure that we could find plenty of room for improvement.

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MS McMURDO: Well, I'm sure we can send you a copy and you might like to do that after you've finished your evidence, and get in touch with us and let us know what your considered opinion is.

D1: I'll try and fit that into my many duties, ma'am.

MS McMURDO: We would greatly appreciate that, thank you.

5 MAJ CHAPMAN: D1, you go a little further in that paragraph to refer to:

Personally, I am comfortable disclosing my fatigue to peers.

Do you see that?

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D1: Yes.

MAJ CHAPMAN: By saying that, are you indicating at all that there's a range of comfort in terms of people you've experienced disclosing issues of fatigue?

D1: I can't speak for anybody else on that matter; I do feel comfortable. Yes, I wouldn't be able to say whether others do or don't.

- 20 MAJ CHAPMAN: Would you have, for example, a personal experience throughout your years of flying where you've seen someone who, to your mind, would appear to be quite fatigued, but on a FACE check, they say they're good to go or they're still flying?
- 25 D1: There were instances where if you were airborne – and like I sort of suggested earlier, you would re-engage with your crew, and someone might say, "Yeah, look, I think I've reached my limit", and that would be enough, regardless of their position in the crew, to say, "Yep, okay, we'll knock it off and go home".

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I don't recall a time at the beginning of a flight where we had got to an aircraft and a person had FACE'd out. That would have usually happened a long time before that, and we would have either cancelled the flight or changed the crew to a non-fatigued crew.

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MAJ CHAPMAN: Thank you. I'll just ask you to now go back, moving on from the question of fatigue, to paragraph 17 on page 5 – I hope this corresponds - and this is on the subject of your experiences with the MRH-90. So around half-way down the page there, you say this, that in your opinion -

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the tasks required to be conducted in the MRH-90 were not significantly different. However, it was because of the complexity of the input data and display set-up that the tasks took longer, and they increased workload.

Do you recall saying that?

D1: Yes.

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MAJ CHAPMAN: Is that by reference to your experience on the Black Hawk principally, or is it other aircraft?

D1: Yes, that is relevant to my experience in Black Hawk.

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MAJ CHAPMAN: So it's another way of saying that at least in your experience in the Black Hawk, that the systems that were set up were far more – they were set up in such a way it was more intuitive, and it was easier for you to use, and there was corresponding less affects on workload in a general way?

D1: The Black Hawk systems were, for want of a better term, individual. The MRH systems were all combined into a single human machine interface which was – if I can use my words – poorly designed.

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MAJ CHAPMAN: Which I think you say at the end of that paragraph. And you refer to a particular system there, the Display Keyboard Unit, the DKU - - -

25 D1: That's correct.

> MAJ CHAPMAN: - - - which you say was complex and not intuitive. Was that a system which was also in the Black Hawk?

30 D1: It was not in S-70A-9 Black Hawk. There is a similar system now in the Mike model Black Hawk.

MAJ CHAPMAN: And you refer to instances where you would be inputting data and that if there was some error, effectively the pilot might have to redo it, and that caused a degree of frustration. Do you see that?

D1: It could potentially cause a degree of frustration, yes.

MAJ CHAPMAN: Just as a matter of process, when you're putting this 40 data into the DKU, is that both pre-flight and during flight?

D1: That's correct.

MAJ CHAPMAN: So you can experience this frustration both pre-flight 45 inputting data into the DKU – correct – and during flight, you may have

occasion to make some adjustments to the DKU; there's an error, and you have to start again, and all of – is that correct?

D1: That's correct.

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MAJ CHAPMAN: And if that transpired, it would cause frustration?

D1: It could.

10 MAJ CHAPMAN: Could cause frustration, no doubt.

D1: Yes.

MAJ CHAPMAN: It could also increase – or, necessarily, increase your 15 workload and divert you from other tasks?

D1: "Workload" is a weird term in the sense that it wasn't physically demanding, but it was a distraction.

20 MAJ CHAPMAN: If you're flying though, this is – now, where is this DKU positioned? Is it - - -

D1: There are two DKUs. There was one, it's in the lower centre console, on the outer edges, and one is primarily for each pilot.

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MAJ CHAPMAN: So if it's in the lower centre console, that's a fair way away from keeping eyes out to what's happening in the outside environment. Is that right?

30 D1: That's a true statement.

> MAJ CHAPMAN: So you could be looking down at your centre console, inputting information, getting error messages, and having to deal with that procedure rather than attending to flying duties, as it were?

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D1: That is correct.

MAJ CHAPMAN: And you then go on to say, in the MRH there was a further difficulty with the multifunction displays, and that you say that they 40 had a tendency to display too much information, and that – rather there was a tendency on the part of pilots – some of them – to display, essentially, more than you thought was necessary?

D1: The pilot could choose how much information they would like to 45 display. I agree that the tendency of a lot of pilots was to try and display too much information, just because they could rather than they understood that it was value-adding or generating increased situational awareness.

MAJ CHAPMAN: So, in a very simple example, you could customise this screen to display attitude information, for example, just only, and it would be clear enough. Is that right?

D1: You would always have attitude information displayed in front of each pilot. That was mandatory. These were more supplementary systems or situational awareness systems. But without a doubt, you know, there's no question in my mind that you could display too much information, or too much supplementary information, that didn't value-add to your phase of flight or contribute to making your situational awareness enhanced.

MAJ CHAPMAN: And this is personal preference on the part of the pilot; is that correct?

D1: The inboard screens are, generally speaking, personal preference, and the outboard screens are not.

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MAJ CHAPMAN: So you could populate it in a way you chose fit, which might be simply or in a decluttered way, and your other pilot might choose to complicate it with every possible indication that's available?

- D1: That was a potential. I mean, we can talk about airmanship here, and airmanship dictates that certain things are displayed at certain times for safety's sake. But you are correct in saying that you could have it set up how you wanted as the pilot.
- MAJ CHAPMAN: And you make the point that if set up in such a way, it would diminish or have an impact on situational awareness, from your point of view?
- D1: It was my opinion that it could be set up in a way to detract from situational awareness.

MAJ CHAPMAN: And that in addition to the multifunction displays, you had TopOwl; correct?

40 D1: Correct.

MAJ CHAPMAN: So in addition to having to deal with whatever's on the Primary Multifunction Display, you have an additional layer of TopOwl information right in front of your eyes?

D1: A supplementary display, that's correct, yes.

MAJ CHAPMAN: So is it your evidence that the Primary Flight Display alone cluttered could detract from situational awareness, and add to that the TopOwl and you're now dealing with an overwhelming number of systems? Is that, essentially, your point pertaining - - -

D1: It would detract from your situational awareness if it caused a distraction, i.e., information was conflicting, would be the point I'd make there.

MAJ CHAPMAN: I'll just return to that conflicting point in a moment. You've set out, helpfully, in a number of tables, the relative advantages and disadvantages, as you saw it, of the Primary Flight Displays, Multifunctional Displays, automation, coupled systems, et cetera. Do you see there a third one, "HMSD TopOwl"?

D1: Yes.

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MAJ CHAPMAN: You've given evidence in the "plus" column, or the "advantageous" column, is the vector symbology.

D1: Yes.

- MAJ CHAPMAN: The Inquiry has received some evidence that, at least in a particular case, the vector symbology appeared to be appearing below the horizon, the horizon that's set out in TopOwl. Have you ever experienced something like that?
- 30 D1: My understanding is the vector symbology and the horizon symbology are not necessarily related to each other, in the sense that the vector symbology is a projection of the trajectory of the aircraft based on the current settings and configurations. Of course it was displayed relevant to the horizon line, but I'm not sure that that has I'm not sure that that's sort of associated or compared to the horizon line being incorrectly set. If that makes sense?

MAJ CHAPMAN: The point of the earlier evidence was that the TopOwl system, or the HMSD, was misaligned in that case, so you had a vector symbology that was incorrect with respect to the horizon line. And my question is, have you experienced anything like that yourself?

D1: I don't know the technical background of it. I have experienced, obviously, the vector being in TopOwl associated with the horizon line. I can't remember a time where I could categorically say that yes, it was high

or yes, it was low, depending where I thought the actual trajectory of the aircraft was.

MAJ CHAPMAN: On that same table, you refer to, as a disadvantage, the Image Intensifier Tubes. Can I just ask this first question: have you flown with the updated L3 tubes?

D1: I don't know the version that I've flown with. However, I've only ever flown with the latest version of the IITs.

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MAJ CHAPMAN: You say there that the Image Intensifier Tubes were substandard when compared with the night-vision systems you had previously used. Do we take that to be goggles on the Black Hawk?

15 D1: That is my opinion, and yes.

MAJ CHAPMAN: It says here that:

They generated or they had a tendency to generate –

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this is the IITs -

illusions to a pilot in addition to those experienced in other systems.

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Can you just describe what the illusions you experienced were?

D1: That statement is not technically correct. What I'm suggesting there is that all NVG systems have illusions. However, the configuration of TopOwl and the IITs meant that particular illusions were perhaps exacerbated, more so than legacy systems.

MAJ CHAPMAN: Could you give us an example, practically, of what – describe an illusion that you experienced with TopOwl.

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D1: The common one that was spoken of was depth perception. You know, it was – depth perception is difficult on all NVGs, but it's particularly exacerbated on TopOwl. It is exacerbated to the safe. And what I mean by that is, you know, 30 feet would look like 10 feet, as an example.

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MAJ CHAPMAN: Including in a formation setting?

D1: Not so apparent when you weren't close to things, but obviously apparent when you were close to things. And "things", just for clarification's sake, are obstacles.

MAJ CHAPMAN: I see. But an obstacle could be another aircraft?

D1: If you were within a few feet or if you were within tens of feet, sure. But, generally, you wouldn't be, in formation. 5

MAJ CHAPMAN: Just when you refer – you've been referring to NVGs. That stands for night-vision goggles?

10 D1: Correct.

> MAJ CHAPMAN: And do you include in that reference TopOwl, just for clarity? Even though they're not a goggle system; it's a HMSD.

15 D1: Yes. So my understanding is TopOwl is the name given to it by the manufacturer.

MAJ CHAPMAN: Yes.

20 D1: You know, we would colloquially call it HMSD and/or with the inclusion of IITs for night flying.

MAJ CHAPMAN: It was just a point of clarification for when you're referring to night-vision goggles; you're not distinguishing between ANVIS and TopOwl? You're talking here about TopOwl - - -

D1: Any image intensifier for night flying, yes.

MAJ CHAPMAN: Just over that page, you then describe some other 30 disadvantages with the MFDs. That's the Multifunctional Displays. And again, you speak of too much information being provided and they're a distraction, potentially, to the SA of the pilot.

D1: Only if information was – only if similar information was presented that was either different or contradicting. 35

MAJ CHAPMAN: Well, I'll just pause there and go to this issue in TopOwl. And you've addressed this later on in your evidence, I think, but you were aware of, were you not, the symbology issue with version 5.10?

D1: I would need more detail, sorry.

MAJ CHAPMAN: Were you aware of the Army Test and Evaluation Section performing testing on the software upgrade to version 5.10?

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D1: I am familiar that testing was done. I'm not sure with reference to exactly what – for what upgrade.

MAJ CHAPMAN: This is the off-axis. Does that assist? The off-axis symbology issue that was identified by AATES.

D1: I was made aware of a problem with off-axis horizon presentation, yes.

- MAJ CHAPMAN: I think you say later on in your evidence and I'll have the reference but that it didn't necessarily affect you because you didn't rely on the HUD for that purpose?
- D1: Yes, I didn't particularly use the horizon lines, and I certainly didn't set attitudes using TopOwl.

MAJ CHAPMAN: We'll return to that, but is that an example – do you accept that if there was an off-axis error in the angle of bank that's different to the Primary Flight Display, is that the sort of difference in information that you're talking about that could be distracting?

D1: No, the type of information I'm talking about on the MFDs might be, for example, that you want to go from point A to point B, but the point A and the point B lines aren't directly over the top of each other. One is, you know – and I'm making this number up – but one might be a 0.2 of a nautical mile, or a 0.3 of a nautical mile, off to one side. So then the pilot is looking at the DKU, looking at the MFDs, trying to interpret which line is correct and which line is incorrect, to try to understand why there is a discrepancy between these two lines, for all intents and purposes, going from point A to point B.

MAJ CHAPMAN: Right.

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D1: So that's the kind of distraction I'm talking about.

MAJ CHAPMAN: Just in relation to your reference to two matters – the decision height audio alarm; to avoid double-alarming in the RADALT – can you just describe to us briefly why you considered those two particular issues to be a disadvantage on the MRH-90? Taking each in turn.

D1: So my understanding of the technology behind the decision height is that it works off the RADALT, which is a single system. Again, clearly I'm not the Original Equipment Manufacturer and I'm not an expert on these things, but that is my understanding. The reason I say the double-alarming of the decision height is not – I'm not specifically talking about the

advantage or the disadvantage of the decision height as a tool, as a supplementary tool; I'm talking about the fact of how it alerted the crew. So, in my experience, you could be at a particularly busy time of flying and you would get this incessant or continuous decision height audio in your headset, which could lead to the breakdown of NTS or CRM because - - -

MAJ CHAPMAN: Can you just expand on those acronyms?

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D1: Crew Resource Management is CRM, and NTS is Non-Technical Skills. For example – we can talk about this later on – I can go into it now if you like, but on the night of the incident, in particular, my crew, Bushman 81, had a RADALT fail. There was not a breakdown in CRM between the crew, but I couldn't talk to the crew because there's this decision height audio going in our headsets. There was also - - -

MAJ CHAPMAN: Just pausing there, that's while you were on the ground, was it?

- D1: No, that's while we were in a hover. So what had happened was, because the RADALT didn't know where it was in time and space, the decision height warning was going off. So here's a tool that's meant to be value-add, that's diminishing, you know, the crew's ability to communicate with each other. Now, if that happens in a critical moment which it didn't on that occasion, but there was potential on that occasion that it could have.
 - MAJ CHAPMAN: It could have malfunctioned, instead of in the hover, at the IP, for example?
- 30 D1: The RADALT absolutely could have, that's correct. Yes, and - -

MAJ CHAPMAN: Sorry to interrupt you. Sounding the warnings, that you would say would be a distraction to everyone because you are unable to then communicate?

- D1: I mean, that my understanding is that audio alarm doesn't, you know, continue infinitely, but if it is at a critical moment, there is no doubt that it does contribute to the breakdown of NTS.
- MAJ CHAPMAN: Just while we're on the subject of decision height and moving ahead to the night of the accident, did you have a recollection of what your decision height was set at in the aircraft, in Bushman 81?
- D1: I have I don't recall exactly what it was set at. I know the rules around how we set it. I can't discuss that in this forum due to its

classification, but I am pretty confident that we had it set up in accordance with the rules.

MAJ CHAPMAN: In your experience, would the other – there are two decision height alarms; is that right?

D1: There is. Like I said, it's off the one system. It's based off a RADALT system, is my understanding, but there is a pilot's and a co-pilot's setting. Yes.

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MAJ CHAPMAN: If you put whatever it is – the figure you put into one of them, what would tend to be – was there a standard procedure with respect to setting the other one?

15 D1: There is a standard procedure, but that is – yes, I can't talk about it, based on its classification.

AVM HARLAND: Can you cancel the alert, the decision height alert, the audio?

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D1: To my understanding, sir, there is a way to cancel it in the DKU. That would be a process, but that's as far as my expertise or knowledge goes on that.

AVM HARLAND: Can you wind the decision height down to zero to get rid of the alarm if it's not relevant to you?

D1: You are able to wind the decision height down to zero.

- AVM HARLAND: Thank you. Actually, one more. What's the audio? Are there different variants of audio for each of the alarms, or are they both the same?
- D1: For the decision height, yes, the audio is the same, and it's a female voice saying, "Decision height", and there is also an icon for want of a better term that displays on the Primary Flight Display.

AVM HARLAND: So it's not like an audio tone? It's a voice saying - - -

40 D1: It is a voice, sir. Correct, yes.

AVM HARLAND: Thank you.

MS McMURDO: How long does it go on for?

D1: I don't have the expertise to answer that, ma'am.

MS McMURDO: In your experience, what - - -

5 D1: I believe it goes off a couple of times, but it's replicated both sides. So, yes, my understanding is, you know, that could be – and whatever it is for one side, is obviously replicated twice.

MS McMURDO: I guess when it's going off in your headsets it seems to be going for a long time.

D1: It feels like a long time, yes, and it breaks down the ability to speak to the rest of your crew, essentially.

- MS McMURDO: When there was this fault on the RADALT during the TALISMAN SABRE '23 Exercise, how was that manifested? Was it just that it went off when it shouldn't have, so it didn't when you were still within your regulated height, but the alarm went off?
- D1: That's correct, ma'am. Yes, we lifted to a hover out of the hot refuel point and initially we and I mean, immediately we could see there was a problem with the RADALT. It comes up with a red flag or a red box that's vacant. So we identified that, but we also, as a secondary effect, had yes, both decision heights obviously not understand where they were, based on their current setting, because the information that inputs to them was not available.

MS McMURDO: Were you then able to turn off that RADALT?

D1: It did cease, and we were able to communicate both internally and externally, after that point.

MS McMURDO: But did you have to wait until it ran out?

- D1: Yes, and this is the technical expertise I don't have, is yes, I don't remember how long it goes for or yes, or whether it just, you know, automatically stops in a certain time frame.
- MS McMURDO: So you don't really remember if the other pilot did something to switch it off, or whether it just ran out of puff?

D1: That's correct, ma'am, yes.

MS McMURDO: Thank you.

MAJ CHAPMAN:	Ma'am, I see the time for – are we continuing?

5 MAJ CHAPMAN: Thank you, ma'am.

MS McMURDO: Yes, I think we'll continue.

Just to pick up on the Chair's point very briefly, just the – you don't have a specific recollection, or even general, about how long in seconds the warning might be, the decision height?

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D1: It probably takes, you know, a second or so for the audio itself to play. And, you know, given that both sides go if they are set generally around the same height, you know, I guess if it goes off four times, as an example, we could be talking in the realm of four to five seconds.

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MAJ CHAPMAN: And during that time, it makes the ability – you're not able, effectively, to communicate with the crew; is that right?

D1: I mean, you can communicate; however, you just can't hear what the 20 other person is saying because you've got this alarm in your – you know, talking in your ear.

MAJ CHAPMAN: Is that the same with – so that's the decision height alarm. Is there a comparable – the same alarm or a different alarm with respect to the RADALT?

D1: The RADALT per se doesn't have an alarm, from my memory. There are obviously other alarms and audio sounds for other various different faults and errors in the aircraft, however.

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MAJ CHAPMAN: Suppose a scenario where you have decision height alarm and perhaps one other alarm, it's conceivable, is it, that you could have this audio human voice-speaking alarm for a period of five seconds of more?

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D1: My understanding is that if there – there is a hierarchy of alarms, and the highest hierarchical alarm will be the one that alarms, and therefore overrides everything else. So I guess if we're comparing, you know, the very rare occasion or the very rare circumstance that – or probability, even, that, you know, two alarms would go off at the same time, my understanding is that, you know, the decision height may be a lower alarm in the hierarchy than, let's say, you know, a slow rotor or an engine failure, for example.

45 MAJ CHAPMAN: So the system will prioritise it in accordance with - - -

- D1: That's my understanding of how the system works, with my limited knowledge on the technicalities of the system, yes.
- 5 MAJ CHAPMAN: When these alarms come up, what sort of message comes up on the is it on the Primary Flight Display? Is there a flashing message of some kind?
- D1: Depending on the issue, you do get a master alarm or a caution warning. There are some instances where you get an advisory warning which, you know, directs you to a Vehicle Management Display to therefore investigate what that alarm is for. Yes.
- MAJ CHAPMAN: Do any of them require you to investigate anything down by your side, or is it all tends to be straight in front of you?
 - D1: It is in front of you on the multifunction displays.
- MAJ CHAPMAN: Can you turn these alarms can you turn them off or mute them?
 - D1: Generally, when you press a button to cancel the alarm, generally the audio will cancel.
- MAJ CHAPMAN: What about can you set it up pre-flight, or even during flight, that you're not disabling an alarm but you're disabling the audio of it?
- D1: That is true. I just can't remember what alarms you could do that for. I believe obstacle audio was one where you could cancel the audio. I can't remember. Yes, it exceeds my expertise to say that you could do that for decision height, for example.
- MAJ CHAPMAN: I understand. So just taking the example of obstacle avoidance alarm, conceivably or your understanding of it is, you could disable the audio alarm but it would still appear on the Primary - -
 - D1: That's correct. You'd still get the visual flash on the map, for example, but yes, the audio alarm wouldn't alarm.
 - MAJ CHAPMAN: But you're not sure at least you don't have experience of that, in the same way with the decision height?
 - D1: That was not my experience with decision height, yes.

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MAJ CHAPMAN: I'll just go now to a continuation of paragraph 19. Just in terms of your observations about night flying – and we've dealt with some of these – but you make the comment that night flying is inherently challenging.

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D1: Correct.

MAJ CHAPMAN: And that that's due to the lack of depth perception. By that, are you talking about the condition stereopsis? Are you familiar with that term?

D1: I don't believe I say "depth perception" there. I talk about the lack of contract.

MAJ CHAPMAN: Yes, there is, perhaps a couple of sentences above: "the lack of depth perception and loss of peripheral vision".

D1: Sorry, when I say "the lack of depth perception", I am talking about just night-vision devices themselves.

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MAJ CHAPMAN: Then:

An added difficulty –

25 as you put it –

when flying overwater, you have the lack of contrast.

There has been some evidence about that in this Inquiry. And you ultimately say:

These combine to a situation where one can become easily disorientated.

- D1: You don't always have a lack of contrast; however, there is the possibility, you know, large open, flat areas particularly if it's a bay with, you know, no whitewater, there is the potential that you can lose contrast between, you know, what would be sky and what would be water.
- MAJ CHAPMAN: And that the conditions such as flying overwater at night, on an NVG device, as opposed to daylight, makes some spatial disorientation a risk?

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D1: I would argue that spatial disorientation is always a risk. However, I would say that under the parameters that were included in this question, that they are more likely under those parameters.

5 MAJ CHAPMAN: A further complicating factor, you'd agree, would be degraded visual environment, including weather?

D1: A degraded visual environment would complicate those conditions.

MAJ CHAPMAN: Just where you refer to "sterile cockpit procedures" and "communications being deliberate and specific", is that essentially what you're referring to by "sterile cockpit procedures"?

D1: Sterile cockpit procedures are just a period of time where, you know, you're focused, you're not talking about anything other than the specific work that has to be conducted at a point in time.

MAJ CHAPMAN: Over the page, D1, you referred to liking – and this is the IRAPALS, which is the Infrared All-Purpose Adhesive Light Strips – and that they'd been added to the airframe by the time you reached it. Is that right?

D1: They were a supplementary yes, lighting aid for the purposes of formation flying.

MAJ CHAPMAN: And they were an improvement, from your point of view, in terms of being able to see other ships in the formation?

D1: They were valuable, in my experience, yes.

MAJ CHAPMAN: In terms of flying in heavy left as ship 3, noting that you were in the first one, first of all, have you flown in ship 3 in a heavy left?

35 D1: I have.

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MAJ CHAPMAN: Did you experience in that, so far as you can recall, any issues with lighting with this IRAPALS?

D1: I don't recall an instance where I was in ship 3 having an issue on MRH with the formation lighting, inclusive of the supplementary lighting system you've just spoken about there.

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MAJ CHAPMAN: At 21, you describe how flying in ship 3 in heavy left is slightly more difficult when flying, because of the vacant space in front of you. Could you just develop that a little more?

- D1: Sure. The how-to for want of a better term of flying formation, the skillset, doesn't change pending what position in the formation you are. Your visual cues, however, in 3, compared with 2 or 4, are subtly different in the sense that because there is a larger space in front of you, compared to the preceding aircraft, it can be, at times, a little bit more difficult to judge your distance from that aircraft and/or to enable the freedom of manoeuvre arc for the aircraft, you know, preceding you, which is 2.
- MAJ CHAPMAN: Have you, in your experience in ship 3, or in other ships in a formation, experienced sort of closure rates creeping in, without you noticing, necessarily?

D1: Closure rates without me noticing?

20 MAJ CHAPMAN: Yes.

D1: No.

- MAJ CHAPMAN: What about when an aircraft in front of you in a formation decelerates? Is that notified over the radio, or internal communications somehow, or you just follow the lead and you can notice it by your eye?
- D1: Yes, the relationship you have with the aircraft around you is that you well, sorry, the relationship you have with the aircraft in front of you is that you follow them, essentially, and you avoid them. So for all intents and purposes the concept, including deceleration/acceleration, so on and so forth, while they are SOPs and I can't go into detail about that the concept is delivered in orders. And, generally speaking, amendments to the plan would be broadcast, but that may not necessarily be an airspeed change.

MS McMURDO: We'll just have a 10-minute break now. Thank you.

40 MAJ CHAPMAN: Thank you, ma'am.

HEARING ADJOURNED

HEARING RESUMED

MS McMURDO: Yes.

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MAJ CHAPMAN: Thank you, ma'am, Air Vice-Marshal.

D1, I'd like to take you now immediately up to the events of the accident and the time preceding it, and post. This is outlined in detail in your Defence statement, so I'd ask you to just go to that, please. 10 specifically, I'd like you to go to paragraph commencing at 17. It should be under the heading, "An Outline of the 24-Hours Leading Up to The Incident". Do you have that?

15 D1: I have that.

> MAJ CHAPMAN: Thank you. So at 17, you refer to leaving Holsworthy and travelling up to Proserpine, and arriving in the evening of 24 July. Is that correct?

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D1: Correct.

MAJ CHAPMAN: Did you fly up in an MRH?

25 D1: I flew an MRH to Proserpine, correct.

MAJ CHAPMAN: And who did you fly with?

D1: I flew with LT Max Nugent, and I flew with CPL Alex Naggs. And forgive me, I have forgotten who the other member was. 30

MAJ CHAPMAN: At 18, on 26 July – so 25 July, was that a rest day for you, do you recall?

35 D1: I flew on 26 July.

MAJ CHAPMAN: Sorry, on 25 July was my question, was that a rest day?

D1: In my statement, I said that – sorry, I don't recall exactly what I said. 40 I could find it, I think. But it was a transition from day to night on Tuesday the 25th, yes.

MAJ CHAPMAN: A change because you were entering into night operations; is that right?

D1: Correct, entering a mission window, for want of a better term.

MAJ CHAPMAN: Thank you. So this is the following day, 26 July, you were approached by D2 to undertake a UTAP, and that's a Unit Training Assessment Program. Is that right?

D1: That's correct.

MAJ CHAPMAN: And that was, you say, during the operation. Was that specifically for the sortie on 28 July? 10

D1: That is probably mis-explanation. That probably should be "exercise" instead of "operation".

MAJ CHAPMAN: So by that, do we take it you're meaning for the whole 15 operation, or just specifically for that FMP?

D1: It was specifically for FMP 2 as part of Exercise TALISMAN SABRE.

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MAJ CHAPMAN: So the FMP concerning the accident?

D1: Correct.

25 MAJ CHAPMAN: D2, it says there, is a Qualified Flying Instructor. And is it the case that D2 invited you to undertake this because it represented a training opportunity for you?

D1: Yes.

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MAJ CHAPMAN: As you've given evidence earlier, these opportunities were - and my words - few and far between. So D2, the intent was to incorporate as much training as is possible, even on an exercise?

35 D1: Yes.

> MAJ CHAPMAN: Now, you say that D2 was the flight lead for the mission on 28 July '23?

40 D1: Correct.

> MAJ CHAPMAN: Who else were you flying with in terms of crewman in Bushman 81?

45 D1: D3 and D4. MAJ CHAPMAN: Thank you. For the purposes – and this is at 21 – of your UTAP, you were performing the duties of flight lead under the guidance of D2 and D14, who were both flight leads?

5

D1: I will just clarify that point. I was not performing the duties of flight lead whilst airborne. I was providing the duties of flight lead for the purposes of developing the mission and working with the Ground Force element.

10

MAJ CHAPMAN: Thank you. And that included the briefings that you attended, and delivering of orders, and so forth?

D1: Correct, yes.

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MAJ CHAPMAN: And this process is also referred to – or you're acting In Command Under Supervision, or ICUS. Is that right? I-C-U-S?

D1: That's correct, yes.

20

MAJ CHAPMAN: You go on to explain there that, again, this is to enable members to be trained and given the complexities of training, you undertake those where you can on exercise?

25 D1: Correct.

MAJ CHAPMAN: Part of your role or your acting in this way would be to liaise with the Ground Force element for the preparation of the Full Mission Profile; is that right?

30

D1: That's correct.

MAJ CHAPMAN: And the delivery of the orders?

35 D1: Correct.

MAJ CHAPMAN: You say, at 26, that you enthusiastically agreed to participate?

40 D1: Correct.

MAJ CHAPMAN: And that D14, who was also there, was in the role of a Standards Officer. This is at 27.

45 D1: Correct.

MAJ CHAPMAN: He was one of two types of Standards Officer, and the Standards Warrant Officer was WO2 Phil Laycock.

5 D1: At the Regiment, that's correct, yes.

MAJ CHAPMAN: Both the Standards Officers had day-to-day responsibility for ensuring everyone conformed with required standards of conduct for flying-relating duties. And this is at 28.

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D1: At in-barracks life, yes. Absolutely, yes.

MAJ CHAPMAN: Thank you. You then say the following day – this is now the 27th, so this is the day prior to the accident – that you commenced your duties at around midday, or between midday and 1400.

D1: That's correct.

MAJ CHAPMAN: That involved meeting with D Company Troop Commanders and other members for about an hour, initially?

D1: That's correct.

MAJ CHAPMAN: And that you'd be re-engaging with the Ground Force element sometime later to discuss the particulars of the mission?

D1: At 1800, that's correct.

MAJ CHAPMAN: Part of your role, acting in this role in the way that you were, required you to develop timelines for the planning of the mission?

D1: Yes.

MAJ CHAPMAN: You see that at 32. For the purposes of developing these timelines and involving yourself in that planning, you were working from – it says at 33 – 1930 to midnight on 27 July. Do you see that?

D1: That's correct.

MAJ CHAPMAN: As part of that planning team, you say that others were involved, including yourself, and they're listed there as D1, D2, D6, D8, D14, CAPT Lyon, CPL Naggs, and LT Nugent. Is that right?

D1: That's correct, yes.

MAJ CHAPMAN: How long did the planning session take, approximately?

D1: So we got some early planning done in the afternoon after the meeting. I can't remember exactly when the meeting was with the Ground Force, so 5 I can't say exactly how long we spent, you know, developing the product. I remember having a break for dinner prior to 1930 and saying words to the effect of, you know, "We'll recommence at 1930, to give everyone that break before we really got stuck into it".

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MAJ CHAPMAN: Now, when you say it included those members that I've just described, did it include others as well? Were there double that number, or just is that the number?

15 D1: Yes, there would have been more members; I just can't recall who.

MAJ CHAPMAN: This is a planning meeting which is separate to any engagement with the Ground Force element which is beforehand. Is that right?

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D1: This is Aviation-only-specific plan, yes.

MAJ CHAPMAN: Thank you. You say that you worked from approximately 1930 to midnight, and that – in 34 – I'll take you to 34 – that some of those involved in planning left the session early, and one of those 25 was LT Nugent?

D1: That's correct. I don't remember what time he did finish his duties and depart, but he departed earlier than, I guess, the rest of the people listed in 33 there.

MAJ CHAPMAN: That's because, presumably, he'd completed whatever tasks he'd been - - -

35 D1: His allocated tasks, that's correct.

MAJ CHAPMAN: Yes, thank you.

D1: Yes.

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MAJ CHAPMAN: The others, which include, in your observation, CAPT Lyon, D2, D6 and yourself, were present right up until the end of that session, which you approximate to be around - well, you don't necessarily say, but would you say around midnight or later?

D1: My estimate, based on the time I went to bed, would be, yes, sometime between 12 to 1230.

MAJ CHAPMAN: You say that:

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I was the last to leave the planning session.

And you went to bed at around 1 am. Did you see when those others listed - CAPT Lyon, D2, and D6 - went to bed?

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D1: When I say I was the last to leave, I remember specifically leaving with Diesel. I believe that D2 and D6 weren't far ahead of me.

MAJ CHAPMAN: Yes.

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D1: But that's my – that's all I can't recall from that time.

MAJ CHAPMAN: Were you accommodated in the same tent as Diesel?

20 D1: I was in a separate tent to Diesel.

> MAJ CHAPMAN: So you walked back to your accommodation to go to bed?

25 D1: They were side by side.

> MAJ CHAPMAN: Turning to the events of 28 July now – this is over the page. You say that you woke – after that late session, around 1 am when you got to bed that morning, in fact, and you woke around 9 am. Is that right?

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D1: That was my recollection. I do have sleep data in my updated statement that I could compare it to, but that was my recollection, yes.

35 MAJ CHAPMAN: Your recollection. So was anyone else awake at that time, from your observation?

D1: A lot of people were awake prior to that time. I remember when I woke up at that - yes, the tent was all but empty, essentially.

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MAJ CHAPMAN: So you'd slept-in – not slept-in, but you'd had the most sleep, waking up at around 9 am?

D1: I was, yes, one of the few that was remaining in the tent.

MAJ CHAPMAN: Just before I get to the sleeping conditions, when you actually emerged from the tent and saw other members, were they congregating, having breakfast and socialising?

5 D1: That's correct, yes.

MAJ CHAPMAN: Could you distinguish between them being junior members of the Aviation crew and senior members, or a mix?

D1: On that morning, I don't recall, yes, who was up and about.

MAJ CHAPMAN: You said you had a pretty reasonable sleep?

D1: Yes.

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MAJ CHAPMAN: And that you found you were in a tent with 16 other members, approximately?

D1: Approximately, yes.

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MAJ CHAPMAN: And that you found sleeping on a stretcher bed uncomfortable; is that right?

D1: Yes. I had got into a pretty good swing of things by then and, you know, my sleep was actually pretty good.

MAJ CHAPMAN: Just briefly, to explain the conditions of where you were sleeping, if you go back to 54 of your Defence statement – sorry, your Inquiry statement rather, and at paragraph 54 you summarise that these were large tents and they had a central doorway. There was no heating or cooling. Is that right?

D1: That's correct.

MAJ CHAPMAN: And that they had 16 stretcher beds, eight lying down each side, and a centre walkway; correct?

D1: That was my recollection. I'm not sure of the exact number of beds.

MAJ CHAPMAN: And that there was limited room between each stretcher – just enough to walk between each and store PERS equipment. Is that right?

D1: That's correct, yes.

MAJ CHAPMAN: So it was a pretty tight fit. Is that a fair summary?

D1: It was tight, but it wasn't uncomfortable.

5 MAJ CHAPMAN: Was it unusual, by reference to your other deployments?

D1: No, it was more or less the same.

10 MAJ CHAPMAN: And you said in the next paragraph that you essentially got used to the sleeping conditions under three nights, and you faired pretty well?

D1: I had adapted pretty well, yes.

15

MAJ CHAPMAN: So just returning to the morning of the 28th – and this is from 39 – you spent the morning cooking your breakfast and having some - and socialising with some colleagues. Is that right?

20 D1: That's correct.

MAJ CHAPMAN: And they were in high spirits, you say?

D1: Trips away like this are one of the better parts of the job. They're a 25 great time to socialise, and just a great time to have fun.

MAJ CHAPMAN: And were the people, to your observation, suffering from being tired, or complaining about being tired at all?

- 30 D1: In ones and twos you would say, you know – and of course I'm recalling stories now, but every now and then you would say – you might hear someone say, "Hey, I didn't have the best sleep", or "Wish I could have another hour", or just words to that effect – general discussion.
- MAJ CHAPMAN: But you didn't hear anyone saying, "I had such poor 35 sleep, I can't possibly fly tonight"?

D1: Yes, I don't recall anyone suggesting tiredness or fatigue to that nature.

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MAJ CHAPMAN: And you say, at 40, that your commencement of your work duty commenced at 1300; is that right?

D1: That's correct, and the reason I can be certain about that is because I 45 developed the timeline.

MAJ CHAPMAN: And between 9 and 1 pm, you're just going about your work and breakfast, et cetera – those sorts of things – are you?

5 D1: Correct.

> MAJ CHAPMAN: And then from 1300, you were due – and this is at 43 - to deliver orders at 1400?

10 D1: That's correct.

> MAJ CHAPMAN: And you had done most of the preparation for those orders the night earlier, had you?

15 D1: Yes, there's always tidy-up stuff that you do on the day. It's always really busy in that hour or so leading up to orders.

MAJ CHAPMAN: And then we next go over to 45, and this is you were assigned the lead aircraft, which was Bushman 81.

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D1: That's correct.

MAJ CHAPMAN: And you've given some evidence at 46 about D2 being the flight lead; and D3, senior aircrewman; and D4, junior aircrewman.

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D1: Correct.

MAJ CHAPMAN: And then you've referred, at 47, to it being a hive of activity in the hour prior to orders, and orders were being delivered at 1400.

Is that right? 30

D1: Correct.

MAJ CHAPMAN: And that, as part of this, the delivery of orders, you liaised at that stage with CAPT Lyon, who was the PCO, the Product 35 Control Officer, and Aircraft Captain of Bushman 83. Is that right?

D1: That's correct.

40 MAJ CHAPMAN: And as part of his role as the PCO, CAPT Lyon was undertaking final check of mission product, in the final period prior to orders. So he was also working himself at that time.

D1: Correct.

MAJ CHAPMAN: Orders then – this is at 48 – commenced slightly later on account of a technical glitch, and then the orders were delivered by you - - -

5 D1: Correct.

MAJ CHAPMAN: - - - as part of your training exercise.

D1: Correct.

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MAJ CHAPMAN: And as part of the sequence in delivering orders, you would deliver orders and all questions arising would be raised at the end of the delivery, and in order of flight. Is that right?

15 D1: That's correct. And just to add there are injects as well from the Ground Force and the AMC with respect to the orders as well.

MAJ CHAPMAN: During the orders, there was identified – sorry, the AMC, the Air Mission Commander, addressed points of clarification, including noting some points of friction, as you describe it at 51.

D1: Correct.

MAJ CHAPMAN: And part of the delivery of orders was an overview of 25 the weather to be expected that night; is that right?

D1: That's correct.

MAJ CHAPMAN: Did you deliver an assessment of the weather, or did you have some other specialist come in and do that? 30

D1: Yes, there is always a pilot that is allocated the task of assessing the weather and delivering the details of the weather in orders. That is not – obviously, all Aircraft Captains also go away and do their own assessment of the weather as well.

MAJ CHAPMAN: There wasn't any meteorological expert or specialist on deployment; it was just it was the pilots looking at your own weather information?

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D1: That's correct, yes.

MAJ CHAPMAN: You then discuss, at 53 and onwards, that to your observation the weather was normal. It included an inter period, which is short for "interim period", which is a reference to some anticipated showers. Is that generally right?

D1: It's a 30-minute period of a change in weather conditions, yes.

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MAJ CHAPMAN: So the ships on this particular sortie were expecting a change in the weather at some point during the sortie?

D1: At up to 30-minute interim periods.

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MAJ CHAPMAN: And you say you were comfortable with the weather forecast for the mission, and that it was normal conditions to your mind?

D1: The interim period did not reduce the weather conditions to less than 15 normal conditions.

MAJ CHAPMAN: Understood. At 57 – and this is now at the end of orders – the attendees, consistent with practice, posed some questions to you as the person in charge of delivery of orders. Is that right?

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D1: That's correct.

MAJ CHAPMAN: And there were three questions which were raised, and I'll take them briefly in turn. The first concerned – and this is at 58 - a Hot Refuel Plan. And the Hot Refuel Plan you had originally briefed proposed 25 moving the aircraft from parked positions, cycling through the refuelling one at a time. Is that right?

D1: That's correct.

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MAJ CHAPMAN: No need to go into that further. The second issue – and would this be described as a point of friction or not a point of friction, as you've described earlier in your statement?

35 D1: This would not be – if you're specifically going to talk about the one that's next with the doors, this was not a point of friction per se, no.

MAJ CHAPMAN: The second was an issue raised by senior aircrewman Phil Laycock, and it requested essentially that – he requested that the formation keep the cabin doors of the aircraft closed to protect against cold weather and wind. And that's at 60. And there was some discussion between you and Phil Laycock concerning that matter. And is it correct that you – at least initially, you've taken the view that they should be open, in your view – your opinion?

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D1: We have a Special Operating Procedure which I can't go into, but I — my initial thoughts were that the doors would be in accordance with that procedure. Phil — which is absolutely achievable and not a problem — is that he wanted to amend that due to the cold, as you discussed. And then there was some inject from D2, who is the flight lead. I can't remember whether D10, as the AMC, also injected, but usually there is a conversation between the flight lead and the AMC on these types of points. It was decided that the doors would be closed for the transit period, yes.

- MAJ CHAPMAN: And one observation that you made, did you not, during this period as to supporting doors open, would it be it improved situational awareness for all the crew in terms of being able to see outside the aircraft?
- D1: It doesn't affect the situational awareness of the pilots. We're talking about the cabin doors. However, in MRH specifically, it would increase their situational awareness because they would have a large opening with which to observe, you know, the other aircraft in the formation, and obviously, you know, the general area outside of the aircraft.

MAJ CHAPMAN: And this is the point that's made, is it, at 67 of your statement where you say this:

In my view, this means that when you close the doors, you go from having four sets of eyes looking out – that is, the two pilots and two aircrewman – to only having two sets of eyes looking out.

Is that right?

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30 D1: That's a generalisation, but yes.

MAJ CHAPMAN: Ultimately – and this is at 62 – the flight lead, D2, proposed, and the AMC, D10, agreed, that the cabin doors would be closed, consistent with Phil Laycock's suggestion. Is that right?

D1: Correct.

MS McMURDO: Do you recall Phil Laycock's suggestion having something to do with wanting to have warmer clothes for the aircrew?

D1: Yes, ma'am. We'd had a SOQC period earlier in the year where we were flying long periods of time with the doors open and the aircrewman had ad hoc pieces of cold weather gear. And temperatures could have been as low as, you know, eight degrees and lower again with wind chill factor. And we might have been in those conditions for hours at a time. It

was Phil's concern, or opinion, that the aircrewman were ineffective at doing their job because they were suffering so much from the cold.

MS McMURDO: Had you put a request for warm clothing or custom-made clothing to deal with this?

D1: In my experience, ma'am, we used to have a Directive – sorry, a Standing Instruction for cold weather gear. In the period between us retiring Black Hawk and obtaining MRH, that disappeared. I don't have the expertise to discuss that in any – I don't know the why or the how, but yes, there used to be a Standing Instruction and it's disappeared. So crew just collected, essentially, whatever cold weather gear they could get their hands on.

MS McMURDO: But Phil Laycock was trying to get official cold weather gear issued to the aircrewman?

D1: He was using this as a means to support improving, yes, and obtaining improved cold weather gear, yes.

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MS McMURDO: Thank you. Yes.

MAJ CHAPMAN: And the SOQC course you're referring to is dealt with at 61, wherein Phil's experience was the temperature often dropped below eight degrees Celsius in Sydney.

D1: In Sydney winter, that's correct, yes.

MAJ CHAPMAN: At 71, following – well, as part of that decision, D2 and the flight lead – is it you reflected you knew that Phil had significant Aviation experience, you highly respected his expertise. You say that:

He knew the role of aircrewman better than I did, and I decided not to deal with that matter further.

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And you proceeded on the basis that it would be doors closed. Is that right?

D1: That's correct.

40 MAJ CHAPMAN: The third point of discussion following your orders concerned deconfliction plans with the United States asset; is that right?

D1: That's correct.

MAJ CHAPMAN: That was just concerning the positioning of that asset at a safe distance from all aircraft participating.

D1: It was in the event that we had to enact our Inadvertent IMC drill, which is the stacking of aircraft above a lower safe altitude in the event that 5 we run into inclement weather.

MAJ CHAPMAN: Then, from about 75, there is discussion there was a ROC that was prepared. And that's a Rehearsal of Concept; is that right?

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D1: Correct.

MAJ CHAPMAN: Did you deliver that?

15 D1: It's my recollection that the ROC was delivered by D2. However, I don't know that to be a fact.

MAJ CHAPMAN: And that was around 1500, in front of the Planning tent?

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D1: That's correct.

MAJ CHAPMAN: That took about 30 minutes?

25 D1: Correct.

> MAJ CHAPMAN: Then, immediately following that ROC – and I'm at 77 - there was an hour and a half for the families to - sorry, it was a down time, essentially, and many took the opportunity to phone home?

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D1: Correct.

MAJ CHAPMAN: Then, at 78, you explain that you went to the Q-store and you signed out your HMSD and your Aeronautical Life Support Equipment; is that right?

D1: Correct.

MAJ CHAPMAN: You did so accompanied by CAPT Lyon - - -

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D1: Correct.

MAJ CHAPMAN: - - - who is Aircraft Captain of Bushman 83. You signed out your HMSD at that time. So we take it then that none of the HMSDs were sitting in the aircraft, and they hadn't been there all day? You specifically went to a particular tent to get them?

D1: That's correct, yes.

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MAJ CHAPMAN: Was that tent air-conditioned?

D1: I don't recall.

- 10 MAJ CHAPMAN: You say then that you walked with CAPT Lyon around four to 500 metres to where their aircraft was parked. It was a lovely evening, the sun was setting, and you make the observation there was plenty of illumination. You recall – and this is at 80 – that Diesel was excited for his first FMP mission as a Special Operations Captain and that he wanted 15 to do an exceptional job. And he wanted to prove to the Regiment and the Ground Force element that the trust placed in him was well founded. And you make the observation that this reflected his diligence – CAPT Lyon's diligence – and a high personal trait.
- 20 D1: Correct.

MAJ CHAPMAN: Moving to around 81. You now were at 1945, 7.45, in the evening. You're strapped into your aircraft. Then at 2115 the formation started its engines. So we're talking about a period of about an hour and a half between strapping into your aircraft and starting the engines; is that right?

D1: For all intents and purposes, that is correct. However, the APU was running. That's the Auxiliary Power Unit.

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MAJ CHAPMAN: Yes. But, nevertheless, you're still strapped in at that point; you're not walking around your aircraft?

D1: That's correct, yes.

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MAJ CHAPMAN: While you're there, were mobile phones permitted on this sortie?

D1: As part of mission orders, I had delivered that mobile phones would 40 not be carried by any member in the formation.

MAJ CHAPMAN: You say it would not be. That was a Direction as part of the orders, that they should not be, or they're not permitted?

D1: That was a Direction, and that Direction came from D10. 45

MAJ CHAPMAN: That came from D10.

D1: So I delivered the Direction in orders. But the Direction to me came from D10.

MAJ CHAPMAN: And you delivered that. Practically speaking, was there a further Direction of, "Place your mobile phones in this box, or in this room after orders"? Or how would that be achieved?

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D1: There was a box that was placed in the Ops tent. It was, the onus was on the individual to comply with the Direction.

MAJ CHAPMAN: I understand. And did anyone in 81 have a mobile, to 15 your knowledge, on them in the aircraft?

D1: To my knowledge, no, nobody had a mobile phone. And I can say categorically D2 did not, because he made a point of saying, "Gee, a mobile phone would be handy right now".

20

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MAJ CHAPMAN: So that's reflecting on the hour and a half you're on the APU, just waiting - - -

D1: Not then specifically. It was later – I can't remember exactly when, but it was certainly later in the sortie.

MAJ CHAPMAN: Then we move – and then I'm at 84 – at 9.20, 2120, your aircraft 81 radioed that you were transitioning to – air transitioned to hot refuel point?

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D1: That's correct.

MAJ CHAPMAN: Took on some fuel.

35 D1: Yes.

> MAJ CHAPMAN: However, after lifting to the hover – and you've given some evidence about this this afternoon – there was an alert, a RADALT alert failure: correct?

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D1: That's correct.

MAJ CHAPMAN: You then changed to the spare; is that right?

D1: That's correct. We typically have a spare and it will start at the same time that we do so that we can minimise any down time or affect on the mission by having that aircraft available to us.

5 MAJ CHAPMAN: Which was my next question. Did the change to the spare have any material effect on timings at all?

D1: Given that we were going through this refuel cycle, essentially it did not. I mean, it could have caused a problem had an early call been made. But it made no impact, essentially, for this mission. Sorry, in hindsight, it made no impact to this mission.

MAJ CHAPMAN: Next in the narrative is that you take off, the formation takes off. Is that right?

D1: Correct.

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MAJ CHAPMAN: And then you follow - and this is at 88 - the navigational route intended to take us over high terrain, utilising a saddle.

D1: Yes.

MAJ CHAPMAN: Can you just explain what a saddle is, very briefly?

25 D1: So a saddle is a depression or a lower area in a mountain range.

> MAJ CHAPMAN: At 88 you then go on to say that very early in the intended crossing of the saddle you form a view that it would be untenable due to low-level cloud over the range. Is that right?

D1: That's correct. I mean, ultimately the decision is D2's to make. But yes, we did have a chat about how poor the opportunity to take that saddle looked.

35 MAJ CHAPMAN: That was identified amongst the crew in Bushman 81, that it's not a tenable route to the IP?

D1: Correct. Everyone was on board with that decision.

- 40 MAJ CHAPMAN: And the flight lead, D2, made that, as you say, authoritative decision to change the route and then notified the formation over the radio. Is that right?
- D1: Actually, I don't remember the exact discussion that was had, but I 45 believe it was the case that that was radioed to the crew, yes.

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MAJ CHAPMAN: And do you have a recollection if that was acknowledged by the crew? I'm sorry, correction. Going back, when you say it was notified to the crew, was it notified also to the formation?

D1: I don't remember whether the conversation was had directly with the

AMC or whether it was a direction to the formation. If it was a discussion

MAJ CHAPMAN: And there would be, would there not, following standard practice, an acknowledgement of that change?

with the AMC, however, it would have been heard by all aircraft.

D1: If it was a Direction for all aircraft, it would absolutely be acknowledged, yes.

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MAJ CHAPMAN: It's not the case that the flight lead can just deviate without notifying in the normal course?

D1: The flight lead can absolutely deviate, and all aircraft will follow – should follow. And that is absolutely not a problem for us in formation.

MAJ CHAPMAN: This is 89:

D2 decided that the formation would remain overwater and transit around Cape Conway to the east, tracking north to the IP.

Is that right?

D1: That's correct.

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MAJ CHAPMAN: There was good illumination due to the moon state.

D1: Correct.

35 MAJ CHAPMAN: And you say it was around 50 per cent moon illumination throughout the mission window.

D1: Correct.

MAJ CHAPMAN: Next is the flight lead requested a new descent of 300 feet AGL, and you were using airspeed hold, RADALT hold, and navigation upper modes?

D1: That's my recollection, yes.

MAJ CHAPMAN: From 92, it's as the formation approached the initial point you note that there was some -a very light rain shower that slightly diminished visibility. Is that right?

5 D1: That's correct.

> MAJ CHAPMAN: And the flight lead, as a consequence of that, and a discussion no doubt between you, a decision was taken to decelerate to 80 knots – indicated. Is that right?

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D1: It was.

MAJ CHAPMAN: Was that a decision which was communicated to the formation?

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D1: I don't believe so. It wouldn't usually be.

MAJ CHAPMAN: So it would be consistent with practice, would it, that if there was, in heavy left formation, or in any other formation for that 20 matter – if the flight lead decelerated, it didn't necessarily need to be broadcast?

D1: That's correct. And, of course, as the flying pilot in the lead aircraft, that's not an aggressive deceleration. That is just a subtle change in attitude so that the aircraft behind you can, in turn, decelerate at the same speed as 25 you – or the same rate, I should say, as the lead aircraft.

MAJ CHAPMAN: You're now approaching the IP and there was a briefing conducted by D2 to all the formation concerning next steps. Is that - - -

D1: That brief is conducted internally in each aircraft.

MAJ CHAPMAN: It's not a brief which is broadcast?

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D1: That's correct.

MAJ CHAPMAN: So the expectation is that each of the ships conduct the brief?

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D1: That is correct. It is a briefing of – we have a mission reference pack and each Aircraft Captain will brief. And that's to update the crew on, you know, particulars to do with, I guess, the approach to a target.

45 MS McMURDO: When you decelerate to 80 knots, that's the speed at which you can open the doors safely. Was there any consideration in your aircraft about opening the doors at that point?

D1: Because we'd already discussed, ma'am, that the doors would be open as we went through the IP or just prior to the IP, that was not a discussion at that point, no.

MS McMURDO: Okay, thank you.

MAJ CHAPMAN: And your expectation at this point, being the flight lead, with the doors shut, that the doors of the other ships were also shut?

D1: Yes, it would be my expectation that all doors for all aircraft would be shut at that time.

MAJ CHAPMAN: There was the internal mission brief you've referred to. Then, upon reaching the IP – and I'm at 94 – there was a hold. Though, at 95, you refer to –

20 becoming clear to me that the formation would not be able to hold at the IP, or be able to track to the target, due to heavy rain shower obstructing the pathway.

Is that right?

D1: That's correct.

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MAJ CHAPMAN: You recall, at 96, saying to D2 words to the effect that you think you should make a turn; is that right?

D1: That's correct. I guess the point of me saying that was not to prompt him into thinking, "Hey, I've made this decision". The point of me saying that was for me to develop a mental image for myself as the flying pilot to determine what a hold may look like, so that I could start to understand a time and space turn rate, and a direction of turn, and so on and so forth.

MAJ CHAPMAN: And that was a deviation from the plan, was it?

D1: The direction of the turn was a deviation from the plan.

MAJ CHAPMAN: Thought it was - - -

D1: Actually, I'm going to make a correction to that. It's not a change to the plan. It's different – we're treading a fine line here between discussing an SOP and not discussing an SOP. I'll just say, it was not a change to the

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plan. There isn't a set plan.

MAJ CHAPMAN: It was a deviation to what was expected, which was within the discretion of the flight lead?

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D1: Correct, I suppose. Yes.

MAJ CHAPMAN: You then talk, at about 100, to being able to see the horizon, and the horizon allows a pilot to orientate themselves in this sort of visibility. And then, at 102, you say as the formation was completing a turn you heard D10 say over the air, "83, pull up". Do you recall that?

D1: I can't remember whether it was said once or whether the "pull up" was repeated two or three times, but yes, it was words to that effect.

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MAJ CHAPMAN: You say there was absolute silence in the aircraft as that occurred; is that right?

D1: In our aircraft, yes.

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MAJ CHAPMAN: A few seconds later, you hear the words from the OC, "83 is in the water. 83 is in the water". Followed by "Knock it off. I have resumed AMC command. Fallen angel. Fallen Angel". Do you recall that?

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D1: Not in that exact – yes. I couldn't tell you the exact order, but yes, words to that effect.

MAJ CHAPMAN: To that effect?

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D1: Yes.

MAJ CHAPMAN: There was a short pause. Now, the OC was acting as AMC for 81 and 82, and there was a direction to track to Pentecost Island 35 and hold, with 84 to remain overhead.

D1: Correct.

MAJ CHAPMAN: And you followed that Direction, you were in utter 40 disbelief about what had just happened.

D1: Correct.

MAJ CHAPMAN: At 105, you observed that the radios exploded with 45 communications.

D1: Yes.

MAJ CHAPMAN: And with all the various assets getting involved. At 5 106, once you'd reached Lindeman Island, D2, the Aircraft Captain, asked for the crew of your ship whether they were comfortable continuing. Is that right?

D1: That's correct.

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MAJ CHAPMAN: And you began to work on some fuel calculations for what would be another sort of operation.

D1: Correct.

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MAJ CHAPMAN: While you were on the ground, you received, over the radio, a message, "All personnel recovered" once. Is that correct?

D1: That's correct.

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MAJ CHAPMAN: And then you heard that call again, "All personnel recovered", and repeated a number of times.

D1: That's correct.

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MAJ CHAPMAN: Do you know the source of that?

D1: We tried to find the source of that. That was a question that was asked repeatedly by D2, and I can recall during that ground laager I believe we sent one of our aircrewman to liaise with the Ground Force to see if they knew where that message had originated.

MAJ CHAPMAN: At 108, you're on the ground. So you would've laagered for approximately 20 minutes?

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D1: Correct.

MAJ CHAPMAN: And you were, according to your calculations, working out a bingo fuel, which you say is an Aviation term which refers to the 40 amount of fuel required to allow the aircraft to return to a fuel source with all fuel reserves intact. So we're talking, in general parlances, very low fuel, right?

D1: Correct.

MAJ CHAPMAN: Next, you, 81, transited, conducted a deconflict poll. So you're off Lindeman Island now and into the vicinity of the crash site, and took over from 84. Is that right?

5 D1: That's correct.

> MAJ CHAPMAN: And then you return to the scene of the crash with an AC, a US asset. Was that a US asset overhead, or - - -

10 D1: That's the US asset, yes.

> MAJ CHAPMAN: Going to 113, you became aware later that 82 had returned to the FOB to refuel. And then, at 114, you had a low fuel level, and you were on station over the accident site for only about 20 minutes before you had to go and refuel. Is that right?

D1: We'd reached our bingo fuel, yes.

MAJ CHAPMAN: You returned then – this is at 116 – to Proserpine, and 20 you took on an amount of fuel, and you were ground laagered there pending further Direction.

D1: Correct.

- 25 MAJ CHAPMAN: You were, at this point, is it right, operating at your endurance level, though were notified that a two-star General, the Avn was it the Avn Commander had to given authority to continue in those circumstances?
- 30 D1: I can't – I don't know who gave the Direction, but it's at that level, yes.

MAJ CHAPMAN: You then discussed, I take it, on the ground at Proserpine with the crew – D2 and the crew about continuing at your levels of fatigue?

D1: Correct.

MAJ CHAPMAN: And there was agreement to continue.

D1: Correct.

MAJ CHAPMAN: Though, between you and D2, you discussed increasing the level of automation discipline for the aircraft; is that right?

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D1: We just wanted to, you know, reconfirm, I guess, to each other that we were going to remain hypervigilant, yes.

MAJ CHAPMAN: Just pausing there briefly. Was the level of automation discipline – as it's referred to there – discussed as part of any prior flight check?

D1: Generally speaking, in my experience, whenever we go on these sorts of missions – or whether we spend time flying overwater, whether it's briefed in orders or whether it's briefed by the Aircraft Captain, there is always some sort of discussion about remaining vigilant to the Rules and Regulations about that – those flight regimes and those flight parameters.

MAJ CHAPMAN: So you topped up with fuel and you returned to the crash site to replace or relieve 82; is that right?

D1: Correct.

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MAJ CHAPMAN: How long were you ground laagered for before you took off again, approximately, at Proserpine?

D1: I don't recall, sorry.

MAJ CHAPMAN: This is at paragraph 120: you then returned to the crash site north-west. You identified the AC-130, and you were at the crash site until you again reached your bingo fuel. Then you handed over the scene to the Australian Search and Rescue Challenger from Townsville, leaving at approximately – the crash site at 4.40 am, and you landed back at Proserpine at approximately 5 am. Is that correct?

D1: That's correct, yes.

MAJ CHAPMAN: I just ask you now to go to paragraph 47 of your Inquiry statement, and these are matters which I'm just going to go through. These are your reflections of the crew of Bushman 83, and if I may, I might just go through these and ask you to agree or disagree.

D1: Sure.

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MAJ CHAPMAN: In relation to CAPT Lyon, Diesel, he was – you only really – you say that:

I only really met him upon returning to 173 Squadron –

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following your transition. Were you not – and that Diesel was the Squadron XO for 173 Squadron in 2022, and it was a position he would hand over to you in November 2022, when he would take up the Troop Commander duties in preparation for the following year, 2023. You say that:

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I liked Diesel. We got on well. We had very different personalities. Diesel was a relaxed, easy-going and kind person who wanted to be everyone's mate. He was the type of person that wanted to take on other people's problems and try to find ways to help them. He valued doing the right thing. He had great camaraderie.

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He would often phone you to vent, and you would likewise phone him for that purpose – really just to improve the system – and you were both looking at how to improve things.

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D1: Correct.

MAJ CHAPMAN: Correct so far? You worked closely with Diesel, both Troop Commanders, in your role as Squadron XO. And, in your view, 20 Diesel was just starting to find his feet as a Troop Commander by July. And, in his typical way, he was - so he'd be everyone's mate, including subordinates working for him. He had a good appreciation for the role of Troop Commander, though the role was weighing heavily on him. He was struggling to reconcile, in your view, the competing challenges of Troop 25 workload and the demands from the chain. And you make the observation that in that role as Troop Commander it's particularly busy, and it's a thankless role, and he – you say that Diesel prioritised members' welfare, and he wanted to see people better themselves.

30 You flew with him on nine occasions. He was, to your observation, a hands and feet pilot who loved flying, and gained great experience while he was in New Zealand, in particular flying with the dangerous weather effects that mountains would generate, and they moulded him into a pilot who knew his limitations and his comfort levels in certain circumstances, and his confident competence with his ability to fly, in particular, in the 35 MRH. That's correct?

D1: Correct.

40 MAJ CHAPMAN: In relation to LT Max Nugent, you met Max when he first posted into 6 Aviation in January 2023. You didn't spend a lot of time in the Troop rooms, so therefore you didn't spend much time with Max. But you knew him to be determined, headstrong, self-assured, confident and knew exactly what he wanted from his career and his motivations.

D1: Correct, yes.

MAJ CHAPMAN: You only flew with Max on two occasions, with only one being the flight to Proserpine on 24 July. And, in your experience, he was the same standard as his peers. He had a good understanding of the MRH-90 and was comfortable with the use of the systems.

D1: Correct.

10 MAJ CHAPMAN: In relation to WO2 Phil Laycock, you don't recall, you say, when you met Phil; however, it was around June 2022. You say he was the quintessential consummate professional. You found him to be quiet, unassuming, and a respectful character. He worked tirelessly to identify problems, and tried to find a solution when a problem or topic was 15 close to his heart – sorry, or when close to his heart. He was stubborn and persistent.

I'll always remember -

20 you say –

> his cheeky grin following the sarcastic comment that he just made, making light of the situation or someone, but in a friendly and very respectful way.

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As you've previously said, he was the Standards Warrant Officer, and he was the subject-matter expert. And you say that there was no doubt in your mind that the role of the Standard WO was one of the busiest and most demanding roles in the Regiment, which speaks to the calibre of Phil as a person and as an aviator.

In terms of how much you flew with him, you flew with Phil on eight occasions. You say you had deep respect for his knowledge and his ability, and you really enjoyed experiencing his craft when he was instructing. He maintained a calmness. He was respectful and professional, and enjoyed listening to others' perspectives. He had well-considered justifications for those perspectives, and you unquestionably trusted him and his judgment. He was an exceptional aircrewman, and you always looked forward to flying with him.

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D1: That's correct.

MAJ CHAPMAN: In relation to CPL Alex Naggs, you met Alex, who you refer to as Naggsy, upon your return to 173 Squadron in June 2022. And you were in the same Troop, and you only sat a couple of desks from one

another. Naggsy, as you say, was a quiet and unassuming character, and you liked his manner, and you admired his attitude. And whether or not he was having a bad day with some stresses or not, he always had a beaming smile on his face, and was always offering to help or to take on more work where he could. You got on very well. You had similar interests.

D1: Correct.

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MAJ CHAPMAN: You flew with Naggsy on 21 occasions. His personality in the aircraft was exactly as it was outside the aircraft. He was a quiet professional. And his studious attitude and professional manner to improving himself and his skillset that led him to become a trusted aircrewman.

I trusted him. I trusted his judgment. I trusted him as an aircrewman, and I always enjoyed flying with him.

D1: The truth, yes.

MAJ CHAPMAN: Thank you. If I can just now conclude with some brief questions? You left Proserpine the day after the accident; is that right?

D1: Correct.

MAJ CHAPMAN: And you've not been interviewed by Queensland Police, you say, in relation to the incident?

D1: That's correct.

MAJ CHAPMAN: You haven't been directed by anyone not to speak with Queensland Police; is that right?

D1: To my recollection, that's correct, yes.

35 MAJ CHAPMAN: Were you asked, at any stage following the accident, to take some notes of your observations or record your recollection of events?

D1: We absolutely were asked to take notes, you know, as well as my professional career prior to Defence, yes, I sort of informed my colleagues as well that it was in their best interests to, you know, make as many observations and write that down as they possibly could.

MAJ CHAPMAN: Thank you. Who asked you to take the notes, do you know?

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D1: Yes, I can't recall, sorry.

MAJ CHAPMAN: Do you still have a copy of those notes?

5 D1: So my personal notes are pretty much what my Comcare details came out of - - -

MS McMURDO: Not Comcare; I think you mean the Coroner's report.

10 D1: Sorry, ma'am, you're correct.

MS McMURDO: What was called "the Defence statement".

D1: Sorry, ma'am, correct, the Coroner's statement, yes.

MAJ CHAPMAN: Could you provide them to the Inquiry, make them available?

D1: I have a copy that I can make available, yes.

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MS McMURDO: When did you make those notes?

D1: I believe, ma'am, I commenced those on the Sunday, which must have been the 30th. I think the same day we had a work meeting – or a work 25 gathering, I should say, rather, in the afternoon, and I probably took up to two to three days to finish that detail.

MAJ CHAPMAN: Finally, you attended the funerals for all four crew of Bushman 83?

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D1: That's correct. I had an official duty at Max's, but I attended all four.

MAJ CHAPMAN: You attended, you say, the memorial service of 83, held at 6 Avn on 27 September 2023?

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D1: Correct.

MAJ CHAPMAN: You did not attend the Anzac Day service; is that right?

40 D1: Correct.

> MAJ CHAPMAN: Just finally, were you aware of the camp being collapsed soon after the accident?

D1: I had to move tents on the morning of the incident because they were beginning to collapse the camp. However, when we left on the Saturday afternoon, everything was still erected.

5 MAJ CHAPMAN: Just a moment. That's the evidence, thank you.

MS McMURDO: Thank you very much. Applications to cross-examine?

LCDR GRACIE: Thanks, ma'am.

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MS McMURDO: How long will you be?

LCDR GRACIE: I'm just about to get to that. Can I suggest two avenues, ma'am. My preference would be that given D1's evidence, in my assessment anyway, is the most significant, helpful and thoughtful evidence that we've received in relation to the D witnesses, it would be very helpful to have the transcript of his evidence, because I think it impacts significantly on some of the evidence that the other D witnesses have given. We've got some 31 pages of evidence from D1.

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MS McMURDO: You've had that for some time though, haven't you?

LCDR GRACIE: Two days, I think, yes. But, in my respectful submission, this evidence would have been of greater assistance if it came 25 first, rather than at the end, because there's a lot of material that it relates to in relation to the earlier witnesses. The alternative, ma'am, is I would ask that this witness's cross-examination be deferred to the next block for that reason.

30 MS McMURDO: Is anyone else able to cross-examine at this point?

SQNLDR NICOLSON: I can.

MS McMURDO: Thank you. Perhaps I'll hear from - - -

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LCDR GRACIE: I was going to say, ma'am, the alternative is, if I am forced on, I'll be a couple of minutes.

MAJ CHAPMAN: If I may, just while that's occurring, just make the 40 observation, Chair, that LCDR Gracie has had D1's Coroner's statement since March.

LCDR GRACIE: I will accept that.

45 MS McMURDO: Yes, SQNLDR Nicolson.

< CROSS-EXAMINATION BY SQNLDR NICOLSON

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SQNLDR NICOLSON: Good afternoon. SQNLDR Nicolson. I appear for D10. You know D10 as the Officer Commanding 6 Aviation in 22/23. Can I talk to you about your Inquiry statement? And I should indicate I will be about five minutes in questions I ask of you. In your

10 Inquiry statement, D1, you refer, at paragraph 19, which is page 7 of 26 – this is the question about specific parameters that you refer to.

MS McMURDO: Sorry, could you just give us that again?

15 SQNLDR NICOLSON: Yes, ma'am, the Inquiry statement, page 7 of 26, paragraph 19.

MS McMURDO: Thank you.

20 SQNLDR NICOLSON: D1, you've got that paragraph there?

D1: Affirmed.

SQNLDR NICOLSON: Was that the four occasions that you referred to as 25 the specific parameters that you're referring to about the night of 28 July?

D1: If I remember correctly, they were the equivalent parameters that were identified and, therefore, they are the occasions that I will have flown under those parameters, yes.

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SQNLDR NICOLSON: When we're talking about the mission on 28 July, in terms of low water, at night, on goggles, in formation, that they're similar to what you experienced or planned for on the night of 28 July?

35 D1: Correct.

> SONLDR NICOLSON: Just one question: on top of that, we've heard about the Jervis Bay incident. Were you part of that process in the Jervis Bay sortie?

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D1: I was at Jervis Bay. I was not in any of the helicopters that were flying when the incident occurred.

SQNLDR NICOLSON: Thank you. Can I just talk now about you've referred to in your evidence about the Executive team in '23. Who did you define the Executive team as?

5 D1: So when I'm talking about the Executive team in that instance, I'm talking about the 173 Squadron Executive team. For me, personally, that includes, obviously, the OC, myself, the OPSO. I would put the two QFIs, the – I'm trying to think if there was one – correction – two QAIs at that time, and I'd also include the Troop Commanders.

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SQNLDR NICOLSON: The Troop Commanders had the on-ground work in terms of dealing with all the aircrew?

D1: Sorry, say that again?

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SQNLDR NICOLSON: The Troop Commanders, that was D20 and CAPT Lyon at the time? You could just check with the pseudonyms.

D1: For the Aviation Troops, yes, that's correct.

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SQNLDR NICOLSON: Yes. And they had the control of the Aviation Troops at the time?

D1: That's correct.

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SQNLDR NICOLSON: You talked about your role as the Executive Officer for D10. Did he support you in the work schedule that you did as the Executive Officer over the time in '23?

30 D1: He absolutely supported me in my role and he would often ask me to work less, yes.

SONLDR NICOLSON: In terms of D10, did he provide you guidance in relation to the plan to ensure that the mission window was controlled within the set shift routine? This is particularly for the mission on 28 July.

D1: I don't believe that the mission window was set. It's not my recollection that D10 gave me direction about the mission window.

40 SQNLDR NICOLSON: Thank you. In terms of the weather conditions on the night, were they considered, in your view, to be normal?

D1: Yes.

SQNLDR NICOLSON: There was some questions asked of you about the decision with the formation to turn left. Was that something that was addressed in the Rehearsal of Concept drill prior to the mission taking place, to your recollection?

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D1: I can't recall specifically addressing that.

SQNLDR NICOLSON: Thank you. Thank you, ma'am.

10 MS McMURDO: Thank you. Any other applications to cross-examine, apart from LCDR Gracie?

LCDR TYSON: Yes.

15 MS McMURDO: Yes, Lieutenant Commander.

LCDR TYSON: I'll just be very brief, ma'am.

20 <CROSS-EXAMINATION BY LCDR TYSON</p>

LCDR TYSON: I am representing CPL Alex Naggs. My name's LCDR Tyson. You gave some evidence about D10 giving a Direction in orders about mobile phones. What was that Direction, please?

D1: That Direction was that mobile phones would not be carried on the mission. They were to be placed, as we discussed, in a box in the Ops tent prior to departure.

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LCDR TYSON: When was that Direction given?

D1: That Direction was given before orders. I can't recall the exact time, and I gave the Direction in orders.

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LCDR TYSON: When was that again?

D1: Orders were from 1410 to approximately 1500 on the afternoon of 28 July.

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LCDR TYSON: Was that rule equally applicable to aircrew and pilots, or was there one rule for aircrew and a different rule for pilots?

D1: No, that was for all aircrew which is composed of aircrewman and 45 pilots.

LCDR TYSON: What did you mean by – you said something about there was an onus on the individual to comply. What do you mean by that, please?

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D1: So there is a Direction given in this case, I guess, by me because I gave the orders with the support of D10. If the individual does not comply with the Direction, they own – I'll use the word "consequence" but it's not - for want of a better term - but, you know, it's up to them to be disciplined, to follow the Direction.

LCDR TYSON: You'd agree the Army is a disciplined service; correct?

D1: Correct.

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LCDR TYSON: D10 was, what, a at the time?

D1: Correct.

20 LCDR TYSON: And the AMC?

D1: Correct.

LCDR TYSON: Or Acting AMC. So it wasn't a case of it was up to the 25 individual to comply, was it? What do you mean by that?

D1: I see where you're going with this. It is a direct order, essentially, from D10 to not carry the phone. I guess the only way he can enforce that or confirm in his own mind – and I'm speaking on behalf of him right now - but I think that the only way he can make sure that that happens is if he individually checks every pilot and every aircrewman to see if they have carriage of their phone.

LCDR TYSON: But he would've been entitled to expect that everyone, not just aircrewmen, but also the pilots and co-pilots, would comply with 35 that order.

D1: He would absolutely expect that they would comply with his Direction, yes.

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MS McMURDO: Because you were never suggesting anything to the contrary, were you?

D1: That's correct, ma'am.

LCDR TYSON: Nothing further, ma'am. MS McMURDO: Thank you. Any other – sorry. AVM HARLAND: Was this a new order, something which was unfamiliar, or was this kind of routine on exercises? D1: Look, it was, sir; it was unfamiliar, which I guess is the reason that there were oversights, yes. And based on where we were at the time, that order was made for those reasons, yes. AVM HARLAND: Okay, thank you. MS McMURDO: Any other applications to cross-examine? No. Yes, returning to you. LCDR GRACIE: Yes, ma'am. MS McMURDO: Did you want to say something further? LCDR GRACIE: Yes. I had thought I was going to be supported in my application, but since I now haven't been, I don't want to stand in the way of progress. I will just deal with the very few matters that I want to deal with. MS McMURDO: Well, yes, you know, we are trying to conduct this in a trauma-informed way, and it's obviously in the witness's interest to finish his evidence today. So your application would not have been successful had you pursued it. LCDR GRACIE: I hope trauma-informed extends to Counsel representing

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too, ma'am, because - - -

MS McMURDO: They're not high on my list of priorities, I have to say, LCDR Gracie. 35

LCDR GRACIE: I do get that feeling, ma'am, but I'll be very brief then. I'm not going to inconvenience the witness further.

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< CROSS-EXAMINATION BY LCDR GRACIE

LCDR GRACIE: I represent the interests of CAPT Lyon. So thank you. 45 Look, you mentioned that the RADALT became unserviceable during the hover. Now, I just want to make it clear that the hover we're talking about is the left turn with the heavy left formation, prior to the IP?

D1: Incorrect. Incorrect. So where all of the aircraft were parked, we had 5 to lift the aircraft up, transit it forward in a slow forward hover, land the aircraft at the hot refuel point, obviously take on fuel, and then perform the same manoeuvre back to where we started.

- We identified, initially, a fault when we picked up the first time; however, 10 it momentarily rectified itself while we got to the hot refuel point. After we took on fuel and picked up again, it failed completely and that made that aircraft unserviceable. So we returned to our landing point, we shut the aircraft down, and we jumped in the spare aircraft.
- 15 The spare aircraft did not have an unserviceable RADALT, nor are we allowed to fly with an aircraft that has an unserviceable RADALT.

LCDR GRACIE: So I thought you said earlier in your testimony that this was not at the time of take-off from Proserpine; is that correct?

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D1: This was well before the time of take-off at Proserpine.

LCDR GRACIE: Are you aware of a situation with 81 having the RADALT unserviceable, and it having to change aircraft?

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D1: That's the aircraft that I was in.

LCDR GRACIE: So when you took that hover – so that's not pre-take-off; that's at the hover just after take-off, where you're setting your instruments?

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- D1: Completely separate parts of the mission. So prior to taking-off airborne for the mission, we have to – so you've got, you know, six aircraft parked, two columns of three. I can't remember exactly where the aircraft were parked, but we had to pick the aircraft up to a hover. We had to manoeuvre around other parked aircraft, to move to a fuel truck. There is very set rules about where the fuel truck can be established, hence that requirement for the aircraft to be air-taxied, as we call it, to that point.
- Because that aircraft, you know, went unserviceable, we had to return it to 40 its parking point, move to the spare aircraft, which was in a column – you know, one of the columns of three. And that aircraft was serviceable for the departure on the mission.
- LCDR GRACIE: Thank you for clarifying that because I hadn't appreciated that it was after that take-off point. I thought it was before then. 45

Only one other thing: can you have the TAC mode and the RADALT set at the same time?

D1: If, by the "TAC mode", you mean AFCS, yes.

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LCDR GRACIE: Yes, okay.

D1: My understanding is yes.

10 LCDR GRACIE: Okay, thank you. Nothing further, ma'am. Thanking you, sir.

MS McMURDO: The Air Vice-Marshal has some questions.

AVM HARLAND: Just a couple of questions. This won't take long. TALISMAN SABRE '23, did you attend a mass Air brief for that?

D1: My recollection, sir, is that, yes – I can't remember. I remember having a brief in barracks at 6 Avn, and I remember having a brief in the Ops tent at TALISMAN SABRE. So therefore I can't recall whether the air brief or the airspace brief was done at TALISMAN SABRE, or whether it was done in barracks at Holsworthy.

AVM HARLAND: The one in Holsworthy, how was that conducted?

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D1: There are numerous briefs that we have, you know, not least, you know, RSONI; orders, generally speaking; the set-up of the exercise; and then, you know, aircrew specifically go into a brief. And I can't remember whether the brief was conducted virtually with all of us in a room or whether we had the orders, sorry – sorry, we had the material, and presented the material. Yes, I can't recall that, sorry.

AVM HARLAND: But you recall that there was a mass Air brief or similar. Was there a sign-up sheet for that, to show that all the aircrew had attended?

D1: I don't recall signing anything off for that.

AVM HARLAND: Okay, thank you. You talked about the display and management at the displays in the MRH-90 when you came across and did your conversion course, and you said that they could be quite confusing, and that it seemed very much to be left up to the Aircraft Captain. I'm assuming that's what you meant. Is that true?

D1: There were some, I guess, standards that we worked to in terms of, you know, when certain information was displayed. And, generally speaking, both pilots would present the information similarly, with some room to move in terms of pilot preference on those screens.

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AVM HARLAND: Where were those standards expressed?

D1: First of all, it was taught to me on the MRH Transition Course, about how to best use the information then. Then, of course, when you flew with an instructor at 6 Aviation Regiment, you know, they obviously taught best practice. I wouldn't say that there was a standard. It was up to the Aircraft Captain's preference. I would also say that, you know, the majority of aircrew operated the exact same way, or in a very similar way.

- 15 AVM HARLAND: That was going to be my next question: whether, as a co-pilot, you found you had to adapt to whoever was the Aircraft Captain? You were saying it was generally the same?
- D1: Generally speaking, sir, yes. You'd find that most people would 20 operate the systems the same way with, like I said, plus or minus their personal preferences.
 - AVM HARLAND: When you came across from Black Hawk to MRH-90. did you do an operational conversion type to the MRH-90?

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D1: They called it our Transition Course. Yes, sir.

AVM HARLAND: Transition Course. How long was that course?

30 D1: That was about five and a half months. I think I did 84 hours, or something like that, to complete that transition.

AVM HARLAND: Did that include ground school and air training?

35 D1: There was a ground school simulator and aircraft work, yes.

> AVM HARLAND: Did you feel comfortable and familiar with the MRH-90, both as an airframe, engines, and also managing the avionics system?

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D1: By that time, in July 2023, yes, I was starting to get pretty comfortable with the aircraft.

AVM HARLAND: And you felt conversant with the systems, once you'd 45 finished your conversion course?

D1: That's right, sir. Was I an expert? By no means was I. There was always more to learn, you know. Couple that with my busy ground roles, I wasn't spending enough time — well, in my desire, I was not spending enough time with the aircraft. But having said that, I was comfortable with the use of the systems; just I wasn't expanding my knowledge, I was remaining current.

AVM HARLAND: Were you confident that you understood how to engage the different AFCS modes?

D1: Absolutely, sir, that was very straightforward, yes.

AVM HARLAND: That's all I have.

MS McMURDO: Thank you. Any re-examination, LT Chapman?

Thank you very much for your assistance. We have asked that if you could provide the notes, and also your thoughts about the FRAT.

D1: Sure thing, ma'am.

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MS McMURDO: That would be very good. The Inquiry really appreciates the thoughtful way you've gone about preparing and giving your evidence, and it's absolutely in the best interests of the ADF.

D1: Thank you, ma'am.

MS McMURDO: Thank you. We'll adjourn shortly. Before I do, there are a few matters I have to address.

COL STREIT: Excuse me, ma'am. Could the witness be excused?

MS McMURDO: Yes, of course.

You're excused and free to go.

D1: Thank you, ma'am.

<WITNESS WITHDREW

LCDR GRACIE: And, ma'am, could I be excused? I have to return a Defence vehicle before 5 and if I don't, I may be court martialled.

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MS McMURDO: Yes, of course. LCDR GRACIE: And I don't want that to happen. 5 MS McMURDO: Well, we live in hope. I am only joking. LCDR GRACIE: Unfortunately, no, I know, ma'am, I'll be here for October. I'll be excused. 10 MS McMURDO: Thank you. Following a request from the Deputy Prime Minster and Minister for Defence, the Honourable Richard Marles MP, and after consultation with me, the Inspector-General ADF has amended paragraph (s) of the Inquiry's Directions so that it now reads: 15 (s) The performance and adequacy of the post-incident procedures, including: (1) rescue, recovery and casualty notification and reports; 20 (2) Defence's decision to remove witnesses from Queensland starting after the incident, and the impact of this decision on the activities of the Oueensland Police; and 25 (3) whether the Defence's actions were sufficient to ensure that witnesses did not collude before statements were taken (whether or not there was collusion). The Inquiry has now received 43 submissions so far. Relevant personal 30 experiences and observations may be extremely important to the Inquiry investigation, as has been seen by some of the witnesses who have given evidence in this matter. The Inquiry welcomes submissions from current or retired members of the Australian Defence Force and members of the public. 35 Submissions can be made by completing the online form or by email. Submissions can be made anonymously. The Inquiry will acknowledge and review all submissions, and follow-up as required. 40

information to the Inquiry.

It is an offence to prevent or dissuade someone from providing information to the Inquiry, or to victimise, penalise, or prejudice someone who has given

The next Inquiry hearings will be held in Brisbane at The Convention

Centre from Monday the 14th to Friday, 18 October, commencing at

9:30 am on Monday, 14 October. Daylight Saving in New South Wales will have commenced by then.

Much of the evidence heard over the past two weeks may have been distressing to those in the hearing room or listening remotely. Help is 5 always available. Please see the phone numbers displayed on the livestream or on the IGADF website.

PUBLIC INQUIRY ADJOURNED UNTIL 10 **MONDAY, 14 OCTOBER 2024 AT 1000**