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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 MAJ L CHAPMAN and FLTLT A ROSE, Counsel Assisting

LCDR M GRACIE, representing CAPT D Lyon SQNLDR J GILES, representing LT M Nugent LCDR M TYSON, representing CPL A Naggs SQNLDR C THOMPSON, representing WO2 J P Laycock COL N GABBEDY, representing MAJGEN Jobson COL S THOMPSON, representing BRIG D Thompson LTCOL D HEALEY, representing BRIG J Fenwick SQNLDR T SCHMITT, representing COL D Lynch SQNLDR M NICOLSON, with FLTLT S SEEFELD, representing D10 CMDR B JONES SC, representing D19 MR G O'MAHONEY, representing Airbus MS K MUSGROVE, representing the Commonwealth

0930, FRIDAY, 2 MAY 2025

DAY 53

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)
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.MRH-90 Inquiry 02/05/25

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OFFICIAL

MS McMURDO: Yes, COL Streit.

COL STREIT: Good morning, Ms McMurdo, AVM Harland. Just by

- way of updating the planned proceedings for next week, the intent is to
 finish D10's evidence today, then I will call D19 and commence his evidence. D19's evidence will move into Tuesday of next week, noting that Monday is a public holiday. We will then conclude D19's evidence. The intent is to do that on the Tuesday.
- 10 Dr Adrian Smith was to be called on the Tuesday. We have spoken with Dr Smith. He has availability to be called on Friday. I am very grateful to him. He's probably been the most accommodating and flexible witness the Inquiry has, so I thank him very much for that.
- 15 If we were to conclude D19's evidence on Tuesday and there was still time left in the hearing day, then I would apply to call Dr Smith and commence his evidence, and then interpose MAJGEN Jobson first thing on Wednesday morning, and deal with his evidence over Wednesday and Thursday. MAJGEN Jobson has a personal commitment for Friday, so therefore must depart the Inquiry's proceedings on Thursday night.

Subject to that plan working, we will either call Dr Smith on the Friday, or conclude his evidence, and I understand there may be some statements submitted thereafter, orally, on behalf of the families.

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That is the plan for today and for next week. I just ask Counsel representing to consider that plan, and to the extent they're able to, to try to work within that plan. Thank you.

- 30 MS McMURDO: Thanks, COL Streit. Yes, that certainly seems the best we can do in the circumstances, trying to accommodate the competing needs of the various witnesses. And could I also thank Dr Smith for his great efforts in accommodating the requirements of the Inquiry. Thank you. Yes, something more?
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LCDR GRACIE: Just in terms of the planning though, I can indicate that after this witness, I have very little left for any of the other witnesses, so that might move things along.

40 MS McMURDO: You might say that, but I couldn't possibly comment.

LCDR GRACIE: That's very gracious of you, ma'am. But I do have what we call a Gabbedy application, when overnight, before I – although I did finish with this witness, there's about five minutes more that I think I

can do in Public Session. That's better than in Private. Just another five minutes with this witness, ma'am. Thank you.

MS McMURDO: You have the good news and then the bad news. All right then. Thank you, LCDR Gracie.

<D10, recalled, on former oath

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<CROSS-EXAMINATION BY LCDR GRACIE, continuing

LCDR GRACIE: Good morning again, I understand that you've got a total of 389 hours in an MRH, which includes sim training.

D10: Roughly, yes.

LCDR GRACIE: Roughly. How much of that is sim-related? We've heard various estimates. Some say 25 per cent. Some say 30.

D10: I believe I cover it in my statement. I can look for it.

- LCDR GRACIE: You don't have to worry about that. That's all right.
 Something that came out of yesterday that I was trying to conceptualise and I apologise, AVM Harland clearly understood it but I didn't and I just wanted to see whether or not I understand this correctly. Your co-pilot D9?
- 30 D10: Yes.

LCDR GRACIE: Was doing his AMC quals.

D10: Yes.

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LCDR GRACIE: But not flying. You were primarily flying on that mission – sortie.

D10: Okay. So he was still a pilot, but not as flying pilot for some of the sortie, yes.

LCDR GRACIE: Then we've heard some evidence that D20 was very disappointed about not being able to do her AMC quals – and I don't mean this pejoratively – but D9 was given that priority. It might come

across as naive on my part, but why did they need to be in the helicopter to do their AMC training? What are they doing if they're not flying?

D10: The specifics of the Air Mission Commander is the airbornecommand of that formation.

LCDR GRACIE: Yes. Can you perhaps give some detail about what they are actually doing to qualify, rather than sitting at a desk and doing it? What's the difference?

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D10: The example I provide is the actions I undertook post-incident.

LCDR GRACIE: What do you mean?

15 D10: Manoeuvring different elements, significant changes in mission, controlling all the forces airborne for the support of that mission.

LCDR GRACIE: I think I understand, but if you've got 389 hours in an MRH, it looks to me though as if there's a separate set of currencies. One is as an aircraft pilot, and the other is in terms of administration, like Troop Commander or AMC. Is that a fair comment?

D10: No. So the flying qualifications are listed in the unit UTAP. I can't remember what that stands for, sorry. The UTAP is specific to each individual unit. The Troop Command position is an appointed position for an officer.

LCDR GRACIE: Let me just try and contextualise this a bit.

- CAPT Lyon has, I think, about 1700 hours total. It might be 1400 in
 MRH. I think LT Nugent has more hours than you do in an MRH, but he's under training, flying as a co-pilot under a more experienced SOQ. How do you get to be the AMC in relation to an MRH night formation with less hours than, let's say, those two pilots?
- 35 D10: So the AMC qualification, the Air Mission Commander qualification, is a mission qual, separate to the specific aircraft. So the mission we were undertaking I had considerable time on over MRH and Black Hawk.
- 40 LCDR GRACIE: So your expertise, if I can put it that way, as an AMC is not type-specific?

D10: The qualification, I believe, is awarded based on the type, but the experience required to get the qualification is required – sorry, covers the

mission-specific. So the example I'd provide – I'd been flying Special Operations Aviation missions at that point since 2015.

LCDR GRACIE: On the MRH, you are CAT C?

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D10: CAT A.

LCDR GRACIE: CAT A. So with 389 hours you're a CAT A not based on your experience with the MRH but based on your overall experience as a pilot in all different types of airframes, and because of your AMC training?

D10: The category of a pilot is assessed based on the qualifications that they have against the unit UTAP.

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LCDR GRACIE: I think – to use the Air Vice-Marshal's words the other day – I think that's a "Yes".

D10: Can you restate the question, sorry?

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LCDR GRACIE: Yes. Your CAT A qual for the MRH is not based on your time on the MRH, it's based upon those other matters that are introduced into your qualifications, such as AMC or overall flying time on other aircraft types.

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D10: That would be a fair assessment.

LCDR GRACIE: Because to equate the number of hours you have on an MRH with LT Nugent, you'd be a CAT C, if that's all you're looking at.

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D10: For clarity, it would be worth looking at the unit UTAP. There are qualifications which list what category of pilot you are. Some of those are based on hours. Some of those are based on specific events.

- 35 LCDR GRACIE: But with your number of hours on an MRH, does that mean that you necessarily defer, in terms of your mission planning, to those Aircraft Captains and aircrew with considerable experience on an MRH?
- 40 D10: For the mission planning, I will always defer to the experience in the room as the Commander.

LCDR GRACIE: I understand. I just want to come back to the weather because I want to put a proposition to you – or ask you a question. Was

there any time that you formed the view, prior to that sudden pitch down of 83, that 83 had lost situational awareness?

D10: No.

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LCDR GRACIE: If you had formed that view, what would you do?

D10: I would have notified whether they were – the terminology would be, "Confirm operations normal", which is a prompt for that Aircraft Captain.

LCDR GRACIE: I won't use the word that's in your CVR, but let's say something unusual about the station-keeping of 83 did not lead you to form the view that there was an incident or a moment of situational awareness by 83.

D10: The only point at which I considered 83 was in a position that was absolutely not normal was the last 10 seconds.

- 20 LCDR GRACIE: And that was because, as I mentioned yesterday, the 14-second climb, that didn't seem to you to be anything abnormal. But were you reassured in your assessment because 82 plateaued at the top of that climb? Do you remember you say in your evidence that it plateaued?
- 25 D10: I don't recall referring to 82 as the aircraft that plateaued. I thought it was 83.

LCDR GRACIE: 83. My fault, my apologies.

30 D10: Can you restate the question?

LCDR GRACIE: Yes. Were you reinforced in your assessment that there was nothing abnormal or worrying by the fact that there was that 14-second climb and then a levelling, or a plateauing, of the aircraft before that pitch?

D10: Are you asking when did I identify an error?

40 LCDR GRACIE: No, what I'm saying is did that plateauing reinforce 40 your assessment that there was nothing necessarily abnormal about that profile?

D10: No. The gentle climb that was commenced took me some time to recognise. Once I recognised what was occurring was almost the same

time that the action of nose down occurred, which was when I made the notification to the aircraft.

LCDR GRACIE: So if you formed the view that there was no loss of situational awareness, what was your thinking at the time as to what 83 was doing?

D10: The Captain of 83, I've never had any concern of from a competence perspective as a pilot, which is why their level of manoeuvring in the position of 3 was never a concern because it was within the realm of what I would deem normal.

LCDR GRACIE: Look, some of these questions go to some matters that will be dealt with in the Private Session. Remember, I talked about limited conditions? We'll discuss that in the Private Session. But I just want to lay some foundations for that. The evidence of D9, your co-pilot, was that:

The lunar conditions on that night were not something that I assessed, and by definition were that of low illumination.

Would you agree with that?

D10: The moon conditions are set out in the mission orders. Yes.

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LCDR GRACIE: No. Would you agree that it was low illumination?

D10: What would you define as low illumination?

30 LCDR GRACIE: I'm just using his words. What would you call it?

D10: I would call it 85 per cent moon.

LCDR GRACIE: Are you saying 85 per cent is low illumination, or are you rejecting the proposition that it's low illumination if it's 85 per cent?

D10: I'm rejecting the proposition that it's low illumination.

40 LCDR GRACIE: The evidence of D12 – he was the right-hand seated aircrewman – he said that:

The weather throughout the sortie was sub-optimal, and by that I mean there were scattered showers and clouds scattered through the area of operation; a normal part of flying, and I'd flown in similar conditions. Scattered rain showers on the mountain

range. The conditions resulted in the mission path changing direction.

That relates to that saddle at Cape Conway, doesn't it? You were going to go through the two higher ranges along Cape Conway, and the cloud was too low to go through that.

D10: It relates to the planned flight path in the saddle. I can't recall the name, if it's Conway that you state.

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LCDR GRACIE: I just want to ask you this. I've had occasion to look overnight, because I had nothing better to do, at the Survey Office Department of Lands, where I see back in 1968 you can buy a copy of this for 60 cents. But it's the topographical data for that saddle, and the lowest part of the saddle is 172 feet. Was that obscured in cloud?

D10: No.

LCDR GRACIE: The highest part is 725 to the left, the way that you're transiting, and 940 to the right. Was that obscured in cloud?

D10: The tops of the mountain range were close to the cloud. I can't remember exactly where, or the heights.

LCDR GRACIE: So why, if you're at 500 or even 350, why couldn't you go through the saddle?

D10: The minimum authorised cloud separation was 1000 feet, which the forecast and actual conditions were better than.

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LCDR GRACIE: That's what I'm asking. If the cloud was higher than that, then it would've cleared those two - if you assume the data I've given you - would've cleared those two sides of the saddle.

35 D10: No, so I spoke about it in my – it's either my official or my DFSB statement, but there are specific weather phenomena with a ridge/mountain – no, sorry, a ridgeline with warm, moist air moving over it where cloud can form. That cloud was – sorry, that phenomena is what I raised in orders, which caused the Rehearsal of Concept to cover this.

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LCDR GRACIE: Let me just be quite specific though. I'm asking whether or not either side of the saddle at 725 to the left of the aircraft, and 172 – sorry, 940 feet to the right, were obscured in cloud.

45 D10: As I stated, the ridgeline - - -

LCDR GRACIE: Please, can you just answer, were they covered in cloud?

5 D10: You're asking a very specific geographical position, which I cannot recall.

LCDR GRACIE: Right. So - - -

10 D10: I've answered with the ridgeline, which is to the east of that.

LCDR GRACIE: I thought you said that you observed them covered in cloud.

15 D10: The ridgeline had cloud, yes.

LCDR GRACIE: So if you accept from me the ridgeline has a maximum to the left of 725 feet and 940 to the right – maximums – they were obscured in cloud?

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D10: The ridgeline to the right had cloud within the vicinity. I couldn't say the height.

LCDR GRACIE: No, I'm not asking that, but your recollection is that they were obscured?

D10: I'm not saying they were obscured. I'm saying there was cloud in the vicinity which caused the deliberate decision.

- 30 LCDR GRACIE: The evidence of D3, Bushmaster 1 aircrew, said that visibility as approaching the IP was reduced in the showers, and there was also low cloud forming in the area. He asked the AC of 81 if he wanted the doors open:
- 35 So myself and the other aircrewman could aid looking for any terrain and having more situational awareness.

Do you recall low cloud forming in the area of the IP?

40 D10: No. The assessment was the cloud was at the forecasted level.

LCDR GRACIE: D3 also said, when asked whether or not he was in a sterile cockpit, he said:

I don't imagine we would have been because we would have been discussing the weather and what was going on.

Was that a constant discussion between you and D9 in your cockpit?

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D10: Yes.

LCDR GRACIE: Because it was variable?

10 D10: Weather is always a discussion during flight.

LCDR GRACIE: Then D3 also said:

As the visibility started to reduce with the showers and those clouds started to form, through my experience it's kind of a good spot to start trying to increase your situational awareness in those positions. So if we've got the doors open, we could assess better routes for avoiding terrain and cloud, and that kind of stuff.

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Was that behind your direction for the opening of the doors at that point in the IP that you've said was earlier than the other three aircraft?

D10: Are you asking did I direct D3?

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LCDR GRACIE: Did you direct the opening of the doors for the same sort of reasons that D3 mentioned, that there was reduced visibility with the rain, the formation of low clouds, and that opening the doors would provide better visual cues of the weather, the route, and the formation?

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D10: No, we opened our doors at the point I'd assessed was briefed in orders.

LCDR GRACIE: He said, perhaps a little bit self-servingly, but I have no reason to question it, he said:

> Through our experience, aircrewman are pretty astute to figuring out where you're going to start losing situational awareness.

40 Would you accept that statement?

D10: Yes.

LCDR GRACIE: Do you know WO2 Thomas? He's from 5 Avn.

D10: Is he on the list, sorry?

LCDR GRACIE: No.

5 D10: Not that I can recall, no.

LCDR GRACIE: I put to you yesterday that there was some evidence – and I misstated it because I thought it was in the Standing Instructions – about the doors having to be open for a flight of less than 20 minutes duration from take-off to target. It's actually based on this evidence in the Operations Manual. Would that be the source of that information, to your knowledge?

D10: No, that's listed in a very specific SOP.

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LCDR GRACIE: Would that be unique only to 5 Avn, or would it be across the board for MRH operations?

D10: I'm not sure which 5 Avn SOP you're speaking about. There is one specific for 6 Avn.

LCDR GRACIE: Is there? Okay. And does it have that requirement that I've just mentioned about the doors being open for a flight of less than 20 minutes duration?

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D10: Sorry, I'm just trying to think through that. I'm happy to cover what's contained in that SOP in detail. It's above this.

LCDR GRACIE: Sure, but do you know if it's in there? Is there 30 something to that effect?

D10: I don't believe it's listed as a "must".

LCDR GRACIE: Well, D2 says at the mission briefing, "What are we doing with the doors?" Sorry, WO2 Laycock said, "What are we doing with the doors?" and D2 said, "Open", and he said, "Which is in accordance with the Standard Operating Procedure that if the transit time is less than 20 minutes, the doors of the aircraft should be configured for landing, which means having the doors open". Does that accord with your understanding of the SOP?

D10: There is a specific SOP covering this, yes.

45 LCDR GRACIE: In terms of the conditions on the night, the fact that 45 you did not see any concern to give rise to an assessment that there was a

loss of situational awareness by 83 – I'm sorry, I'll withdraw that, ma'am. I don't need that. I just want to see whether or not 6 Avn have a different approach to this issue of the doors to 5 Avn, and we can explore the detail of it in the Private Session as to why. But as I said, WO2 Thomas gave evidence about the practice at 5 Avn. He gave evidence that:

As aircrew, ultimately our priority is the aircraft in front. If the doors are closed, and you're in a seatbelt, you cannot see a lot. You're probably about two arms, arm and a half length away from the window when you're strapped in.

Would that be a fair assessment?

15 D10: Roughly, yes.

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LCDR GRACIE: And he said his job is to look out for the aircraft in front. And he was asked how confident he'd be able to perform that duty when seatbelted with the doors closed, and he said, "Not very confident". With that sort of expertise that was available to you with D2, what was the overriding thing from a safety perspective to have the doors closed?

D10: I believe I've already covered that in my statement in detail, plus previous discussions.

LCDR GRACIE: What's the overriding thing in relation to safety? I'm not talking about wind chill. I'm not talking about the comfort of the aircrew. What was the overriding factor to have those doors closed in a night sortie, in possible degraded visual environment, at low level?

D10: The welfare of those aircrewman is always the overriding constraint.

35 LCDR GRACIE: Thank you. And - - -

D10: Sorry, and I would add, for context, it is deliberate to the portion of flight that I'm discussing, that welfare concern.

40 LCDR GRACIE: I understand. Thank you. And Warrant Officer Class Two was asked the question in relation to the practice at 5 Avn, he says the standard is to fly with doors open. He says he's never flown on a mission where you've had the doors closed for the majority of the mission, except a transit. And he was asked:

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If you're flying in a sortie that's approximately about half an hour or less, and it's at night, in formation, overwater?

WO2: I would have the doors open, and that was standard practice at 5 Avn.

Was that standard practice at 6 Avn?

D10: It depends on the context once again.

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LCDR GRACIE: Well, night formation, overwater, of a sortie of half an hour or less.

D10: The reason to have the doors open within that specified time is very specific, which I'll cover in a different forum.

LCDR GRACIE: I'm just asking about standard practice.

D10: My answer is the same.

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LCDR GRACIE: All right. Thank you, ma'am. I have no further questions. Thank you,

MS McMURDO: Yes, LCDR Tyson.

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<CROSS-EXAMINATION BY LCDR TYSON

- 30 LCDR TYSON: D10, my name is LCDR Matthew Tyson. I represent the interests of CPL Alex Naggs. The first topic that I want to ask you about is a topic relating to instrument scanning techniques when flying the MRH-90. So that's the first topic I'm going to ask you about. Are you familiar, D10, with the attitude indicator in the MRH-90?
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D10: Yes.

LCDR TYSON: Would you agree that that is a coloured visual depiction to the pilot of both the angle of bank of the aircraft and pitch of the aircraft?

D10: Plus yaw, yes.

45 LCDR TYSON: Yes. And that attitude indicator is part of the Primary 45 Flight Display on the MRH-90 Taipan?

D10: Yes.

LCDR TYSON: And that Primary Flight Display in the Taipan, is that pretty much directly in your line of sight as the flying pilot?

D10: Yes.

- LCDR TYSON: There's been some evidence in the course of the Inquiry about instrument scans and a work pattern, and eyes in, eyes out. Can you just explain to the Inquiry how you, as a flying pilot of an MRH-90, did your instrument scan of the Primary Flight Display? What was the technique that you used?
- 15 D10: The technique was the one standardised and taught at the schoolhouse. It's listed within the Standardisation Manual, and it's a directional scan, essentially.

LCDR TYSON: What does that mean as a matter of practice, please?

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D10: It means you're covering the key elements of your Primary Flight Displays, which includes attitude, roll, pitch, speeds, heights, and any of the specific navigation as a supplementary.

25 LCDR TYSON: Are you constantly scanning the Primary Flight Display while attending to other tasks?

D10: The flying pilot is required to keep the aircraft safe – sorry, will use it whilst keeping the aircraft safe, yes.

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LCDR TYSON: Is it a core principle of training as an Army Aviation MRH-90 pilot to pay close attention to the Primary Flight Display, and constantly scan the PFD, the Primary Flight Display, while flying?

35 D10: That would be a normal technique, yes.

LCDR TYSON: You are taught, aren't you, and trained to put your faith in the Primary Flight Display as a source of truth?

40 D10: Yes.

LCDR TYSON: Are you aware that in the MRH-90 STANMAN in relation to night operations there's a requirement to – quote, sorry –

To do constant cross-reference to flight instruments is required during all night operations.

Are you aware of that requirement?

D10: That is normal practice, yes.

LCDR TYSON: In circumstances where you're flying at night, overwater, at a low level of about 200 feet, using night-vision devices, in that circumstance you'd be paying particular attention to your Primary Flight Display, would you not?

D10: You always pay particular attention to the Primary Flight Display as the flying pilot.

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LCDR TYSON: In addition to the Primary Flight Display on the HMSD version 5.10, that gives you a horizon bar. Correct?

D10: Horizon line, yes.

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LCDR TYSON: Yes. A pitch indicator?

D10: Yes.

25 LCDR TYSON: There's information on it about your altitude.

D10: Barometric and RADALT, yes.

LCDR TYSON: And it also gives you a flight vector.

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D10: Yes.

LCDR TYSON: During the Bushman formation sortie on 28 July 2023, you were the flying pilot for Bushman 84. Correct?

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D10: Yes, for a vast majority.

LCDR TYSON: In addition to flying the aircraft, you were ship 4 in a four-ship heavy left formation. Correct?

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D10: Correct.

So you had to be mindful of rates of closure between 84 LCDR TYSON: and the preceding aircraft in the formation, being 83?

D10: The formation contract, yes.

LCDR TYSON: You also had duties as the Air Mission Commander?

5 D10: The overall Air Mission component, yes.

LCDR TYSON: And you were providing, I think, what, supervision or mentoring in relation to D9, in relation to that Air Mission Commander qualification as well during the mission?

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D10: Yes.

LCDR TYSON: Is this right, that you were also engaging in communications with other Coalition Aviation Ground Force elements during the course of the mission?

D10: Yes.

LCDR TYSON: While doing all of those things, were you still able to constantly scan the Primary Flight Display on Bushman 84?

D10: Yes, while I was the flying pilot.

LCDR TYSON: Would it have been your expectation during that sortie on 28 July 2023 that the flying pilots in the other three aircraft in the Bushman formation would also be constantly scanning their Primary Flight Displays within their aircraft?

D10: It would be my expectation that at all times, regardless of the profile, the flying pilots are doing that, yes.

LCDR TYSON: And that's notwithstanding their additional duties, such as maintaining the contract in relation to formation flying. Correct?

35 D10: Correct.

LCDR TYSON: And the duties that the flight lead has in relation to navigation, weather and so forth in the course of that mission?

40 D10: Yes.

LCDR TYSON: And certainly in terms of some of the personnel you had in that mission, D2 an D6 were very experienced MRH-90 pilots, weren't they?

D10: Yes.

LCDR TYSON: And D6 in fact was also a QFI.

5 D10: D2 and D6 were, yes.

LCDR TYSON: Yes, and both of them were experienced Special Operations Captains?

10 D10: Yes.

LCDR TYSON: CAPT Lyon was an experienced MRH-90 pilot?

D10: Yes.

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LCDR TYSON: And he'd also, I think, recently been qualified as a Special Operations Captain as well, hadn't he?

D10: At the end of 22, yes.

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LCDR TYSON: So your expectation would have been that all of them were confident, experienced, proficient flyers, and would have been paying constant attention to the Primary Flight Displays on their aircraft during the sortie?

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D10: When they were the flying pilots.

LCDR TYSON: When they're flying.

30 D10: Yes.

LCDR TYSON: And, incidentally, when the flying pilot is doing the scan as well as the other tasks, what is the non-flying pilot doing in terms of scanning the Primary Flight Display? Are they doing it from time to time while doing other mission preparation, or what's the non-flying pilot doing in terms of situational awareness as discerned through the Primary Flight Display?

D10: The primary role of the non-flying pilot is to manage the mission elements of that aircraft. There is a level of support that the non-flying pilot gives the flying pilot with respect to the Primary Flight Displays.

LCDR TYSON: If you're the non-flying pilot and you're told that there's going to be a handover to you of the controls of the aircraft – so that's the scenario, that's the context – are you paying attention or are you

scanning the Primary Flight Display prior to that anticipated handover of controls?

D10: Yes, as part of the procedure.

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LCDR TYSON: You're not just sitting there, staring out the window, you've actually got good situational awareness imminently, before you're going to take over as the non-flying pilot. Correct?

10 D10: In my experience, yes.

LCDR TYSON: I want to come to another topic now, the concepts of degraded visual horizon versus loss of visual horizon. Would you agree that a degraded visual horizon is not the same thing as a loss of visual horizon?

- D10: What do you define "degraded visual horizon" as?
- LCDR TYSON: Well, from time to time in the evidence some pilots refer to a degraded visual horizon. What does that term mean, as you understand it?

D10: The term "degraded visual environment" is - - -

25 LCDR TYSON: No, horizon. Sorry, horizon.

D10: "Degraded visual horizon", I'm not familiar with the term. I understand – are you referring to less than clear air?

30 LCDR TYSON: No, it's a term that some pilots, including on the particular sortie on 28 July, have used.

MS McMURDO: If it's not a term you understand, say so. If you are able to explain what it means to you, say so.

35

D10: No worries, ma'am. My understanding is degraded visual horizon, if you're saying the visual component of that is degraded, there is some degradation in the distance you can see.

40 LCDR TYSON: So it's harder to make out the visual horizon, but one can still make it out.

D10: As opposed to?

45 LCDR TYSON: Loss of visual horizon.

D10: Yes, correct.

LCDR TYSON: That's fair. So they're different terms?

5

D10: Correct.

LCDR TYSON: All right.

10 D10: Sorry, in my understanding.

LCDR TYSON: Yes. In terms of loss of visual horizon, if you were flying an MRH-90 and you lost visual horizon on a flight sortie, what would you do?

15

D10: There's a very specific sequence that you'll fly should you lose visual. I would – sorry, just to clarify, are you saying in formation or single aircraft?

- 20 LCDR TYSON: In formation. So you're flying in formation. Let's say a four-ship, heavy left formation, and in the course of that flight you've lost visual horizon. What would you do?
- D10: Context would be important. Sorry, formation flight is a visual manoeuvre, so I need to have a level of visual acuity to conduct that, and it's generally authorised. If I can still see the other aircraft – and this is where the context depends – and I can maintain my contract, it would be a deliberate assessment about what happens next.
- 30 LCDR TYSON: But would you, for example, scan your Primary Flight Display, or would you look at the horizon line in the HMSD version 5.10, or things like that?
- D10: I would take in every input I could as the flying pilot, which would include anything from the HMSD in an MRH to the Primary Flight Displays.

LCDR TYSON: Just to confirm, you've given evidence that you were the flying pilot in Bushman 84 on the sortie on 28 July 2023. Correct?

40

D10: Correct.

LCDR TYSON: In the course of flying that sortie, did you ever at any point lose visual horizon?

D10: No.

LCDR TYSON: Did you ever hear from any of the other Aircraft Captains in the other Bushman formation helicopters whether they reported to you that they had lost visual horizon?

D10: No.

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LCDR TYSON: Is this right, that you've heard the cockpit voice data recorder for Bushman 83 on the sortie?

D10: Yes.

LCDR TYSON: Do you agree that there's no statement there ever that the visual horizon had been lost within that aircraft?

D10: Yes.

LCDR TYSON: I think you've also heard your own transcript from Bushman 84, is that correct – or the recording?

D10: I've heard the voice recorder, yes.

LCDR TYSON: Did you recall – I think there's something – and sorry, I don't have a copy of it, but I've read it. Do you recall that there's something about – I think three minutes before the actual collision there's some statement about, or something?

UNIDENTIFIED SPEAKER: It's "Official: Sensitive".

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LCDR TYSON: Sorry, I withdraw that, ma'am.

So just turning to another aspect of weather conditions on the night. You've been asked some questions about showers and so forth. Just to get it clear in my mind, or for the Inquiry, in the course of the sortie on 28 July 2023, did you fly through showers, and if so, how often?

D10: The showers were scattered in the area, and we did fly through them. There were periods of flight through those showers. I couldn't confirm how many, or what percentage.

LCDR TYSON: So there were some, what, relatively short timeframes involved in flying through showers? Is that correct?

45 D10: Through the scattered showers, yes.

LCDR TYSON: You say they're scattered. Were they light showers, or heavy showers, or - - -

5 D10: The weather forecast we planned on had a specific cloud height and a visibility associated with those showers. I couldn't tell you light or heavy.

LCDR TYSON: Did a shower ever cause you to lose visibility of Bushman 83?

D10: No, I was formating off 1, 2 and 3.

LCDR TYSON: So it would therefore follow that a shower never caused you to lose visibility of 81, 82 and 83 on the sortie on 28 July 23.

D10: Correct.

LCDR TYSON: I think there's some requirement to maintain, what, about 3000 metres of visibility. Is that along the flight vector or is that to the landing zone target?

D10: The authorisation along your flight path.

- 25 LCDR TYSON: Incidentally, in the course of flying that formation, did any of the other Aircraft Captains say to you, "Look, boss, we're having difficulties because of the weather. This is not safe", or anything like that? Did they make any report of that nature to you in the course of the sortie on 28 July?
- 30

D10: No, other than what I covered in my statement about the holding point.

LCDR TYSON: Did you ever form the view that the weather conditions were such that the risks were increasing and you should abort the mission?

D10: No, we got additional data on that weather from an asset in the area.

40 LCDR TYSON: Does the flight lead in this particular formation on the night have a role in terms of navigation, considering weather, and those sort of conditions?

D10: Yes.

LCDR TYSON: Is the flight lead actually – is part of their duty, or their job, to avoid flying into pockets of particularly bad weather?

D10: I think, sorry, context will matter. Generally, as a general answer, yes.

LCDR TYSON: I now want to just ask you about a different topic, about air speed in the course of formation manoeuvre. Now, you've flown position 3 in a four-ship, heavy left formation of MRH-90s; is that correct?

D10: Many times, yes.

LCDR TYSON: When you fly the aircraft, where was air speed indicated?

D10: So it's on the Primary Flight Display and it's also in your HMSD.

LCDR TYSON: If you're flying in a heavy left formation, the third

- 20 aircraft in that of MRH-90s, and the formation is executing a turn to the left, so the aircraft on the inside of the turn needs to be mindful of the aircraft's speed, doesn't it?
- D10: It's less about the speed. It's more about the time it takes to travel to cover the same distance as the rest of the formation.

LCDR TYSON: Well, going back a moment, before this sortie, you briefed the pilots, didn't you, on the air speed that was going to be used coming up to the IP, hadn't you?

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D10: It's listed as a constant in the orders slide.

LCDR TYSON: And it's about 80 knots, wasn't it?

35 D10: Yes. I can give you the page it's on if that helps?

LCDR TYSON: So the air speed that that part of the mission was going to be conducted at would have been clear to everyone involved in the flight, in the formation?

40

D10: Yes. We're just broaching the boundaries of the Standard Operating Procedure now.

45 LCDR TYSON: Just that previous answer you gave me regarding the geometry of the turn, the situation is this, isn't it, if you're in position 3 in

the formation, the circumference of your turning circle is smaller, as compared to the circumference of the turning circle of aircraft on the outside of the turn, such as the position 2 aircraft that is on the starboard side of the flight lead? Correct?

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10

D10: Yes.

LCDR TYSON: So you need to make sure that your speed – if you're aware that it's 80 knots, you need to make sure that you're not going too quickly, so that you get out of position in the formation, don't you?

D10: The normal formation technique is to use your manoeuvre position or you can adjust your speed.

15 LCDR TYSON: But if you're aware that you're flying at 80 knots and you're in a formation and you're conducting a left turn, you'd always be mindful of your speed, wouldn't you?

D10: Yes.

20

LCDR TYSON: Is there any reason why, in executing the left turn, if you're number 3 in the position, that in the course of the turn you would substantially increase speed, say, to about 120 or 130 knots?

25 D10: The formation is still doing 80?

LCDR TYSON: Yes.

D10: No.

30

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LCDR TYSON: If you had increased speed in the course of the turn to that sort of a speed, that would be inconsistent, would it not, with opening the doors for the aircrewman?

35 D10: There is a speed associated with opening doors, yes.

LCDR TYSON: If you're increasing speed in the course of the turn and you're getting, what, more than 50 per cent of the briefed air speed, you're not permitted to open the doors in that situation, are you? It would not be safe.

D10: The aircrewman could open the doors at any point. There would just be an associated US of the aircraft if it was above a certain speed.

45 LCDR TYSON: Sorry, what? An associated what, sorry?

D10: Unserviceability. The aircraft would be made unserviceable at that point.

5 MS McMURDO: Well, if the aircraft was made unserviceable, they wouldn't open the doors, would they, to render it unserviceable?

D10: Sorry, ma'am. To clarify, so you can open your doors at any point. If the physical manoeuvre of opening that door is above the limitation on the aircraft, which was 80 for an MRH-90, the aircraft at that point will become unserviceable when you report it back with maintenance. It does happen.

MS McMURDO: When you report it back to?

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D10: With maintenance.

MS McMURDO: With maintenance.

20 D10: The maintenance force on the after-flight.

LCDR TYSON: Incidentally, in this scenario where there's a left-hand turn of a four-ship, heavy left formation of MRH-90s, if you're flying the third aircraft, it's actually advantageous to you to be in the right-hand seat during the course of that turn, isn't it, if you're the flying pilot?

D10: I've flown that in either seat. It can help to be closer on the right-hand side.

30 LCDR TYSON: It's easier to do the left-hand turn flying position 3 if you're the flying pilot in the right-hand seat.

D10: It can be.

- 35 LCDR TYSON: I just want to now ask you just some other aspects of flying technique. I'm just going to read you something. I'll just read you some evidence, and I'll ask you to comment on it. This is some evidence from one of the other pilots in the Bushman sortie on 28 July:
- 40 The standard configuration for overwater flight is RADALT hold engaged. We transition to RADALT hold immediately after establishing overwater flight. The non-flying pilot assists with the switch selection for this. A flight lead aircraft will also generally have an air speed holding to assist in consistent air speed. Trailing aircraft overwater will likely just have RADALT

hold engaged, and should be pushing against a trimmed datum on the cyclic to maintain formation position.

5 That explanation of how RADALT hold would be used, do you agree that 5 that's the appropriate way to engage RADALT hold in the mission that 5 took place on 28 July '23?

D10: Yes.

10 LCDR TYSON: If I told you that that's from paragraph 138 of D2's addendum statement to the Inquiry, that doesn't change your answer in any way?

D10: It sounds like it comes from a QFI, yes.

15

D10: Yes.

- 20 LCDR TYSON: So you'd have RADALT hold engaged when you're overwater, and what you do, if you need to, you would push against the trim if you needed to maintain formation position?
- D10: Yes, and for clarity, there's a height associated with the RADALT hold.

LCDR TYSON: Yes, under 500 feet overwater. Is your answer yes?

D10: Yes, correct. Sorry.

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LCDR TYSON: I just want to ask you about TAC mode, and I'll just read you some evidence and then I'll ask you a question about it. The question was:

35 So in the context of flying an MRH-90, what is tactical mode?

Then this is the answer:

40 TAC mode is an attitude reference mode, but it removes the trim 40 feedback, force feedback. It has a trim follow-through feedback. So if I move the stick from centre position to a forward position, rather than providing resistance, the trim will follow and give a null. So that's the pitch aspect or axis. The roll axis remains in an attitude mode. So if you push to a 30 degree angle of bank, for

LCDR TYSON: But that's the standard technique. Correct?

example, it will hold a resistance against that, but it won't display that cueing system through the Primary Flight Display.

- 5 What's interesting about the TAC mode is it doesn't enable in the 5 design to have an upper mode for barometric or RADALT hold, which is what protects the aircraft, or maintains the aircraft at a given height.
- That description of TAC mode, do you agree that that's an accurate description of TAC mode?
 - D10: From my recollection, yes.
- LCDR TYSON: Just for the other people following it, that's on page 3921 of the transcript. That was MAJ Lamb. You see there that one of the particular aspects of what happens when one goes into TAC mode is that you lose the trim resistance on the pitch axis.
 - D10: Yes.

20

LCDR TYSON: So it's a particular problem. If I'm flying that aircraft and I've selected TAC mode, I'm not going to have - I'm reducing my situational awareness about the pitch axis of the aircraft, aren't I?

25 D10: As compared to ATT mode?

LCDR TYSON: Well, as compared to being in an upper mode, yes.

D10: Yes.

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LCDR TYSON: I just want to ask you just a situational awareness situation, as to how you might respond. I'm just going to read you some evidence first. There's evidence before this Inquiry from an MRH-90 pilot who said this:

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If I lost visibility in formation, I would announce it.

Sorry, I'll say that again. I'll start again.

40 If I lost visibility in formation, I would announce internally, and if the other pilot did not have visual, then I would announce it externally on the formation frequency, and then turn away from the formation and look to regain visibility, and regain the formation once approved.

In relation to that evidence, do you agree that that's an appropriate response if a flying pilot has lost visibility in formation?

D10: Yes, but it would be lost visibility with your preceding aircraft.

5

LCDR TYSON: What I've read there is from the statement of D20, paragraph 37.

- MS McMURDO: So would you say that's a loss of visibility with the preceding aircraft, rather than a loss of situational awareness? Is that the distinction you're making?
- D10: No, ma'am. Loss of visibility is a separate procedure. It's the IIMC, Inadvertent Instrument Meteorological Conditions. That's a set procedure I think I discussed it yesterday where you are turning away and climbing to a specified height versus the loss of visibility or visual with your preceding aircraft, which means you can no longer maintain your formation contract, so you are avoiding the rest of the formation until you can visually sight them and you're approved to rejoin, if that helps?

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LCDR TYSON: Thank you, ma'am, for that clarifying question.

I'll also read you something else:

25 I do not recall anything specifically in the STANMAN covering an unusual attitude when flying in formation. However, loss of situational awareness on the formation is discussed in training, along with how to rejoin another aircraft, and how to bug out of formation. I would expect that a pilot who lost situational 30 awareness in formation would put their aircraft in a position where it is no longer going to conflict with the formation. I would expect the pilot to turn away from the formation in a similar manner to the Inadvertent Instrument Meteorology Conditions (IIMC) drill, which dictates the formation aircraft turning away to the outside of the formation. There is the losing 35 sight calls, and the IIMC drill detailed in the MRH-90 STANMAN.

40 MS McMURDO: That's the second type of situational awareness, not the being unaware that you've lost situational awareness.

LCDR TYSON: Yes, that's true, ma'am.

MS McMURDO: All right, we'll bear that in mind. Yes, okay.

LCDR TYSON: Well, just in terms of that statement which someone else has given evidence to the Inquiry, do you agree that that is an accurate response, that is an appropriate response in a situation of loss of situational awareness?

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MS McMURDO: That is, the Type 2, not Type 1, because they're actually aware that they've lost situational awareness.

D10: Understood, ma'am. Yes.

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LCDR TYSON: Yes, I'm not talking about spatial disorientation. Do you understand that?

D10: Correct.

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LCDR TYSON: Sorry, your answer was "Yes"?

D10: Yes.

20 LCDR TYSON: You agreed with the accuracy of that response?

MS McMURDO: Yes.

LCDR TYSON: All right. So - - -

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D10: Sorry, I'd just add that is the formation contract.

LCDR TYSON: Have you ever bugged out of a formation when you've been flying in formation, or left a formation?

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D10: Yes, multiple times.

LCDR TYSON: What are some of the situations where you did so?

35 D10: The bug out is a specific manoeuvre that is taught within the formation procedures. It can occur, and has occurred, in my experience, during rejoins as my general recollection.

40 LCDR TYSON: So is "bug out" a general term for leaving a formation or is it more specific?

D10: I see what you're saying. No, they're separate things. So the bug out is a procedure that keeps you clear, a set procedure which keeps you clear of the formation aircraft. In my experience, it's conducted when a rejoin has been done. I don't want to use my hands, but the rejoin, for

whatever reason, was unable to be successfully completed. Therefore, there's a requirement for that aircraft to avoid the rest of the formation. The departure of an aircraft from the formation is generally a planned manoeuvre or, as described previously, is the unplanned – the aircraft's getting away from everyone else.

LCDR TYSON: Have you had situations where you are flying as part of a formation and, for an unplanned reason, you've had to leave the formation?

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D10: Yes. From a flying perspective, in my experience, generally some sort of malfunction has caused that.

- LCDR TYSON: What about if you had lost sight. Let's say, again, going back to the scenario of a heavy left four-ship formation, if you had lost formation of ship 2 in the formation, would that be a circumstance where you would leave the formation?
 - D10: Depart the formation, yes.

20

LCDR TYSON: It would?

D10: Sorry, you said if I lost sight of the preceding aircraft?

25 LCDR TYSON: Yes. You would, thank you. Ma'am, is this an appropriate point to have a break or should I continue?

MS McMURDO: Would you like a break yet?

30 D10: Can I just take a quick bathroom break, ma'am?

MS McMURDO: Of course. We'll have a 10-minute break.

35 HEARING ADJOURNED

HEARING RESUMED

40

MS McMURDO: Yes, LCDR Tyson.

LCDR TYSON: Thank you, ma'am.

D10, I want you to consider the flying scenario where there's a flight overwater. It's at a low level of 200 feet. It's at night. There are some showers around. There is a four-ship heavy left formation and the formation is executing a turn to the left. So those six parameters. I wonder if you can give the Inquiry some evidence about the difficulties or the risks, or lack of risk perhaps, involved in that scenario. So in those parameters, and in the course of executing a turn to the left in those parameters, is that the sort of flying that only, say, the competent pilots like D2, D6 and CAPT Lyon should have been flying, or is that a flying profile that the other pilots within the formation were capable of flying?

D10: My expectation is, coming out of Flight School, all pilots can fly in that environment. It's dependent on the individual though.

- 15 LCDR TYSON: When you are flying in that circumstance, so you're executing a turn to the left in that circumstance, are you tense when you're doing it? Is it stressful, or is it something that you feel with your training that you do it with a degree of comfort and safety? How do you feel about it?
- 20

D10: The more experience you have flying, the more comfortable you get.

LCDR TYSON: If on the one hand – is it an inherently dangerous situation to be flying in or is it a comfortable situation to be flying in, given the technology that's available in the MRH-90 and flying techniques that you're taught?

D10: I found it comfortable, based on my experience.

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LCDR TYSON: So even though there are inherent risks in flying at night, overwater, at low level, in formation, it's the sort of mission that, with your training and the technology in the MRH-90, it was something that you could complete that component of the left-hand turn with a degree of comfort?

D10: Yes.

40 LCDR TYSON: Thank you. Now, I think that in your evidence to 40 COL Streit yesterday you mentioned at one point that shortly before the collision you saw Bushman 83 at about 350 feet. Is that right?

D10: I saw them at the top of the plateau, yes.

LCDR TYSON: So abnormally high and well above the other three aircraft in the Bushman formation?

D10: Yes.

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LCDR TYSON: In that circumstance, if you're flying in that number 3 position and you are that high, would you agree with this, that the quickest way and with the minimal resistance from the aircraft to regain position down in the formation would be to (a) disengage the RADALT hold, (b) select TAC mode, and (c) apply a large forward or longitudinal cyclic input?

D10: Sorry, I lost the question.

15 LCDR TYSON: So in that circumstance where in the four-ship formation where Bushman 83 is at about 350 feet high, would you agree that the quickest way, with minimal resistance from the aircraft, to fly down and regain station in the formation would be to (a) disengage RADALT hold, (b) select TAC mode, and (c) apply a large forward or longitudinal cyclic input?

D10: No.

LCDR TYSON: Why do you say that?

25

D10: I wouldn't select TAC mode. I would decrease in your height to get back on plane, so it's a decrease in collective at some point would be required.

30 LCDR TYSON: Those inputs of disengaging RADALT hold, selecting TAC mode and applying a large forward or longitudinal cyclical input, do you know any reason you might do that in the scenario that I put to you?

D10: No.

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LCDR TYSON: I just want to just deal with a miscellaneous aspect of your evidence about the flight sortie on 28 July. You said in your Coronial statement at paragraph 91 – which I think is Annexure DD to your statement – one of the things that you noticed about 83 was that there was some slight forward and aft movements in the course of the flight path.

D10: Sorry, I'm just skipping to that.

45 MS McMURDO: It's at the top of page 16 of that statement.

D10: Thank you, ma'am. Yes.

LCDR TYSON: Can you just explain what's the characteristic – or what's happening with the flight controls that would be having that effect on the movement of the aircraft?

D10: Slight forward and aft movements? It's a mixture of control inputs but there are control inputs required to maintain station. There are also control inputs required to move around in that station.

LCDR TYSON: Just another miscellaneous question. If you're flying in an MRH-90 and one of the aircrew in the back is not seated with the seatbelt, but is on the CHAD, does that affect the way that you fly?

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D10: Yes.

LCDR TYSON: In what way?

20 D10: If you've cleared your aircrewman on harness, then you are deliberate with your manoeuvres to not throw them around.

LCDR TYSON: So you would be, what, non-erratic, very gradual in your adjustments you're making to your flying?

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D10: Yes.

LCDR TYSON: In that situation where one of the aircrew is not in the seat with the seatbelt but is on the CHAD, there's got to be a command executed before that's executed?

D10: It's authorised by the Aircraft Captain, yes.

LCDR TYSON: Thank you. I now want to just go prior to the sortie
now, back to 28 July, on the afternoon, and just some of the pre-flight and
planning issues. Just in relation to the issue of fatigue. Now, I think
COL Streit asked you yesterday about how long you were sitting in
Bushman 84 before the actual sortie, and I think your initial answer was
you didn't know an exact time. But you were prepared to accept, I think,
that you might have been sitting in the aircraft for about two hours. Is that
a fair understanding of your evidence?

D10: Yes.

LCDR TYSON: If you're sitting in an aircraft like that for a period of about two hours, is it tiring? Is it fatiguing? Does it dull your senses, your reactions to some extent?

5 D10: Not in my experience, no.

LCDR TYSON: I mean, I think if I was sitting in a car, for example, for two hours and waiting for some message to leave, I would find that tiring and dulling my reactions. But that's not your experience?

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D10: No.

LCDR TYSON: Now, are you familiar with the term "OC's hour" or "flight bubble"?

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D10: Yes.

LCDR TYSON: What is that, please? What's your understanding of that term?

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D10: It's generally the hour immediately prior to starting the APU where you are – where possible, you're refraining from any additional distractions.

25 LCDR TYSON: Is that a technique or a practice that you engage in?

D10: Yes.

LCDR TYSON: Is that something that you engaged in on 28 July 2023, prior to the sortie that night?

D10: The formation were given an OC's hour? Sorry, is that what you mean?

35 LCDR TYSON: Yes.

D10: Yes.

40 LCDR TYSON: The mission that took place on 28 July on that night, that 40 was a mission under FMP conditions, wasn't it?

D10: Yes.

45 LCDR TYSON: Are you aware of evidence in this Inquiry that one of 45 the Captains in one of the Bushman helicopters was using a mobile phone

in the cabin, sending messages to other officers within the Squadron about – for example, one about a work meeting the next day, another about that person's welfare. Are you familiar with that evidence that's come out of the Inquiry?

5

D10: Yes.

LCDR TYSON: Were there any rules or orders given about the use of mobile phones in an aircraft that was about to go on a mission under FMP conditions on that night?

D10: Yes.

LCDR TYSON: What was that, and what were those orders?

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D10: It was directed in orders to leave your mobile phones in the TOC.

LCDR TYSON: So you must be very disappointed to become aware of that evidence?

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D10: Yes.

LCDR TYSON: Because in the pre-flight, the focus should be on looking at the mission ahead, thinking about the risks that might be encountered, and preparing for them?

D10: Yes.

AVM HARLAND: Before you step to the aircraft from the ops area, was there a check done by the formation lead or anyone else about whether everyone had effectively complied with that order regarding the mobile phones?

D10: Not deliberately, sir, no. I trusted my team.

35

AVM HARLAND: So it was just left to the individual?

D10: Yes.

40 AVM HARLAND: Okay, thanks.

LCDR TYSON: Just very finally, a different topic. So you're very experienced in flying the Black Hawk; is that correct?

45 D10: Relatively, yes.
LCDR TYSON: Obviously, you've got many hours as well in the Taipan?

5 D10: Yes.

LCDR TYSON: You're also familiar with flying – I think you said back to about 2015 you've been flying Special Operations missions, profiles, and so forth?

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D10: Yes.

LCDR TYSON: Comparing those two aircraft to the sorts of missions that you do in the Special Operations profile, which is the aircraft that you prefer to fly in those missions?

D10: Sorry, terrible answer. I preferred both aircraft in different instances, based on the context.

20 LCDR TYSON: Thank you, D10. Thank you, ma'am. Thank you, sir.

MS McMURDO: Up next? Yes.

25 **CROSS-EXAMINATION BY SQNLDR THOMPSON**

SQNLDR THOMPSON: Thank you. SQNLDR Thompson. I represent the interests of WO2 Laycock. I just have a few questions for you in this particular forum. Thinking back to during the day of 28 July 2023, there was a meeting between the Aircraft Captains and yourself, and also some aircrew, regarding how the mission would be flown. I will refer particularly to whether or not – the meeting where it was decided that the doors would be closed. Were you present at that meeting?

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D10: Yes, it was during orders.

SQNLDR THOMPSON: At what time of the day did that meeting take place? You can be rough, if you like.

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D10: Sorry, I found the timeline yesterday. I'll just quickly look at that. 2 o'clock was the start of orders.

SQNLDR THOMPSON: At orders, I take it you were present, and were all of the aircrew present?

D10: Yes.

SQNLDR THOMPSON: So the pilot and co-pilot of Bushman 81, 82, 83 and 84 were all present at that meeting?

D10: All crews of 81 to 84, yes.

10 SQNLDR THOMPSON: During those orders, is there discussion 10 between the various people attending that meeting about how the mission will proceed?

D10: Yes.

- 15 SQNLDR THOMPSON: Is it one of robust discussion between all of the participants or is it one where you, as Mission Commander, will just tell everyone how it's going to be?
- D10: There is a very deliberate portion of orders at the end with questions that is covered by individual aircraft and crews of those aircraft to point out anything they've picked up that may require change.

SQNLDR THOMPSON: Your observations and experience working with those people who were present, is it your view that anyone there

25 would feel free to speak up if they felt there was a problem or they had any concerns?

D10: Absolutely, yes.

30 SQNLDR THOMPSON: Would CAPT Lyon speak up if he had any concerns?

LCDR GRACIE: I object to that.

35 MS McMURDO: Well, I mean from your knowledge of CAPT Lyon, would he be prone to speak his mind in that situation or not?

D10: He would, ma'am, yes.

40 MS McMURDO: Yes, all right. Thank you.

SQNLDR THOMPSON: Did he raise any concerns about the doors being closed for that particular mission on the 28th?

45 D10: No.

SQNLDR THOMPSON: I will reserve my other questions for the Closed Hearing, ma'am.

5 MS McMURDO: Thank you. Next?

<CROSS-EXAMINATION BY SQNLDR GILES

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SQNLDR GILES: D10, my name is SQNLDR Jonathan Giles. I represent the reputational interests for LT Max Nugent. I've got a number of areas that I want to go through with you. The first area that I wanted to discuss – and it has come through the evidence today, but I want to give you the exact figures – is the hours' experience of the MRH-90. Now,

15 you the exact figures – is the hours' experience of the MRH-90. Now, LT Nugent, through the PEX system, has 383.6 hours' experience flying in the MRH-90. Would you accept that?

D10: If it's on PEX, yes.

20

SQNLDR GILES: Thank you. In your statement at paragraph 11, 6(a) - -

MS McMURDO: This is his Inquiry statement?

25

SQNLDR GILES: Of the Inquiry statement, which is Exhibit 209, you have your total aircraft hours at 323.8, but I understand there would be a slight increase due to the fact that the hours from up to the 28th are not recorded. Is that correct?

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D10: For MRH, yes.

SQNLDR GILES: So you would need to agree with me that 383 for LT Nugent and 323 for yourself, LT Nugent had more experience in the MRH-90 aircraft?

D10: In the MRH, yes.

SQNLDR GILES: Thank you. I want to go through the rehearsals, being
 FMP 1 and FMP 2. Can you tell me when FMP 1 – and I understand this was the rehearsal for the mission on 26 July – when was that rehearsal held?

D10: The rehearsal for the FMP 1 was held on the same day as FMP 1 on the 26th.

SQNLDR GILES: On 26 July 2023. Now, FMP 2, which we understand from the evidence was the rehearsal flight for the flight on 28 July, which is the discussion of this Inquiry, when was FMP 2 held?

D10: FMP 2 was 28 July.

SQNLDR GILES: At approximately what time?

10 D10: Sorry, are you talking about the rehearsal or the FMP?

> SQNLDR GILES: The rehearsal of FMP 2, what time was that held? From your evidence today, you're saying it's 28 July.

15 D10: No, sorry, I misunderstood the question. The rehearsal requirements were covered between 26 and 27 July.

SQNLDR GILES: So I'm clear, FMP 2, when was that held?

20 D10: FMP 2, the mission, was 28 July.

SQNLDR GILES: And the rehearsal?

D10: The rehearsal requirements for FMP 2?

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SQNLDR GILES: Correct.

D10: Were covered on 26 and 27 July. Just for clarity, I can cover exactly what that means in the Closed Session.

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SQNLDR GILES: That's okay. I think we can probably work it during the Open Session. So 26th and 27th we can say FMP 1 and FMP 2 were held for the rehearsal?

35 D10: The rehearsal requirements, yes.

SQNLDR GILES: Correct.

AVM HARLAND: Just to be clear here, FMP 2 was the incident sortie?

40

D10: Yes, sir.

SQNLDR GILES: Yes. It's more of the rehearsal for the incident sortie is what I'm looking for, on which date?

D10: The 26th and the 27th covered the rehearsal requirements of FMP 2.

- 5 SQNLDR GILES: That's fine. So linking that, the evidence from D20 5 was that she had organised for LT Nugent to replace her, as we understand, on 27 July 2023. Do you know when – in what time on the 27th that decision was made and were you involved?
 - D10: From D20's decision, sorry?
 - SQNLDR GILES: Correct.

10

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- D10: I thought that was the 28th.
- 15 SQNLDR GILES: So your evidence is the decision to put LT Nugent was on 28 July; is that correct?

D10: To my recollection, I thought it was, yes.

- 20 SQNLDR GILES: So if LT Nugent was advised on 28 July that he was going to be flying with CAPT Lyon, would he have been able to do the rehearsal flights for the incident on 28 July?
- D10: I understood that Max covered the rehearsal requirements on the 27th, during his day flight.

SQNLDR GILES: So your evidence is that Max, LT Nugent, would have done the rehearsal for both FMP 1 and FMP 2 between 26 and 27 July?

30 D10: We might be talking separate things here, but the rehearsal requirements for FMP 2, Max covered those on the day flight of the 27th.

SQNLDR GILES: So prior – and this is nothing to do with the rehearsal now – prior to 28 July, which was the day of the incident, LT Nugent was not meant to be on that flight? Is that correct?

D10: To my knowledge, yes.

- 40 SQNLDR GILES: Thank you. Now, moving to an area which we've 40 covered a number of times, so I won't go over it again, except for one 10 narrow area. Is when you're in formation on a heavy left in July 2023, the 10 actions on, in simple terms, if you lose visuals of the aircraft in front of 10 you, is to turn away and climb. Is that correct?
- 45 D10: That is one of the methods, yes.

SQNLDR GILES: So if I put to you in the same scenario that that aircraft that has lost sight was rolling from left to right, potentially to find the aircraft in front of them, would that be a correct actions on a correct technique?

D10: Context would be important but, generally, no.

SQNLDR GILES: Thank you. Earlier in your evidence you spoke about a big red button. Can I ask you to explain to the Inquiry again in simple terms what you mean by the big red button.

D10: In the simplest terms, it's an assessment of the level of safety or - sorry, the risk exceeding my level of safety that I had set.

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SQNLDR GILES: In any time during your career, have you ever pressed the big red button, the concept?

D10: Yes.

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SQNLDR GILES: In what situation have you done that?

D10: I believe I covered that in my statement, but it was during one of the SOQC flights at the end of '22.

25

SQNLDR GILES: Now, the evidence that came earlier today was in relation to the mobile phones being in the aircraft. During that flight, which is 28 July, did you have your mobile phone in the aircraft?

30 D10: No.

SQNLDR GILES: You left that at the TOC; is that correct?

D10: In the box, yes.

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

MS McMURDO: Thank you. Next? COL Gabbedy?

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<CROSS-EXAMINATION BY COL GABBEDY

COL GABBEDY: Good morning, I'm COL Gabbedy. I appear

for MAJGEN Jobson. What I'm going to try and do is do everything in the open. So if I could get you to flag for me, if I ask a question that you don't feel you can answer in this format, I'll just note it and I'll move on. I want to start to talk to you about issues of fatigue, and in your evidence you gave evidence about fatigue management. What I'd like you to do, if you could, is outline for us the practical measures that you put in place with your Squadron to try and ameliorate effects of fatigue on them. Are you able to go into some detail about that?

10 MS McMURDO: This is prior to 28 July?

COL GABBEDY: Sorry, I need to say that every time. Yes, prior to 28 July.

15 D10: Yes. Are you talking during my time as the OC?

COL GABBEDY: Yes.

D10: Yes.

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COL GABBEDY: Would it be easier if I put some propositions to you and let you agree with them or disagree with them?

D10: Yes.

25

COL GABBEDY: Why don't I do it that way? Were there occasions where you would cut people away early?

D10: Yes.

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COL GABBEDY: Were there occasions where you would let people work from home?

D10: Yes.

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COL GABBEDY: Did you encourage unit PT?

D10: Yes.

40 COL GABBEDY: Did you give people additional time off when you could?

D10: When I could, yes.

COL GABBEDY: Did you encourage engagement by members of your Squadron in ADF sports?

D10: Yes.

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COL GABBEDY: Did that include the surf camp that CAPT Lyon went to?

D10: Yes.

10

COL GABBEDY: Did you encourage your aircrew to take regular leave?

D10: Yes.

15 COL GABBEDY: Were there periods of low activity over Christmas and over school holidays?

D10: That I could control, yes.

20 COL GABBEDY: Did you minimise their hours of other duties when they were night flying?

D10: Yes.

- 25 COL GABBEDY: Were there any other measures that you can think of now, beyond those measures that you brought into place, to try and deal with the effects of fatigue?
- D10: Outside of the Snapshot discussion, there were deliberate periods of lower tempo periods planned around the extant Regimental Planner for directed outcomes from the Squadron.

COL GABBEDY: Were you able to make an assessment prior to July of '23 as to how successful these measures were in dealing with some of the concerns raised by the Snapshot survey?

D10: I think so, generally, yes.

40 COL GABBEDY: Thank you. If I look at fatigue policy now, you've done your Aviation Medicine Training, I take it?

D10: Yes.

COL GABBEDY: That's a requirement for all aircrew?

45

D10: The currency, yes.

COL GABBEDY: There's an NTS Skills Course which I think is also a requirement for all aircrew; is that right?

5

D10: Yes.

COL GABBEDY: I think there's a requirement that members be green in PEX before they're authorised to go on a flight; is that right?

10

D10: Yes.

COL GABBEDY: What does that mean, being green in PEX?

- 15 D10: PEX is a system that logs the mandatory requirements that are covered under the top eight qualifications. I can't remember exactly what they are, but CRM and NTS, as well as AVMED, are within that from a qualification perspective. It also tracks and manages any of the FCIFs which, I'm sorry, I can't remember what they stand for - to ensure that if
- 20 it's come out, it's been read and understood and acknowledged. As well as it tracks the currencies of those aircrew with respect to flying, so day, night, instrument. If it's green, those conditions have been met and are within the limits.
- 25 COL GABBEDY: That green is a requirement before they're authorised to fly, isn't it?

D10: Yes.

30 COL GABBEDY: Now, I think on the deployment to TALISMAN SABRE you were the Flight Authorising Officer; is that right?

D10: One of them for the deployment, yes.

35 COL GABBEDY: What's the requirement? What duties does that place on you as the Flight Authorising Officer?

D10: One of those duties is to confirm that all the members are qualified and current for the sortie they're undertaking.

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COL GABBEDY: Do you need to assess your own fatigue?

D10: Yes.

COL GABBEDY: Do you need to check with Aircraft Captains, or anybody else, as to their levels of fatigue?

D10: Yes.

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COL GABBEDY: Who is it you check with? Do you check with everybody who's flying, or is it just the Aircraft Captains?

D10: Everyone is assessed during orders on their ability – sorry, on their FACE and then Aircraft Captains are checking that at the aircraft as well.

COL GABBEDY: So that's a second FACE check at the aircraft itself?

D10: Yes.

15

COL GABBEDY: At orders, do those members effectively say to you, "We're good to go", or "We'll pass a FACE check"? Alternatively, can they say to you then, "I need to tap out of this one, boss. Can you find someone to replace me"?

20

D10: They will confirm that they're FACE'd, but the confirmation or change of crewing is generally done at the start of day as a normal procedure that we adopted in the Squadron.

- 25 COL GABBEDY: So if I understand that right, the crewing is done at the start of the day but if you are doing orders later on in that day and somebody felt they had to FACE out, that could happen. Is that right?
- D10: Correct. Sorry, and just to clarify, if the members were unable to rest, for example, and they needed to pull off the sortie, that's when it would get done at the start of day.

COL GABBEDY: So in this particular example, on 28 July, you could have that discussion as well if you're doing orders. In my understanding, orders were in the early afternoon. Is that right?

D10: Yes.

40 COL GABBEDY: There was a period of time then, a period of some hours, before the flight?

D10: Yes.

45 COL GABBEDY: So if, for example, at orders one of your crew 45 members had said, "Boss, I'm not feeling 100 per cent", you could say,

"Look, go and take a nap. Let's re-assess you before we take off", and in that space look for an alternate in case that person couldn't fly?

- D10: Yes, there's a deliberate bump plan that's briefed in the orders to
 facilitate that. That's planned generally during the sorry, it is always planned during the conduct of the mission planning, which is, for this, the day before.
- COL GABBEDY: So if I understand your answer, that means there's already somebody or people identified to take the place of people if they're bumped; is that right?

D10: No, the bump completely takes that aircraft and all of the crew out of the sortie.

15

COL GABBEDY: In this particular plan, there was a bump plan. You could have flown the sortie with three aircraft; is that right?

D10: Yes.

20

COL GABBEDY: Now, on this day, on 28 July, did anybody come forward and say, "I'm not up to this. I'm feeling tired. I need a rest"? Did anyone present with those concerns?

25 D10: Not that I'm aware of, no.

COL GABBEDY: No one did to you?

D10: No.

30

COL GABBEDY: Now, in relation to fatigue policy itself, there was some evidence given about work you were doing with then CAPT, now MAJ James. Do you recall that evidence?

35 D10: Yes.

COL GABBEDY: As far as you're aware, did MAJ James reach out for support to DFSB?

40 D10: Yes.

COL GABBEDY: I think if you look at your statement, Annex D is an email from MAJ James to CMDR Cooper of the DFSB asking for some help.

D10: Yes.

COL GABBEDY: Are you aware as to whether or not MAJ James ever received any response to that email?

5

D10: I didn't get feedback from it, no.

COL GABBEDY: Can you recall receiving any help from DFSB as a result of that email?

10

D10: No.

COL GABBEDY: I'll take you back to the - - -

15 AVM HARLAND: Can we just correct the record there. It was actually to Mr Cooper, not CMDR Cooper.

COL GABBEDY: Sorry, my mistake, sir. Thank you for that. It was Mr Cooper still at the DFSB though, I assume. Did I get that wrong?

20

AVM HARLAND: I understand that's the case, yes, just so we don't get it mixed up with the DFSB investigator.

COL GABBEDY: Yes, thank you, sir. So if I could take you back to 25 Proserpine now, Your Squadron had run the SOQC course some weeks before the Proserpine deployment.

D10: Yes.

30 COL GABBEDY: Are you able, for this Inquiry, to contrast the tempo on the SOQC course as compared to the tempo when you were deployed to Proserpine?

D10: The SOQC is a deliberate higher tempo or surge period which, compared to Proserpine, was lower with planning days in between mission 35 days.

COL GABBEDY: So would you call Proserpine a high-tempo deployment?

40

D10: Not high tempo, no.

COL GABBEDY: In your opinion, was there sufficient time for rest during that deployment in between different sorties?

D10: Yes.

COL GABBEDY: You were deployed into a field environment, and you gave some evidence about some conversations with D13 about that. Did you believe that the field environment was appropriate for what you were trying to achieve?

D10: Yes.

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10 COL GABBEDY: This was a non-contested field environment, wasn't it?

D10: Yes.

15 COL GABBEDY: Have you ever been deployed into a contested field environment?

D10: Yes.

20 COL GABBEDY: Tell me if this breaches our security classification. Could you explain what's involved in that?

D10: In general terms, you are required to secure yourself and your call-sign, which includes pickets and weapons, and potential for the position to be probed throughout day and night.

COL GABBEDY: So you might be probed at times when you could be sleeping. There might be pyrotechnics. You might have to stand-to. You might have to defend the position?

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25

D10: Correct.

COL GABBEDY: That's all part of training, isn't it?

35 D10: Yes.

COL GABBEDY: But this wasn't that sort of deployment. It was a deployment to a field environment where you slept in tents.

40 D10: Yes.

COL GABBEDY: What were your aircrew required to do, by and large, when they weren't flying? There was some planning to be done, but did they have, in your opinion, large chunks of free time where they could

simply choose their own adventure, rest if they needed to, read books, do whatever?

D10: Dependent on their position, yes.

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COL GABBEDY: Now, you slept in the tent for, was it, one night or more than one night?

D10: I believe it was the first two nights. I've got that in my statement somewhere.

COL GABBEDY: I'll rely on your statement for the accuracy, but I think in your evidence you said that the first night for you wasn't that great sleep. Was it any better the second night?

15

D10: My first night actually wasn't too bad. The second night was a little bit worse, which is why I got the Jet Tent.

COL GABBEDY: Were you sleeping in a tent with any of the crew of Bushman 83?

D10: Yes.

COL GABBEDY: Were you able to observe whether or not any of those crew members went to sleep before or after you, when you were sleeping?

D10: The first two nights, I was one of the last ones back. I can't specifically recall.

30 COL GABBEDY: So you can't recall if when you got back, whether they were already in bed asleep or not?

D10: No.

COL GABBEDY: Your Garmin information is extracted at Annex AA of your statement. Would you accept from me that that records that on the night before 25 July you slept for eight hours and 43 minutes, 26th is seven hours and 26 minutes, 27th is six hours and 54 minutes, and before the mission, before the 28th, it was seven hours and 24 minutes. I think you say in your statement that you felt completely refreshed on the 28th. Did you think you were getting enough sleep?

D10: I believe I said this yesterday, but I had young kids then which would generally wake me up throughout the night, so yes.

COL GABBEDY: In relation to the sleep conditions and if I could deal with the tent, was it cool of a night-time?

D10: Relatively, yes.

5

COL GABBEDY: Was it dark? Can you remember whether the flaps were opened or closed?

D10: I believe we had a mixture of both for the first two nights.

10

COL GABBEDY: When the flaps were open, did that make it unreasonably light?

D10: I had an eye mask.

15

COL GABBEDY: I mean there would have been disruption at some stages, but if we look at the hours of, say, midnight to 7 in the morning, was it relatively quiet between those hours?

20 D10: Yes.

COL GABBEDY: On stretchers, was it relatively comfortable?

D10: For me, yes.

25

COL GABBEDY: Now, I understand you were near the Proserpine airport, having seen the site. Was that a disruption during the night?

D10: On the nights we weren't flying, no.

30

COL GABBEDY: There was a fire station nearby. I understand their fire sirens went off. Was that simply the one morning? Can you remember whether that happened or not?

35 D10: I recall that was a daily check they did sometime between – sometime around 9 or 10.

COL GABBEDY: So it was after 9 or 10 in the morning, as best you can recall?

40

D10: Yes.

COL GABBEDY: Now, this may sound like an odd question, but have you ever been in a situation where you've been out at the pub and you've

had a few drinks and you've got to assess whether or not you're over .05 or .08 and you're right to drive?

D10: Yes.

5

COL GABBEDY: You're familiar, aren't you, with how you feel and how you behave when you're in that state where you might be a bit over the limit, and you might need to get an Uber rather than drive home?

10 D10: Yes.

COL GABBEDY: That will become relevant to a question I'm leading up to, so if you could park that for me. The crew of Bushman 83, I take it they're people you know pretty well?

15

20

D10: Yes.

COL GABBEDY: On this particular deployment, I think there were two tents with aircrew in them. So on my count, there's about less than 30 aircrew in total there, or was there slightly more?

D10: Less than 30-ish, yes, from memory.

COL GABBEDY: In the four days leading up to 28 July, I assume you spent a bit of time with the people in your Squadron? Did you see them on a daily basis, interact with them; was that the case?

D10: Yes.

30 COL GABBEDY: On the 28th, in the lead-up to this particular sortie, did you spend time with all of the four crewman from Bushman 83?

D10: Yes.

35 COL GABBEDY: Do you think you know them well enough to know whether they're tired, whether they're happy, whether they're sad, how they're feeling?

D10: Yes.

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COL GABBEDY: Do you have the sort of relationship with those four individuals that you think they would tell you if there were issues that were concerning them?

45 D10: Yes.

COL GABBEDY: There's been some evidence given by a Dr Smith in these proceedings where he ranks three of the crewman of that aircraft as being affected by fatigue to a level where they would be at .08 and unable to drive, and he describes that they would present as extremely tired, with difficulty concentrating. Now, those three members are all of the crew except for LT Nugent. From your interactions with those crew members, did they present to you in that way?

10 D10: No.

COL GABBEDY: When CAPT Lyon came up to authorise or to say to you that his crew was fit to fly, did he indicate to you any concerns with either himself or his crew on that basis?

15

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D10: No.

COL GABBEDY: Now, I want to run you through some specific impacts. In Dr Smith's report of June of 2024, at paragraph 100, he lists a number of features that he says would impact on the cognitive processes if you were in the state he describes these people as being in. If you could tell me whether you noticed any of these features in any of the four crewman, I'd appreciate it. The features he describes are reduced alertness. Did you see that?

25

D10: No.

COL GABBEDY: Easy distractibility?

30 D10: No.

COL GABBEDY: Complacency and inattention to detail?

D10: No.

COL GABBEDY: Impaired vigilance and slow reaction time?

D10: No.

40 COL GABBEDY: Poor judgment and impaired decision-making?

D10: No.

COL GABBEDY: Impaired cognitive and information processing?

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D10: No.

COL GABBEDY: Irritability and mood change?

5 D10: No.

COL GABBEDY: Impaired working and long-term memory?

D10: No.

10

COL GABBEDY: That wouldn't have been really apparent?

D10: No, it wasn't apparent.

15 COL GABBEDY: Impaired coordination?

D10: No.

COL GABBEDY: And poor communication?

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D10: No.

COL GABBEDY: Now, some of those things are potentially relatively discreet. Do you think you had enough interaction with the four crew members of Bushman 83 so that these things, or one or more of these things, would have been apparent to you if they were present?

D10: Based on my perception, yes.

30 COL GABBEDY: None of that was apparent to you?

D10: No.

COL GABBEDY: Thank you. I just want to move on to a different area
 now. D19, your Commanding Officer, did he arrive at Proserpine? I think earlier in your statement you said he did.

D10: Sorry, what date?

40 COL GABBEDY: During the four days in the lead-up to the 28th, was he there during that period?

D10: Yes, he was there for I think the second and third day and then he was there the morning of the incident – morning after the incident.

COL GABBEDY: Did he fly with any of the crews prior to 28 July?

D10: Yes.

5 COL GABBEDY: Did he sleep in the tent with the rest of the crew?

D10: Yes.

COL GABBEDY: Did he raise with you any issues that he'd picked up during his time at Proserpine about fatigue amongst your Squadron?

D10: No.

COL GABBEDY: Just a couple of things to finish up, thank you,
 LCDR Tyson took you to the mode which I think is called the RHT upper mode. Do you recall those questions?

D10: Yes.

20 COL GABBEDY: It's a requirement, isn't it, for flight overwater below 500 feet that that mode is selected?

D10: Yes.

25 COL GABBEDY: If, as a flying pilot, you were going to switch that off, that's something you would brief the crew about, isn't it?

D10: Yes.

30 COL GABBEDY: Is that a mode that you would switch off if you were the flying pilot?

D10: It's the Aircraft Captain's responsibility to keep it on.

35 COL GABBEDY: So it's the responsibility to keep it on. It's not something that could be turned off?

D10: It's a must, I believe, within Standing Instructions.

40 COL GABBEDY: Standing Instructions are an order to you as an Aircraft Captain, aren't they?

D10: Yes.

COL GABBEDY: So it's a requirement. Just one last thing to finish with. You gave some evidence, again in response to LCDR Tyson, about phones on 28 July and the Air Vice-Marshal asked you whether you had checked to see whether people had complied with your order. It was an order, wasn't it, that the phones be left in the TOC?

D10: Yes.

COL GABBEDY: Would you normally need to check and see if your Squadron had complied with a direct order that you had made as their OC?

D10: No, I trusted my team.

- 15 COL GABBEDY: Indeed, if an aircrewman had failed to comply with your order, wouldn't it be the Aircraft Captains that you would then rely upon to make sure that order had been complied with?
 - D10: It's the individual and the Aircraft Captain.

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COL GABBEDY: Thank you very much for your time. I have nothing further.

AVM HARLAND: Just a follow-on question from that. Would you ordinarily do sanitise checks before you fly in a formation on one of your missions?

D10: It might be a terminology thing, sir, but what's a sanitisation check?

30

AVM HARLAND: Removing things which might identify you, managing comms equipment and the like?

D10: Yes, that does get done, sir.

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AVM HARLAND: Would mobile phones normally be included in something like that?

D10: It depends on the context, sir.

AVM HARLAND: It would be reasonable to expect that they could be?

D10: Yes.

45 AVM HARLAND: Thank you.

MS McMURDO: Further application to cross-examine? Yes.

5 <CROSS-EXAMINATION BY CMDR JONES

CMDR JONES: D10, my name's CMDR Jones. I appear for D19. I've got one question for you. How would you describe the two weeks leading up to Exercise TALISMAN SABRE 2023 in terms of the activities of the aircrew? Was it a low activity period, high activity period; what was it?

D10: Relatively low.

15 CMDR JONES: Were you aware that some of them were on leave in that period of time?

D10: Yes.

20 CMDR JONES: Would you be surprised if you heard that they were working long hours in that period of time?

D10: Yes.

25 CMDR JONES: I've no further questions.

MS McMURDO: Yes. Any other applications to cross-examine? Yes. Or re-examination?

30 FLTLT SEEFELD: Yes, please.

<RE-EXAMINATION BY FLTLT SEEFELD

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FLTLT SEEFELD: Good morning, sir. Could you take up your Inquiry statement, please, and go to paragraph 72(a)? Could you go down to (ii), which is at the bottom of the page? Just take a moment to scan across. It's only the part on the bottom of that page but it concerns the - I'll just give you the background. This is the departure for 173 Squadron to the exercise, so before the exercise on Monday, 24 July. You'll see there that there was a requirement to shift the departure time, and you say there:

I note the departure times changed to move left by two hours from the planned departure time.

Do you see that sentence right near the bottom?

D10: (No audible reply).

5

FLTLT SEEFELD: You're nodding, yes?

D10: Sorry. Correct, yes.

10 FLTLT SEEFELD: When you say "move left by two hours", what do you mean?

D10: The departure time was brought earlier into the morning by two hours.

15

FLTLT SEEFELD: You left two hours earlier than what was planned?

D10: Yes.

- 20 FLTLT SEEFELD: Considering that, did you assess that that shift in time to leave earlier, that that had any significant impact upon the Squadron?
- D10: The two-hour change allowed for sorry, it provided the best
 chance for the formation to get up to Proserpine during the day, as opposed to finishing the transit by night. It also minimised the amount of re-fuels required where you shut the aircraft down, which is always a risk of leaving an aircraft in location. For a transit of this nature, the follow-on effects of leaving an aircraft to subsequently have to get to your final destination could compress the rest of what you are doing which, for the circumstance, was a risk.

FLTLT SEEFELD: I see. For those reasons, you felt that was a better option, was to leave those two hours earlier?

35

D10: Yes, and the relative shift at the time was day which meant it was shifting right, which in my assessment is always easier.

40 FLTLT SEEFELD: Moving forward then into the exercise itself, you 40 gave some evidence before, you used the word "Jet Tent". Please explain 40 to the Inquiry, please, what a Jet Tent is?

D10: It's a stretcher that has a mosquito net on it and you can put a canvas cover and it's completely self-sufficient.

FLTLT SEEFELD: In layman's terms, is it like a little one-man tent?

D10: Yes.

5 FLTLT SEEFELD: The Squadron had these?

D10: Yes.

- FLTLT SEEFELD: Back to your statement then and, again, inside the exercise, we'll go to paragraph 88(a), please. It's on page 29 of 40. I'll just give you a moment just to scan across the question and the answer you've given.
 - D10: Yes.

15

FLTLT SEEFELD: You've done that. Okay, thank you. So this is about - you'll see at 88 it says this is about the decision for D20 to depart. If we go to the bottom part of (a) - sorry, I'll go back a step. At the fourth line it says, "Primary Aviation Troop Commander". You said:

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It was normal practice to have one Primary Aviation Troop Commander.

Can you just explain what you mean by "Primary Aviation Troop Commander"?

D10: It was a deliberate procedure within the Squadron with 2 Aviation Troop Commanders that one would take an exercise at a time as the primary, or the lead, which allowed the second Troop Commander to plan and execute the next event, which allowed for a level of surge and rest.

FLTLT SEEFELD: When you say "the next event", the next event in that exercise?

35 D10: The next exercise, sorry.

FLTLT SEEFELD: The next exercise in the future?

D10: Correct.

40

FLTLT SEEFELD: Then I'll read this bit out. We're about six lines down, second half of that paragraph. It says:

I have observed CAPT Lyon closely on previous exercises understood his workload at the time and knew the limited Troop Commander tasks were within his ability to manage.

5 If I can pause there. Why do you say – just on the word "limited", "limited Troop Commander tasks", what do you mean by that?

D10: I'm referring to the outstanding events which were to occur within TALISMAN SABRE and my knowledge of how much work and what
was left from D20, which was not a substantial amount because of her diligence.

FLTLT SEEFELD: Because of her – I missed that last word.

15 D10: Diligence.

FLTLT SEEFELD: Her diligence. I see. Then you go on to say:

20 Additionally, there were no objections or issues raised by 20 CAPT Lyon about his ability to conduct this task.

Now, knowing CAPT Lyon as you did, would you have expected, if he had objections or issues, that he would have raised those with you?

25 D10: Yes.

FLTLT SEEFELD: During your oral evidence – I'm moving forward immediately post-incident – during your oral evidence, you used these words – I might not have this exactly right but something close to. So we're talking about immediately post the incident there was some questions about search and rescue and what was happening with that. Your aircraft was on for a while and then other aircraft came and continued that. You used the words, "extension of duty hours". Can you please explain what extension of duty hours means?

35 D10: We were approved to operate in an extended duty period for the conduct of the search and rescue.

40 FLTLT SEEFELD: So not beforehand but once the search and rescue 40 became necessary, you were approved for an extension of duty hours?

D10: Correct.

FLTLT SEEFELD: Is that something that you approved?

45

D10: No, that's listed within the Standing Instructions, but it was a two-star approval.

FLTLT SEEFELD: Two-star. And when you say "a two-star", you mean a Major General level?

D10: Correct.

FLTLT SEEFELD: You had that approval?

10

D10: Yes.

AVM HARLAND: What start time was that extension based on, the duty start time?

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D10: It was an extension to 5 am. I believe it was based on hours of flying initially, sir.

AVM HARLAND: What was the start time of your duty for that day based on? So what was the extension based on? Which start time was it based on? Was that your 1300 duty time?

D10: Yes, sir.

25 AVM HARLAND: Okay, thank you.

FLTLT SEEFELD: If you go to your Coronial statement, which I think is Annexure DD to your main statement, and then go through to paragraph 52. At paragraph 52 – and you use this word at 55 as well –
earlier in your evidence, a long while ago, you were asked some questions about this word "basic" versus "complex". You said:

In my estimation, the Mission Plan for that night was quite basic.

- 35 You say that later on as well. Within the confines of this room and the classification, if you can, do you want to explain what you mean by why this was basic and, I guess, other things might be more complex, other missions might be more complex?
- 40 D10: The term "basic mission", or the reference to the mission as being basic is purely to do with the mission. I would consider, and it's my assessment through experience, that the mission in question – which was extraction – was basic because in terms of the left of arc being basic and the right of arc being complex. Anything that does not require a change to the original location, the original mission task, the original formation,

constitution – or construct is probably a better way to put it – that can be executed as planned with minimal level contingencies, it would be basic. Whereas a complex mission is one that requires multiple levels of contingencies. The location might change. The formation, composition, and execution of task may change. It's a lot more dynamic is a basic way to explain it. And that was not what I considered this to be.

FLTLT SEEFELD: Understand. Just back to your Inquiry statement then, paragraph 84, please. So you were asked whether you had any concerns about sleep and fatigue management during the exercise and in your answer, you say that D20 and D6 had raised some concerns with you about aircrew being up early for FMP 1 on 26 July. Then you say:

Based on that information, I discussed with the Ground Force Commander my requirement to shift the mission window left for all assets.

Picking up from what you said before, left means move forward in time, or earlier.

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D10: Earlier, correct.

FLTLT SEEFELD: Do I take it though that relates to the conduct of FMP 1? It was conducted earlier; is that right?

25

D10: Correct.

FLTLT SEEFELD: You were asked some questions about FMP 1 and FMP 2 before.

30

35

40

D10: Yes.

FLTLT SEEFELD: Did the movement of that FMP 1 earlier during the day, did that have a flow-on effect to the Ground Force Commander as well?

D10: Yes, correct. The Aviation Force does not own the mission. It was the Ground Force we were supporting. Therefore, it was a request to move the mission timeline, which resulted in a constraint for them, which means we started the crews early deliberately to constrain them, which resulted in constraining their mission window.

FLTLT SEEFELD: You say that you discussed it with the Ground Force Commander. So they were content to accommodate that change?

D10: Yes.

FLTLT SEEFELD: During the cross-examination from my learned

friend LCDR Gracie, you were taken to the Risk Management Plan. I think it's - I don't need you to go there - Annex BB to your 5 statement. You may recall there was questions – I don't need you to go there, but you were looking at the table and sort of looking down at things, and there was questions to you about which ones related to formation flying and which ones didn't and so on. Just flowing out of that though, I 10 wanted to ask you if there were any - if you are able to say - any additional levels of risk controls that were applied in respect to this sortie? D10: Yes, the - sorry, I'll just find it. The last page of the mission orders, titled, "Risk Analysis and Assessment", is the deliberate listing of the RMPs or MRPs, Mission Risk Profiles or Risk Management Plans -15 sorry, Mission Risk Plans, those in addition to - sorry, those listed are the specific and novel risk controls associated with those hazards. There are also routine hazards within the Aviation environment which are covered through Standing Instructions. 20 FLTLT SEEFELD: So there's routine ones and then others, putting it in layman's terms, specific to the mission? D10: Yes, correct. 25 MS McMURDO: Sorry, there's a technical issue. How long will we need? FLTLT SEEFELD: Sorry? 30 MS McMURDO: A 10-minute break, a technical issue. FLTLT SEEFELD: I see.

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HEARING ADJOURNED

HEARING RESUMED

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MS McMURDO: We understand the issue has been resolved, whatever it was.

45 FLTLT SEEFELD: Thank you, ma'am.

MS McMURDO: Thank you.

FLTLT SEEFELD: I can indicate I am almost finished.

5

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45

Before the technical issue, I think you were partway through an answer. I wasn't sure if you were complete yet. So just to recap, what I'd asked, I'd taken you to the Risk Management Plan and asked you about whether there were any other additional risk controls, if I can use that term. You'd taken us to the orders, the orders pack. Was there anything further you wanted to say about additional risk controls that were implemented in respect to the incident – the sortie, sorry, I should say – which is the subject of this Inquiry?

- 15 D10: Sorry, just to summarise it again. The MRPs and RMPs for the novel risks in the analysis were covered on that slide and the routine risks sorry, routine hazards, and the risk controls were covered within Standing Instructions.
- 20 FLTLT SEEFELD: You used a couple of acronyms there. "MRP"?

D10: Sorry, Mission Risk Profile.

FLTLT SEEFELD: The last question I was going to ask you about and
it's really just to clarify, I think, what may be some confusion which arose
in some of the questions from my learned friend about Air Mission
Commander and that person being the Air Mission Commander and also
flying the aircraft. It was put to you why couldn't you do it at a desk and
so on. Can you, just in very general terms, just explain what is the Air
Mission Commander doing?

D10: The Air Mission Commander is the command and control for the aviation package.

FLTLT SEEFELD: Well, I'll put some things to you. So a mission here, for example, is four aircraft – the Air Mission Commander, if they happen to be flying, they're worrying about flying their own aircraft. But that person is also concerned with what the other aircraft are doing. "We're going out to execute a mission. I need this. This aircraft's doing this. This aircraft's doing that", and so on.

I think the example you gave, you said, "Well, I took over when the search and rescue started". You said, "Well, that's an example of what I was doing". I'm giving you the answer here, but just tell me if I've got this right. You said, "As Air Mission Commander, you happen to be" –

well, your co-pilot was flying your aircraft in that SAR, but what you were doing is you moved 81 and 82 off to Lindeman Island. You were talking to other assets. You're coordinating with vessels on the water, and so on. Is that an example of what an Air Mission Commander is doing? They're looking after the overall mission, not just their aircraft themselves?

D10: Correct.

10 FLTLT SEEFELD: Thank you. That's all I have, thank you, ma'am.

MS McMURDO: Just before you go. Could I just ask you, in preparing your statement for today and preparing to give evidence today, were you assisted by your superior officers in that task?

15

5

D10: No, ma'am.

MS McMURDO: Yes, all right then. Thank you. Yes, thank you. Anything arising out of that?

20

FLTLT SEEFELD: No, ma'am.

MS McMURDO: Thank you. Yes.

25

<RE-EXAMINATION BY COL STREIT

COL STREIT: Just briefly some matters in re-examination before a short adjournment to initiate the Private Hearing, if I may.

D10, you were asked some questions by various Counsel concerning observations on individual aircrew on Exercise TALISMAN SABRE; that is, your observations of them, levels of fatigue and how they appeared to

35 you. Now, I just want to show you Exhibit 39, if I may. So just have that first. Thank you. What I'm showing you is the – are you familiar with that publication?

D10: I am now, yes.

40

COL STREIT: Immediately prior to Exercise TALISMAN SABRE

D10: Yes.

45

2023, were you aware of that publication?

COL STREIT: Had you read that publication?

D10: Only – sorry, no. It was described through Sam James.

5 COL STREIT: Sure. Can you just state the full title of that publication, please?

D10: This is the Aviation Fatigue Management Guidebook.

10 COL STREIT: Version 1?

D10: Yes.

COL STREIT: Now, just accept from me that in the body of that guidebook is some guidance to the effect that individuals are not good judges of their own levels of fatigue. Just accept that.

D10: Yes.

20 COL STREIT: Is that something you were aware of as at Exercise TALISMAN SABRE?

D10: Yes.

- 25 COL STREIT: Now, in relation to observing levels of fatigue in aircrew, first is you were sleeping in a Jet Tent on Exercise TALISMAN SABRE. Is that right?
 - D10: From the third night, yes.
- 30

COL STREIT: From the?

D10: The third night.

35 COL STREIT: From the third night. So that's the Wednesday night? You were up on the Monday, Monday night, Tuesday night.

D10: Correct.

40 COL STREIT: Wednesday night, Thursday night, and then the exercise occurs on the Friday night; that is, the mission involving Bushman 83. Correct?

D10: Correct.

COL STREIT: So you were asked some questions by COL Gabbedy in the broad about your observations of CAPT Lyon, LT Nugent, WO2 Laycock, and CPL Naggs. Correct?

5 D10: Correct.

COL STREIT: Is it fair to say your interactions with those individuals only arose intermittently during the day, during the morning routine of the day?

10

D10: Yes.

COL STREIT: Before manning duty at 1. Correct?

15 D10: Correct.

COL STREIT: If you're flying during the day or attending to other activities that they're not participating in, you're not observing them, are you?

20

D10: No, only when I'm with them or around them.

COL STREIT: On the day of the 28th, you have interaction with CAPT Lyon in the morning on the 28th. Correct?

25

D10: Yes.

COL STREIT: Because you're having a discussion with him about him taking over D20's Troop Commander responsibilities. That's right?

30

35

D10: Yes.

COL STREIT: Is your next principal interaction, or main interaction, with CAPT Lyon at 1300 hours, when the duty day starts and you do a brief?

D10: There were interactions as well just in and around during morning routine.

40 COL STREIT: Were they significant, fleeting, mild, or how would you describe them?

D10: Intermittent, just around in the same area at the same time.

45 COL STREIT: Now, would you say you had the same level of

intermittent interactions and observations of LT Nugent, WO2 Laycock, and CPL Naggs on the 28th?

D10: Yes, we're all in the same area.

5

COL STREIT: Where you start having more interactions with these individuals is as you step through the briefing from 1300, then orders and so on. Correct?

10 D10: Correct.

COL STREIT: Then interaction drops off as everyone goes away and has a little bit more time before they have to go to their aircraft to commence the mission?

15

D10: Yes.

COL STREIT: You went to your aircraft at 7.55 pm, according to your Coronial statement?

20

D10: Yes.

COL STREIT: That was to commence preparation for – what is it – AMC?

25

D10: The starting of the APU.

COL STREIT: APU. Thank you.

30 D10: Sorry, the Auxiliary Power Unit.

COL STREIT: Sure. So insofar as that timeline is concerned, without even considering your interactions before going to the aircraft insofar as that timeline is concerned, from 7.55 pm onwards, you're not physically observing any of the aircrew of 81, 82, are you, or 83?

D10: No.

COL STREIT: You might be listening to them on the comms. Correct?

40

35

D10: Correct.

COL STREIT: But you're not observing them?

45 D10: No.

COL STREIT: Now, cast your mind back to the Special Operations Qualification course in June of 2023, the two QFIs were D2 and D6. Correct?

5

D10: Correct.

COL STREIT: Now, where their office was located at the Squadron, was that close to where your office was?

10

D10: Yes. They were located in the SHQ corridor.

COL STREIT: Would you have regular interaction with them during the Special Operations Qualification Course?

15

D10: Yes.

COL STREIT: What was your assessment of your observations of D2 and D6 during that course?

20

D10: Towards the second week, after some time over the weekend – I believe the course ran over that – I was aware they were starting to look a little tired.

25 COL STREIT: So D6, just accept from me he submits a Sentinel report that he worked 76 hours in a six-day period.

D10: Yes.

30 COL STREIT: On my maths – which is not always good, I should add – it's about 12 and a half hours a day work. Would you accept that from me?

D10: Yes.

35

COL STREIT: But at no point in time, although you're observing them starting to appear a bit fatigued, you didn't at no point in time pull up and say, "Stop. You're looking too tired. You're not going to go on with this course".

40

D10: No.

COL STREIT: Now, you have - - -

45 D10: Sorry, and I'll just add, I only saw them fleeting as well.

COL STREIT: So you say you saw them fleeting?

D10: Sorry, fleeting interactions on a daily basis, depending on what was going on those days.

COL STREIT: Did you get a brief from them at the end of the day about how the course was going?

10 D10: No.

COL STREIT: No briefs at all?

D10: Sorry, for clarity, the Course Manager would have, yes, but me, no.

COL STREIT: So your interactions with them was simply when running into them in the corridor intermittently and in and around the Squadron?

20 D10: Correct, unless I was authorising that day and then I would deliberately see them for the process of orders.

COL STREIT: Did you authorise missions during the Special Operations Qualification course?

25

D10: Yes, there were a number of them. I can't remember exactly how many but, yes.

COL STREIT: Because in the Regiment at that time, there were only
 two people that had the qualifications to authorise all of those types of flights. One is you?

D10: Three.

35 COL STREIT: Three?

D10: Three in barracks. Sorry, four, including this year.

40 COL STREIT: But you recall authorising a number of missions for the 40 Special Operations Qualification Course. Correct?

D10: Yes.

45 COL STREIT: Which required you to have engagement with D2 and D6 as the QFIs for that course?

D10: Correct.

COL STREIT: So you, at least insofar as those periods are concerned,had observations of them; is that right?

D10: Yes.

COL STREIT: And, at least towards the back end of the course, once you thought they started looking a bit tired?

D10: Yes.

COL STREIT: But I take it, given the figures I just read to you about the Sentinel report of 76 hours in six days, that level of work, was that something you were not aware of that they were engaging in?

D10: The work over the weekend, I was not in the barracks to observe, but I did become aware of it early in that second week, which is what prompted that discussion.

COL STREIT: You have had the opportunity, given what you've said in the front part of your statement, to read statements of witnesses and listen to the evidence of witnesses. That's correct?

25

20

D10: Yes.

COL STREIT: That includes Mrs Lyon's evidence when she gave evidence?

30

D10: Yes.

COL STREIT: And her statement?

35 D10: Yes.

COL STREIT: You would have had regard to the text messaging attached to that statement between her and CAPT Lyon. That's right?

40 D10: Yes.

COL STREIT: Would you accept from me that what CAPT Lyon is communicating back to Mrs Lyon about being tired, the sleeping arrangements, the workload that he was being asked to attend to, that's a

different picture than the one you were seeing of CAPT Lyon, in the sense of he was just getting on with the job. Would you agree with that?

D10: Yes.

5

COL STREIT: Now, you were asked some questions about observing CAPT Lyon in his tent at times when he might be sleeping or if he was asleep in his tent, by COL Gabbedy. Do you remember those questions?

10 D10: Yes.

COL STREIT: The reality is you're in a Jet Tent on the Wednesday night and the Thursday night, aren't you?

15 D10: Yes.

COL STREIT: So you're not going into the aircrew tent to check on whether people are sleeping, are you?

20 D10: No, my tent was located immediately beside.

COL STREIT: The last matter before we move to Private Hearing, can I just ask you this. It arises, for Counsel representing, from paragraph 93 of D19's statement, which is not yet in evidence before this Inquiry, but the matter was not put to this witness, and I'm going to so the matters can be engaged in evidence. So I just wanted to cast your mind back to May of 2023 and did you have a discussion with the Commanding Officer, D19, in relation to whether or not a Special Operations Qualification Course would be conducted post-Exercise TALISMAN SABRE 2023?

30

35

D10: Yes.

COL STREIT: The context of the discussion, was it, was that the CO was considering directing that the course not occur? Do you remember that? Was that the context?

D10: Yes.

40 COL STREIT: Did you communicate to him in the context of that matter 40 that you were adamant that the training of the Force was necessary to grow the depth of the Force ahead of transition from MRH to the UH-60M?

D10: Yes.
COL STREIT: So you wanted the course to go ahead; is that correct?

D10: Correct.

- 5 COL STREIT: Was his response to the effect that he disagreed with you and told you to inform the workforce that there wasn't going to be a Special Operations Qualification Course after Exercise TALISMAN SABRE? Did he say those things to you?
- 10 D10: Words to the effect.

COL STREIT: Did he explain his reasoning process was that he was most concerned to implement a deliberate reduced tempo period to rest the Force after what he regarded as a busy period conducting Exercise TALISMAN SABRE '23? Did he say anything along those lines to you?

D10: Words to the effect, yes.

COL STREIT: So the bottom line is there was a planned Special
 Operations Qualification Course to occur post-Exercise TALISMAN
 SABRE 2023 in the Unit Training Program?

D10: Yes.

25 COL STREIT: You wanted the course to go ahead so people could get their training and qualifications. Correct?

D10: Correct.

30 COL STREIT: The CO was communicating to you that, no, the course was not going to go ahead because he wanted people to have a rest period following Exercise TALISMAN SABRE?

D10: Generally, yes.

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15

COL STREIT: Now, do you agree with the description that you were adamant that the training of the Force was necessary to grow the depth of the Force ahead of transition from MRH-90 to UH-60M? So, in other words, you were adamant that the course goes ahead?

40

D10: Yes.

COL STREIT: The CO said, "No".

45 D10: Yes.

COL STREIT: All right, thank you. That deals with that matter.

MS McMURDO: COL Gabbedy seems to want to say something.

5

COL GABBEDY: There's a matter I need to raise as a matter of fairness. if I could, ma'am?

COL STREIT: Sure.

10

<FURTHER CROSS-EXAMINATION BY COL GABBEDY

- COL GABBEDY: Sorry, at the start of his questioning of you, 15 COL Streit put to you this proposition out of the DFSB publication. He put to you that individuals are not good judges of their own level of fatigue-affected performance. There's a sentence immediately after that sentence which I think needs to be put to you as a matter of fairness, and
- 20 that sentence is:

Research has demonstrated that without training, humans are quite poor at determining their actual level of fatigue.

25 Now, I think that phrase "without training" is important, and in your context, are you able to say have you received what might be referred to as a significant amount of training in relation to fatigue?

COL STREIT: At what time?

30

COL GABBEDY: Prior to July of 2023.

D10: Fatigue training for us is covered in multiple different layers. I'd say we'd have a decent amount of fatigue training.

35

COL GABBEDY: Thank you. That's the only matter I wish to raise, ma'am.

MS McMURDO: Yes, FLTLT Seefeld.

40

FLTLT SEEFELD: Sorry, ma'am, I would like to raise one thing.

MS McMURDO: Yes, all right.

<FURTHER RE-EXAMINATION BY FLTLT SEEFELD

FLTLT SEEFELD: And I say this because I'm conscious that D10 did
not actually have D19's statement in front of him while he was answering those questions, but in any event, I'll just say this.

You were asked some questions about the CO and discussion between you and the CO about running an SOQC, the evidence you just gave a few moments ago.

D10: Yes.

FLTLT SEEFELD: It was put to you that you were adamant that you wanted the training to go ahead and he said, "No, no, I don't want the training to go ahead", for the reasons that were given. Once he gave that decision, you accepted that, did you?

D10: Yes.

20

10

FLTLT SEEFELD: You didn't push back and say, "No, no, no, I insist"?

D10: No.

25 FLTLT SEEFELD: Thank you.

MS McMURDO: COL Streit?

- LCDR GRACIE: Just so that you're included in the loop, SQNLDR Nicolson and I have had a discussion about something that I was offering for him to put or that I will put to the Inquiry, but he wants to raise it with Counsel Assisting first, just so that you know what we're whispering and toing and froing - - -
- 35 MS McMURDO: All right. Well, we're trying to get into the Closed Session. This has to be done before the Closed Session, does it?

LCDR GRACIE: No, I will do it later in the public.

- 40 MS McMURDO: Well, when we go out of the Public Session into Closed Session, I'm hoping that we'll be able to let this witness go. If you need to just go outside and have a chat for a minute or two and then come back?
- 45 LCDR GRACIE: It should take 30 seconds.

MS McMURDO: Yes, thank you.

LCDR GRACIE: Sorry, I raised it at morning tea.

MS McMURDO: Do you need to be involved in the chat?

LCDR GRACIE: No, ma'am. They know what it's about.

10 MS McMURDO: Okay. There's no need for you to stand at the lectern. Thank you.

COL STREIT: Thank you. Sorry, Ms McMurdo, for that. The matter, I understand, is linked to communication made by Counsel Assisting and
 Counsel representing before this witness gave evidence concerning a personal sensitive matter and so I'm not in a position to address the matter now, but I will do so at a later stage today, after I speak with appropriate members of Counsel representing.

20 MS McMURDO: Okay, that's fine. So we're now ready to go into Closed Session?

COL STREIT: Yes, we are. We just need to - - -

25 MS McMURDO: I know, we'll have to have an adjournment. No, we don't need an adjournment.

COL STREIT: Well, the adjournment was also to confirm that we have all of the names of the people.

30

5

MS McMURDO: Names of those we need, yes.

COL STREIT: The request was made yesterday. That was yesterday's audience. There may be other people here who are not accounted for.

35

MS McMURDO: Yes. The suggestion is that we do lunch now, but is that sensible?

COL STREIT: It's nearly 12.30.

40

MS McMURDO: Well, do you think that probably would be?

COL STREIT: I think that would be sensible, yes.

MS McMURDO: All right then. We'll resume at 1 o'clock -1.15 – let's say 1 o'clock. Yes, we'll resume at 1 o'clock.

5 **<WITNESS WITHDREW**

HEARING ADJOURNED

10

(Continued in Private Hearing Session)

HEARING RESUMED

MS McMURDO: So we are no longer in Closed Hearing. Do we need an adjournment?

UNIDENTIFIED SPEAKER: (Indistinct).

MS McMURDO: Okay. Well, we can just do that. We're going to start with D19. Did you want an adjournment before we start with D19?

COL STREIT: It might be of some assistance to have a short adjournment to realign things, to talk to D19's legal Counsel, and D19 can be made ready and brought into the room.

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MS McMURDO: All right then. And the plan is to adjourn at about 4.30 this afternoon for everyone's convenience.

COL STREIT: Yes.

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MS McMURDO: Is that right?

COL STREIT: That is at your convenience.

25 MS McMURDO: And D10 will continue his evidence on Tuesday.

COL STREIT: D19.

MS McMURDO: D19, sorry.

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COL STREIT: Yes, that's correct.

MS McMURDO: D19 will continue his evidence on Tuesday. Thank you.

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COL STREIT: That's right.

HEARING ADJOURNED

HEARING RESUMED

MS McMURDO: Yes, COL Streit.

COL STREIT: Thank you, Ms McMurdo. I call D19, whose name appears on the pseudonym list that's before you. His evidence-in-chief will be taken by his legal representative, CMDR Jones, in these proceedings, which should only be short, I understand, and then I will commence questions.

MS McMURDO: Yes, so we're now back in Public Hearing, but with only the audio being streamed.

15 COL STREIT: That's right.

MS McMURDO: Correct, yes. Yes, thank you. There must have been a lot of people on that plane. The room seems quite empty.

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<D19, Sworn

<EXAMINATION-IN-CHIEF BY CMDR JONES

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MS McMURDO: Please let me know if you need a break at any time.

D19: Will do, ma'am.

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MS McMURDO: Thank you. Yes, CMDR Jones.

CMDR JONES: D19, in front of you, you should have a folder with your – in front of you. Do you see that?

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D19: I do.

CMDR JONES: Now, have you signed a statement dated 11 April 2025 for the purposes of this Inquiry?

40

D19: I have.

CMDR JONES: Is that a copy of your statement there in front of you?

45 D19: It is.

CMDR JONES: Are there any corrections that you wish to make to that statement?

5 D19: There's one correction, if I could.

CMDR JONES: Yes, and what is that?

D19: On page 4.

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CMDR JONES: Page 4.

D19: In the airframe hours there, you'll see on the left-hand column the aircraft type there, it's OH-58B. Can I change the B from Bravo to D for Delta, please?

CMDR JONES: Yes.

MS McMURDO: Sorry, could you just give that to me again, please?

D19: Page 4, ma'am.

MS McMURDO: Yes, I've got that.

25 D19: On the left-hand side, it's the fifth airframe down the left-hand side there, OH-58B to D.

CMDR JONES: It should be D.

30 MS McMURDO: D, great. Thank you.

CMDR JONES: With that correction, are the contents of your statement otherwise true and correct?

35 D19: I believe so, yes.

CMDR JONES: I tender that statement.

MS McMURDO: That will be – what are we up to?

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CMDR JONES: Together with the annexures thereto.

MS McMURDO: Yes, that will be Exhibit 222.

#EXHIBIT 222 - STATEMENT OF D19 AND ANNEXURES

CMDR JONES: D19, at paragraph 153 you advert to some further
 considerations that affected the planning for the activity – that is to say,
 Exercise TALISMAN SABRE – that the security clearance of those considerations were not appropriate for that statement. Can I show you a document?

10 D19: Yes. Thank you.

CMDR JONES: Now, that document I note refers to – it's a "Protected" document. I'm not going to discuss or disclose the contents of it, but it's reference – it is referable, rather, to Exercise TALISMAN SABRE 2025,

but were the contents of the threats in relation to the security assessment extant as at 2023 for the purposes of Exercise TALISMAN SABRE 2023?

D19: They were. The considerations were the same, yes.

20 CMDR JONES: How did that threat assessment affect the planning, in particular, as to how the unit would be accommodated?

D19: It influenced the availability of accommodation in the local area significantly as it relates to where we were to be in Proserpine.

25

CMDR JONES: Did it make it impossible to accommodate the unit in a hotel or motel in the local vicinity?

D19: It probably didn't make it impossible, but it was a risk balancing activity as to where I saw the highest risk existed.

CMDR JONES: I tender that document.

MS McMURDO: That will be 223.

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#EXHIBIT 223 - DOCUMENT RE EXERCISE TALISMAN SABRE 2025 ("PROTECTED")

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CMDR JONES: One final question before I hand over to COL Streit. Your statement doesn't – and COL Streit will take you through some of your history and experience in the Army – but in your time, have you deployed on active service?

D19: I have, yes.

CMDR JONES: In an operational role?

5 D19: Yes.

10

CMDR JONES: Did that involve flying combat missions?

D19: It did, yes.

CMDR JONES: I have no further questions.

MS McMURDO: Thank you, CMDR Jones. Yes, COL Streit.

15 COL STREIT: Thank you, Ms McMurdo. Can I ask the Inquiry Assistant to take up the exhibit?

CMDR JONES: Sorry. I'm terribly sorry. I apologise to COL Streit, there was one further thing. At the beginning there was – before I sit down, and I had neglected to do this – is to ask you is there something you wish to say to the Inquiry before you commence giving evidence to COL Streit?

- D19: If I could take the opportunity, yes, ma'am. I offer my deepest condolences to the families of the fallen: CPL Naggs, WO2 Laycock, LT Nugent, and CAPT Lyon. I am truly sorry for your loss. I had the honour of serving with them as their CO, but while they were valued members of my team, they will always be your family.
- 30 To the men and women of the unit, I had the honour of commanding for two years, and to their friends and families, I offer my sincere sympathies. I am deeply sorry for all that has been asked of you, and continues to be asked of you. My hope is that in some small way we will grow stronger and be better as a product of this long run.
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I would also like to acknowledge the strength of character and resilience shown by everyone affected by this incident. The unit's motto is valour, and every person I have encountered has embodied that spirit in their response to this tragedy, and the challenges that have followed.

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Finally, I would like to acknowledge the leadership of the unit. The officers and senior NCOs led with conviction before the incident, and they continue to lead with dedication today. Their professionalism and their strength of character is the cornerstone of a trusted capability. This trust is enduring and unwavering.

For the OCs of 173, past and present, your performance and actions on the night of the incident have set a new benchmark for what is considered professionalism under pressure.

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To all of the crews in Bushman call-signs the night of the incident, the response you offered demonstrated the skill, courage and professionalism seldom seen, that very few could match. You should all be proud.

10 Thank you, ma'am.

MS McMURDO: Thank you.

CMDR JONES: Thank you, D19.

MS McMURDO: Yes, COL Streit.

<CROSS-EXAMINATION BY COL STREIT

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COL STREIT: Thank you, Ms McMurdo.

Thank you, D19 for those words. Can I begin with some preliminary matters, please? First, can I ask the Inquiry Assistant just to remove the "Protected" exhibit? D19, can I begin by just asking some background matters to how your statement came into existence. Please take the opportunity to pour yourself a glass of water when you wish. But you received a section 23 Notice which had some questions in it, which then 30 generated your statement. Is that right?

D19: It is.

COL STREIT: And that Notice was accompanied by some

35 documentation, which included a Frequently Asked Questions Guide to Witnesses?

D19: It did.

40 COL STREIT: A Privacy Notice?

D19: (No audible reply).

COL STREIT: Sorry, you have to respond verbally. Yes?

D19: Sorry. It did, yes.

COL STREIT: A copy of my Instrument of Appointment?

5 D19: It did.

COL STREIT: And a copy of the Inquiry's Directions?

D19: Yes.

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COL STREIT: Just to orientate you to the room, in front of you are two lists on A3 attached to the table. One is a pseudonym list by order of pseudonym number 1, 2, 3, 4, et cetera. The other is a pseudonym list by order of surname of an individual with the accompanying pseudonym. So in the course of your evidence, I anticipate you might need to have regard to those lists just to confirm whether a person has a particular pseudonym before you respond to a question, if you are unsure. I suspect you will be aware of the pseudonyms of a number of witnesses that have given evidence already in the Inquiry.

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And finally, in relation to the section 23 Notice, in addition to asking you to answer some questions that generated your statement, it also required your attendance here to give evidence before the Inquiry. Is that correct?

25 D19: It did, yes.

COL STREIT: Now, what I'm proposing to do with your evidence is just take you through your statement in a narrative form, chronologically. I'll draw your attention to particular parts, or a section, or a paragraph.

30 I'll ask you some questions. I might read out that part and then ask you some questions in and around that particular matter. If the question that I ask means you have to respond above the "Official" classification, can you just let me know that, or anyone else who asks you a question, and we can address that issue in a Private Hearing next week.

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If the matter requires a response that can't be dealt with in a Private Hearing because it's above that classification, then if you could just indicate that, and we'll have to deal with the matter in a different way.

40 D19: Yes, indeed. Just for clarity and my own understanding, confirm the level of classification that covers a Private Hearing.

COL STREIT: "Official: Sensitive".

45 D19: Okay. Thank you.

COL STREIT: Yes.

MS McMURDO: So that is, if it is "Official: Sensitive" it has to be in a 5 Private Hearing. If it's "Official" - -

D19: Yes. And anything above that we need to have another discussion; is that right, ma'am?

10 MS McMURDO: Yes. Yes, we don't go as far as "Protected".

D19: Okay. Thank you.

MS McMURDO: If it's "Official", it can be in the public forum.

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D19: Thanks, ma'am.

COL STREIT: To assist you, D19, what may occur, even though a number of – you've got a number of annexures to your statement. Some of those might be at an "Official: Sensitive" level, and it might be that in the course of questioning I, or the Inquiry, or other Counsel representing, will take you to that particular publication, draw your attention to an aspect of its contents, not ask you any questions about it to identify the contents, but ask a question in and around the document, which won't then breach security. Okay.

D19: Okay.

COL STREIT: So if that process occurs and is done clumsily – it sometimes happens – by me, or somebody else, then just indicate that so you perfectly understand what you're being asked to do.

MS McMURDO: And we have experts in the room who are listening to what's being said, and we have – I think it's a five-minute delay in the audio being transmitted, so if there is any slip-up, it can be quickly corrected. So you don't need to be on absolute tenterhooks.

D19: Understood. Thank you, ma'am.

40 COL STREIT: D19, the first page of your statement, just above the note you referred to with the families, you say:

The information below is based on my best recollection of the events as they are enquired about and, where possible, I have provided additional context.

And what you have just said there is a reference to the contents of your statement. That's correct?

5 D19: It is.

COL STREIT: If we turn the page to question 1, which deals with background qualifications and posting history? I'll just ask you to confirm some matters there. So you are presently posted to Forces
Command, and you are undertaking a particular role that you've identified in question 1. You have, by way of tertiary qualifications, a Bachelor of Science, Master of Business Administration, a Master of Data Science and Innovation, and a Master of Military History. Is that correct?

15 D19: Yes.

COL STREIT: Turning now to you were asked a question about describing your role as the Commanding Officer at 6 Aviation Regiment, which commences at paragraph 2. You say you were posted into – as CO 6 Avn Regiment in December 2021. I just pause there. Had you

20 CO 6 Avn Regiment in December 2021. I just pause there. Had y previously been posted into 6 Aviation Regiment?

D19: I had, yes.

25 COL STREIT: When was your last posting to the Regiment prior to December '21?

D19: 18/19 – 2018 and 2019.

30 COL STREIT: At that time, you had been – were you the OC of 173 Special Operations Aviation Squadron?

D19: I was, yes.

35 COL STREIT: Prior to that posting, had you been previously posted to 6 Aviation Regiment as a line pilot?

D19: No.

40 COL STREIT: In terms of your earlier career in Aviation, I take it one of the airframes you flew was the Kiowa.

D19: It was, yes.

COL STREIT: Just for the assistance of the Inquiry, where you made the pen amendment on page 4 concerning OH-58D, that aircraft is the Kiowa; is that correct?

5 D19: It's one Kiowa model, yes.

COL STREIT: One Kiowa model. Just in relation to your flying on the Kiowa, where was that conducted? Were you part of a Recce Squadron somewhere?

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D19: I was, yes; principally in the Northern Territory.

COL STREIT: At some point in time, did you – is it fair to say when you have a look at your airframe hours, the majority of the airframe hours are on the Kiowa?

D19: Yes.

 COL STREIT: Is that a reference – or does that reflect that your
 background as a pilot before you transitioned to MRH-90 was largely in the reconnaissance space on the Kiowa?

D19: That was the bulk of my experience, yes.

25 COL STREIT: Just returning to your time as CO 6 Aviation Regiment on page 2 of your statement, you held the position for two years and posted out in December 2023. And during your entire time as the CO of the unit, you reported to Commander 16 Brigade Aviation, BRIG Dean Thompson. Is that right?

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D19: It is, yes.

COL STREIT: You list at paragraph 3 your main responsibilities as the Commanding Officer. First:

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Ensuring the safe and effective operation of all capabilities resident in 6 Aviation Regiment: Force generation and operation generation; Special Operations Aviation effects in support of ADF and government direction; managing personnel welfare; professional development; technical mastery, safety and operational airworthiness framework to sustain and promote capability; maintaining capabilities the unit is responsible for as outlined in the CDF Capabilities Preparedness Directive; and introducing a new capital platform, Black Hawk UH-60M, for the ADF.

Is what I have read out correct?

D19: Yes.

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COL STREIT: Just in relation to the last matter, introducing the new capital platform, you posted in in December 2021. When did the process of introducing the new Black Hawk into 6 Aviation Regiment - when did that really start to impact the lines of effort in 6 Aviation Regiment? Were you - - -

D19: It was an enduring line of effort for the entire time during my period of command. Following the government decision to purchase UH-60M, planning was underway immediately, and it impacted the level - the unit at various levels as time progressed.

COL STREIT: We have some evidence before the Inquiry that your unit in January 2022 - that's 6 Avn - comprised essentially two flying Squadrons, 173 flying MRH-90, and another Squadron whose function it was was bringing into service the new Black Hawk. Is what I have said accurate?

D19: Yes.

- 25 COL STREIT: Does that mean that other Squadron, was it simply going through the process of transitioning from an MRH-90 to the Black Hawk. or was it starting fresh without MRH-90, and just starting fresh on Black Hawk?
- 30 The majority of the aircrew in the other Squadron had not flown D19: MRH-90, therefore they were transitioning to UH-60M as a new platform. They had probably flown a legacy Black Hawk system.
- COL STREIT: I see. So effectively is it accurate to say that for the significant period of your time as CO of 6 Aviation Regiment, that 35 Squadron you just referred to was essentially training and transitioning to fly and operate for 6 Aviation Regiment taskings on the new Black Hawk?
 - D19: Correct.

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COL STREIT: And that role, that continued into 2024, is that right, after you had posted out and the new CO took over that?

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D19: I believe so, yes.

COL STREIT: So at all material times when you were the Commanding Officer of 6 Aviation Regiment, 173 Squadron was the only Squadron operating MRH-90 within 6 Avn?

5 D19: It was, yes.

> COL STREIT: You were asked a question on the bottom of page 2 about issuing directions, instructions, or other policies in respect to Aviation safety and operations. So just in relation to that, you give some evidence at paragraph 4:

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The unit has a set of Standing Instructions and SOPs that relate to operations and safety. These are subordinate to the white page SIs and other regulations. They're the lowest form of regulation in the framework available to Army Aviation units.

Is what I've read correct?

D19: Yes.

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COL STREIT: So in order to understand the full suite of orders,

instructions and policies that applied to your unit, the Inquiry should appreciate that orders, instructions and policies for 6 Aviation Regiment, specifically created, were the lowest level of orders, instructions and policies, but there's a whole suite of orders, instructions, policies and regulations that sit above the unit, imposed on the unit by other organisations. Is that correct?

- D19: Yes.
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COL STREIT: In terms of reporting any Aviation safety concerns raised at the Unit, Regiment, Brigade and Command levels, you say at para 5 on page 3 you were responsible for providing frank and fearless advice to all levels of Command as it relates to safety concerns. Can you just explain what you mean, or just expand on what you mean by "frank and fearless advice"?

D19: In a word, being honest. So offering my senior Commanders a level of transparency and honesty so they can appreciate the context at the ground level, and what we face.

COL STREIT: Was it the case that that largely meant a communication to the Commander of 16 Aviation Brigade, or did you go beyond that into **Aviation Command Headquarters?**

D19: Principally through my one-up, which was Commander 16 Aviation Brigade.

- COL STREIT: On a daily basis, or even a weekly basis, in terms of your
 specific engagement with 16 Aviation Brigade, did you have more regular
 engagement with the Brigade Headquarters staff, or more regular
 engagement with the Commander direct?
- D19: I could reach out and talk to the Commander at any stage. He was always willing to take my calls. It was a very good command relationship, is the way I would assess that. In saying that, I also had open access to his staff, so I could reach out and touch anybody – reach out and talk to anybody that I needed access to at different points in time.
- 15 COL STREIT: Were there, in the usual Military context, regular or requirements for you to appear in Commander's update briefings with 16 Aviation Brigade, conducted by phone or some other means?
 - D19: There was, yes.

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COL STREIT: And that process provided one of the conduits for you to provide information up, and to receive information down.

D19: Yes.

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COL STREIT: You say at paragraph 6:

- In executing my responsibilities as the Commanding Officer, I was responsible for reporting all safety concerns in accordance with the extant frameworks in orders, instructions, and policies, utilising the systems and forums available to me. If required, I was able to call my High Commander directly with any matter that was time-sensitive or serious in nature.
- 35 Is that right?

D19: It is.

40 COL STREIT: A question I meant to ask you in terms of context and 40 timing is before you took up your role as CO, did you attend the Army Pre-Command Course for new COs?

D19: I would have, yes.

45 COL STREIT: Do you have a specific recollection of doing that now?

D19: I believe – it's a bit of a stretch. I'd have to go back and check my own records. I believe it would have been during the time of COVID, so it would've been done remotely in small groups across the country.

COL STREIT: And that particular training is designed, would you agree, to inform incoming Commanding Officers of key Army-centric processes, and policies, and procedures to assist them in mounting command in their new unit?

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D19: In broad terms, that is about the remit of the course. The specific course outcomes and learning outcomes, you'd need to have a look at exactly the Learning and Management Package, and what they expected as part of the Pre-Command Course there.

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COL STREIT: But it covers everything from receiving briefings from senior Commanders, all the way to receiving briefings about how to run a disciplinary proceeding. Do you recall anything - - -

20 D19: Again, I'd have to go back and look at the details of the course to confirm that.

COL STREIT: Coming back to now being at 6 Aviation Regiment, just returning to page 3, paragraph 7, in response to a question about
 responding to aviation safety concerns raised at the unit, you say:

I oversaw any concerns raised at the unit and sought to remediate issues at the local level. If I was not able to remediate the matter at the local level, I would refer the matter to High Headquarters for consideration.

Just in relation to some evidence we've received, there was an occasion in the evidence where D6 - perhaps if you could just have a look at the pseudonym list?

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D19: Yes.

COL STREIT: There's some evidence before the Inquiry from some witnesses that D6 submitted a Sentinel report in relation to fatigue, where
 the Sentinel report identified he'd worked – I think it was about 76 hours in a six-day period doing the June 2023 Special Operations Qualification Course, and that he was in fact encouraged to put in that Sentinel report. You touch on it a little later in your statement, but just while we're here at this juncture, in terms of that Sentinel reporting process that, on your evidence that's been tendered now, you encouraged, did you,

yourself, receive Sentinel reports from members of your unit, or did it go through a different process?

- D19: The Sentinel system and again, I had safety staff responsible for this to me I actively encouraged people to log reports, such as Sentinel reports, for two reasons. It offers a way for me to track things in an objective fashion, but it also demonstrates a proactive safety culture for the unit. So I would have received that report through my staff as part of a regular weekly update brief.
- 10

COL STREIT: Are you able to indicate what – the Sentinel report is not a document that you created, that is, your unit. It's a form that the system provides to be completed for a work health and safety hazard that has been identified as having occurred.

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D19: A version of that. Yes.

COL STREIT: Are you able to assist the Inquiry understand what its purpose is, and what are the outcomes that can occur from a Sentinel report?

D19: There's two parts there. There's the purpose and the outcomes, as you said, sir. The purpose is for a safety occurrence to be logged and tracked, notified – as a notification mechanism. The outcome sought, that would be for me, in this context as the Commander at the lower levels, to assess what was available to me. Could I remediate the issue, and if I could, take action.

- COL STREIT: We're speaking fairly broadly here, and I'm just asking you to reach back in your memory to your time as the CO, but did that then, the process, close the loop on providing feedback to the individual about an outcome from the report they've lodged?
- D19: I'm not sure if the process did. I know the decision to make
 changes to the course as a product of the particularly the matter that you mentioned was communicated back to the member, yes.

COL STREIT: Just returning to your statement, now at question 2(d) you were asked:

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overseeing the implementation of any Defence Aviation Safety Regulations and guidance.

You say:

Units do not implement the DASR directly. High Headquarters is responsible for distilling the guidance from DASR into policy that's applicable at command, formation and Regimental level.

5 Is that correct?

D19: It is, yes. So - - -

COL STREIT: So – sorry, go on.

10

D19: You're right, sir.

COL STREIT: So just in relation to that matter – and you touch on this also later in your evidence, but we might just deal with an aspect of it now. There was a Defence Aviation Safety Regulation, the new Aviation Fatigue Management Regulation, which was in effect – it came into effect about October 2021, but it had a two-year transition period for MAOs to bring whatever processes they had within their span of command in line with the new fatigue regulation.

20

So the Army Aviation Command establishing a response to the coming into Force of that Fatigue Management Regulation, as far as your unit is concerned, your unit is simply waiting for Aviation Command to inform you what their response is to that new regulation. You're not providing your own individual response as to how you're going to implement that regulation in your individual Command, are you?

D19: Ideally not. I cover that in a lot more detail on page 12 of my statement there, where you actually asked the question, question 27(c).

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COL STREIT: Yes. The purpose for asking you this now is just to highlight an example which is extant, relevant to your evidence at this point that your unit is waiting for organisations above you in the chain of command to develop their responses to this fatigue management policy – regulation change, and then that is then imposed on you to implement

D19: In broad terms, yes.

within your unit. Would that be fair?

40 COL STREIT: You may take – and we'll come to it a little later – but you may take additional steps to try to get ahead of the wave, and understand what the new regulation might be about, and how that might be implemented. You might do that, but in essence you're having to wait for your High Headquarters to develop its response, and its processes, and

then impose those matters on the units in Aviation Command, which would include you.

D19: Yes.

5

COL STREIT: Would you agree?

D19: Yes.

- 10 COL STREIT: Now just very briefly, in terms of your category as an MRH-90 pilot – so you were asked to state what category pilot you are, or were, and previously held, and on which aircraft. So you indicate and give evidence that you held a Category C pilot category on MRH-90. You've previously held categories on Black Hawk and the S-70, A9, the
- 15 Kiowa, the Bell 206. Should that say "B", or "D"?

D19: There's two Kiowa versions. There's the OH-58D, L206.

COL STREIT: Got it. Thank you. And the Eurocopter EC-135. That's 20 right?

D19: It is, yes.

COL STREIT: You were also both an Aircraft Captain and a co-pilot for 25 general flying on MRH-90. This is your response at paragraph 10.

D19: Mm.

COL STREIT: You didn't fly as either a Special Operations co-pilot or Special Operations Aircraft Captain during your time as the Commanding 30 Officer; is that right?

D19: That is correct.

35 COL STREIT: Did you hold those qualifications, notwithstanding you didn't fly as a CO? Did you hold those qualifications?

D19: Not as a Commanding Officer, no.

40 COL STREIT: When you were the OC of 173 Squadron earlier in time, did you hold those qualifications on the - I'll start again. When you were the OC of 173 Squadron earlier in time at 6 Avn, was that when the Black Hawk was at 6 Avn or the MRH-90?

D19: So Black Hawk was the primary platform. There was a period of introduction of MRH-90 into the capability.

5 COL STREIT: You've listed your total hours on the Black Hawk on 5 page 4, the second serial. So you were qualified and flying the Black Hawk, were you, when you were the OC of 173?

D19: I was, yes.

10 COL STREIT: Did you hold qualifications in that role as an SO co-pilot and Aircraft Captain?

D19: I did not, no.

15 COL STREIT: So you held qualifications as an Aircraft Captain for general flying in Black Hawk?

D19: Yes.

20 COL STREIT: In your time as CO at 6 Aviation Regiment you say that you didn't fly either as an SO co-pilot or an SO Aircraft Captain during your time as CO. You did, however, fly consistently in the jump seat in the MRH to maintain oversight of the standards and to participate in training activities in the Special Operations context. That's correct?

25

D19: Yes.

COL STREIT: Can you just explain, I suppose, where the jump seat is located with reference to the two pilot seats?

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D19: The jump seat is between the two pilots' seats, just rearward of the centre console.

COL STREIT: So seated in the jump seat of the MRH-90, you are able to see all of the instrumentation that's in front of the two pilots and observe their flying of the aircraft.

D19: Yes.

40 COL STREIT: And you're on comms?

D19: Yes.

45 COL STREIT: Do you recall in broad terms how regularly you did sit in the jump seat during your time as CO?

D19: I tried to do it at least once per activity. So as we moved through the regular training cycle, I tried to make an effort to get to at least once per each activity, regardless of the length of the activity. A minimum once, in an effort to oversee and understand the performance of the crews through a Full Mission Profile, is the way to think about it.

COL STREIT: Without, I suppose, identifying the activities, would that mean on average once a week, or once every two weeks, or once every three weeks, or might it be longer?

D19: Minimum once per activity. Each activity as per an annexure to the document there. In terms of a regular drumbeat, probably not that regular. It would be more intensive periods.

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COL STREIT: Was it the case that being in the jump seat during a particular activity, the mission itself might be of varying duration? One mission might be quite long in terms of time. One mission might be short.

20 D19: Yes.

COL STREIT: So even if you were only doing it irregularly, let's say once a month or six weeks on average, it might be you're still spending a fair bit of time in the jump seat because of the duration of the mission?

25

D19: I think the time in the jump seat is not as relevant as the oversight and understanding of what the crews are doing, and how they're performing.

30 COL STREIT: Sure, and did that mean you would, in addition in preparing to be on that mission and in the jump seat, you'd be involved in observing the orders and the process that occurred beforehand?

D19: The complete process, yes.

35

COL STREIT: I'll just turn the page. Page 4, and I won't go through it, but you have identified all of the airframes that you're qualified on, and the hours that you have undertaken flying, and broken them down into various categories in that table. That's correct?

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D19: Yes.

COL STREIT: At paragraph 11, which is a response to question 6 - you were asked at question 6:

If you flew less than 180 hours per year between 2020 and 2024, please explain why.

And you identify and give your evidence there. Second sentence, you say: *I was unable to meet the required flying times due to the approach I took to commanding the Regiment, which was to do the work only I could do. I didn't want to detract from the flying opportunities for my pilots by taking time that they could have taken. However, I did spend more than 30 hours in the jump seat both years, where I was able to oversee the Force, and training, they were doing. This was incredibly valuable because it allowed me to observe whether the Force was at a required standard. In particular, I observed the pilots responsible for upholding the relevant standards.* Is what I've read correct?

D19: Yes.

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COL STREIT: Your evidence there, is that really indicating the balance that you, as Commanding Officer, have to weigh up in the performance of your role as the Commander on one hand, and responsible for the Regiment, against maintaining individual qualifications to fly a particular aircraft, and your decision was to focus on the work that only you could do as the CO, and at the expense of maintaining flying qualifications?

D19: Yes.

30 COL STREIT: Would that be a fair summary?

D19: Yes.

COL STREIT: And by not trying to maintain those flying qualifications
 or get new ones, it meant that there was more availability for your pilots in the flying Squadron to retain or obtain qualifications.

D19: Correct.

40 COL STREIT: You were asked to describe how confident you were in your abilities as an MRH-90 pilot, and you say you were confident in the airborne environment generally, having flown a number of aircraft types in various circumstances and conditions, including combat operations in the Middle East.

I was confident to fly domestically in all weather conditions, as I did on numerous occasions. However, during my time as CO at 6 Avn, I had to refresh myself consistently before going flying to make sure I was ready to fly.

Is what I've read correct?

D19: Yes.

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COL STREIT: In terms of your experience flying the MRH-90, you didn't have a preference as to which particular side of the cockpit you would sit. You were comfortable seated on either side. You identify there are strengths and weaknesses related to mission equipment, depending on which you side you sat on. You generally asked who you were flying with which side they preferred, and you took the other side. Is that correct?

D19: Correct.

- 20 COL STREIT: Now, you were asked to describe the cockpit workload for an MRH-90 pilot and how it compares to the workload in other airframes you have flown. You say that the cockpit – this is at 15 – the cockpit workload for the MRH was very manageable. The systems were very good and reduced pilot workload considerably, compared to all other
- 25 aircraft you had flown. The autopilot functions were some of the best you've ever used. However, it was also the most complex aircraft you've ever flown but if you knew how to use the systems effectively, it reduced workload and fatigue during missions. Is that correct?
- 30 D19: Yes.

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COL STREIT: Now, very briefly you were asked to outline how many times per year in 2022-23 you would have flown in a sortie in the MRH-90 which included the parameters of that night on NVDs overwater in formation, lower than 500 feet. You say maybe three or four times working with ships. While these conditions can be challenging, depending on environment conditions, the aircraft systems are designed to reduce the workload. That's correct?

40 D19: Correct.

COL STREIT: You also identify just in the footnote that:

45 A degraded visual environment is characterised by obscurance, 45 predictability and duration. A low cue environment is where the

pilots don't have many visual cues to them. An unusual attitude is usually a product of operating in a low-cue environment.

- Is what I've read out in terms of that footnote?
- 5

D19: Yes.

COL STREIT: That's taken from the Standardisation Manual for MRH-90?

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D19: Yes.

COL STREIT: Now, turning the page, you were asked to describe any difficulties you experienced seeing formation lights on the MRH-90 when flying in formation. Your evidence is you don't recall having any difficulties seeing aircraft in formation with upgraded Night-Vision Intensification System, which was introduced in 2020. That's right?

D19: That is.

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COL STREIT: You don't recall having any difficulties in flying in the ship 3 position in a formation of four. In terms of your formation flying experience, it's not something that PEX records as a separate feature, is it?

25 D19: I don't know if it does now but it didn't at the time, no.

COL STREIT: In relation to formation flying, your experience of formation flying, was that - I'll start again. When you flew Kiowas in a reconnaissance role, I take it you're not doing formation flying?

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D19: Some of it was formation. Quite a bit of it was as a pair, yes.

COL STREIT: As a pair. When you're moving and you're flying Black Hawk when you're the OC of 173 Squadron, are you flying in formation then in terms of formation of four?

D19: Principally, yes.

40 COL STREIT: Then when you take over and become the CO of 6 Aviation Regiment, December 2021, did you also fly in formation the times that you did?

D19: Yes.

COL STREIT: Do you recall where you would regularly fly when you're in a formation of four? So, in other words, as the flight lead or 2, or 3, or 4 ship?

5 D19: Generally, further back in the formation as a more senior pilot.

COL STREIT: Does that mean in ship 3 or in ship 4?

D19: Either/or, dependent upon what the mission's orders for the day were, and very seldom as part of an SO mission, if ever.

COL STREIT: We've had some evidence that ship 3, compared to the positioning of ship 1 and 2, that ship 3 can be a more difficult position to fly in formation. What was your view?

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D19: I never experienced that. I can see how that may have been the case, dependent upon your application to techniques. But I never experienced that personally.

20 COL STREIT: Now, we're looking at para 21. You've never lost situational awareness flying an MRH-90. You say:

The Standard Operating Procedure is to hand over to the other pilot asap and reset awareness with the aid of instruments.

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Is what I've read correct?

D19: Yes.

30 COL STREIT: Now, can you just explain your understanding that the SOP – I withdraw that. Just to put this response in terms of a proximate time, so is your answer applicable to July 2023 as a point in time?

D19: It would have been around then, yes. It would have been

35 applicable then, yes.

COL STREIT: So in terms of the Standard Operating Procedure to hand over to another pilot asap, reset awareness with the aid of instruments, is that decision point an exercise of judgment made by the pilot who has lost situational awareness? The context of the question is this. If the loss of situational awareness is temporary, in the sense of a matter of seconds, is it simply an exercise of judgment whether you would just hold on for the moment and then the situation resolves itself, or the minute you lose where you are in time and space, you hand over immediately?

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D19: Ideally, you would hand over as quickly as possible. The second you realise you don't have it anymore, so to speak, you'd be seeking for someone else to take the controls to reset yourself so you regain situational awareness, yes.

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COL STREIT: Would you speak first because they might be in the same position as you are?

D19: You'd have to make that judgment call on the night in the context.

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COL STREIT: Are you aware of the near miss in 2020 between two MRH-90s from 5 Aviation Regiment?

D19: I'm aware of it, yes.

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COL STREIT: Are you aware of the fact that both ships lost situational awareness of where they each were in time and space?

D19: I have some understanding of it, yes.

20

COL STREIT: It would seem to indicate that both pilots in each ship were experiencing that loss of situational awareness at the same time. Was that your understanding of the circumstance of that matter?

25 D19: I'd need to go back and review the safety report in detail to confirm that.

COL STREIT: Would the Inquiry be correct in understanding that loss of situational awareness by a flying pilot, then your expectation would be the flying pilot would hand over as soon as possible but it is a judgment-call by that flying pilot in the context of those circumstances. Would that be fair?

D19: Yes.

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COL STREIT: You have given some evidence to this effect: you have not experienced spatial disorientation while flying an MRH-90. Is that correct?

40 D19: Yes.

COL STREIT: The question doesn't define what "spatial disorientation" is. So to be clear, what's your understanding of what spatial disorientation is?

D19: There's a couple of different types, Type 1 and Type 2. I believe from memory Type 1 is the more insidious type of spatial disorientation where your version of what is considered a normal reference is reset. So it's an inner ear vestibular matter. We used to do a bit of this as part of our training where they would put you in a slow turn. You'd end up in a situation where you have what we call "the leans". You're spatially disorientated.

COL STREIT: You mentioned Type 1 and Type 2. Sorry, you continue.

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D19: I'd have to go back and check the actual references to confirm that but that's my understanding off the top of my head, sitting here and now.

- COL STREIT: Would you agree with this? Spatial disorientation is a 15 circumstance where your body is giving you information about where you are in time and space that is different to the reality of what your Primary Flight Instruments are telling you?
 - D19: Yes.

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COL STREIT: So in other words, your body's telling you you're climbing, but your Primary Flight Instruments might be telling you you're straight and level?

25 D19: Yes.

> COL STREIT: Recognised spatial disorientation is that concept where, if the pilot looked at their Primary Flight Instrument, they would appreciate that the Primary Flight Instrument is telling them something different than their body is so they're able to take corrective actions. Would you agree?

D19: Yes.

COL STREIT: Unrecognised spatial disorientation is where the pilot is unaware that they are spatially disorientated and then they take actions 35 based on what their awareness is at that time of the circumstance?

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D19: Yes.

40 COL STREIT: Would that accord with your recognition?

D19: Type 1 and Type 2, off the top, yes.

COL STREIT: Now, in paragraph 24 you say you weren't aware of any 6 Aviation Regiment aircrew having suffered from spatial disorientation prior to deploying on TALISMAN SABRE 2023. That's correct?

5 D19: Yes.

COL STREIT: Is it correct for the Inquiry to understand that spatial disorientation is a risk for each pilot when flying an aircraft?

10 D19: I think the risk is ever present, yes.

COL STREIT: Now, can I just focus – and this might be a bit of a memory stretch and, if it is, it's not a memory test, so please indicate – but if you could sort of reach back into your memory as far as you can, where you recall a specific time where the Army actually trains you about the risk of spatial disorientation occurring whilst you're flying and how you might respond to that matter? It can be on any airframe, it's not just limited to MRH-90?

- 20 D19: I've been fortunate enough to fly in a number of different training systems, so I might confuse and conflate them between the Australian context, the Australian Army context, the Australian Air Force context, and a Coalition Partner environment. So apologies for that if I mix it up. I'm pretty certain that I was taught about spatial disorientation on my
- 25 basic flying course, both in fixed-wing aircraft, but also on rotary-wing aircraft in Australia. I also covered a similar thing as part of flying with Air Combat Group for a short period of time where that was covered as part of an extension of basic training specific to the airframe. Then I'm pretty sure we covered it down in a coalition construct on operations as a product of some things that occurred.

COL STREIT: Would your view be that spatial disorientation, if it manifests, does present a significant risk to an aircraft if suffered by a pilot during flight?

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D19: It could do, yes. I think the nature of the airframes and the complexity of the airframes matter though. So the more complex, more capable airframes, all our pilot systems and the like have been designed to avoid a lot of these risks, or mitigate them or reduce them, I should say. Whereas the older airframes, so the basic Kiowa that I flew up on had no pilot augmentation, is a way to think about it. So it was far greater ever present risk, whereas the more modern airframes have four axes, three axes, autopilots, a variety of different systems to assist with flying and mitigating some of these fundamental risks to flying in different environments.

COL STREIT: Would one of those, in terms of the MRH-90, would one of those protective factors that wouldn't just deal with the risk of spatial disorientation but one of those protective factors in relation to where the aircraft is in time and space, is the RADALT hold?

D19: I think the complete system is the actual mitigation specific to MRH, so not one particular element of it but the complete system used in its totality mitigates the risk, not one particular element.

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COL STREIT: In terms of now just focusing in on 6 Aviation Regiment and its training of pilots, are you able to identify – if you can't, just say so – was there any specific training given when you took up as CO that was required of your pilots to be informed about the risk of spatial disorientation and how they might respond to it?

D19: Off the top of my head, I don't have a - I can't recall that specifically. I'd have to go back and look at the UTAP and the training provided to the aircrew to confirm that.

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COL STREIT: Do you remember how often it was necessary for pilots to undertake emergency training for the MRH-90?

D19: I believe it was every six months but, again, I'd need to go back and confirm that with the UTAP and the requirements.

COL STREIT: Now, can I just turn briefly to matters concerning TopOwl? So you were asked to state whether you ever flew using TopOwl and which versions of TopOwl you have used, and describe the differences between the various versions, i.e. how it affected your ability to fly at night. If you flew Black Hawk, compare the performance of TopOwl with the NVDs you used on Black Hawk. Your evidence is:

I have used TopOwl version 4.00 and version 5.10. With one particular exception, the differences between the versions of software were not particularly notable. The distance to run feature in the HUD for version 5, which was not a feature of version 4, was, in my opinion, a very important safety feature for the mission set as we were responsible for at 6 Aviation Regiment.

You provide a footnote with some additional information on that matter. You say:

In my opinion, the HUD system on the MRH-90 was superior to the system used on the S70. I have not used the new system for the UH-60M and cannot comment on it. The Image Intensification Tubes used on the S70 Black Hawk are comparable to tubes used on the MRH-90 TopOwl version 5.1.

Is what I've read correct?

D19: Yes.

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COL STREIT: When you talk about the distance to run being an important safety feature for the mission set and noting the classification of this forum, to the extent you can, can you just say what you mean by why was it an important safety feature?

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D19: The precision approach that was used to fly to a point in time and space, the distance to run was absolutely - it was a value add for the flying pilot.

- 20 COL STREIT: Now, we've received some evidence to the effect that the TopOwl version 5.1 in 2023 displayed certain symbology taken from the Primary Flight System on the visor itself in front of the pilot's eyes. Is that a fair summation?
- 25 D19: Sorry, can you restate the question? I didn't understand.

COL STREIT: The HMSD had projected on it, or occurring on it, symbology taken from the Primary Flight System, so the height, the speed, for example, that you might be travelling.

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D19: Yes.

COL STREIT: Now, there's some evidence that TopOwl version 5.1 has been variously described as an irregularity, an error, or even something
that was deliberate. But when you turned your head off-axis, an error arose in relation to the attitude information. Were you aware of that ambiguity?

D19: I was aware of that, yes.

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COL STREIT: So in circumstances where the Inquiry is trying to understand if pilots are taught that the symbology on their HMSD TopOwl version 5.1 is not something they can rely upon in setting the aircraft attitude, and they have to look in on the Primary Flight Instrument to set the attitude, then what's the point of the symbology?

D19: I think there's a number of elements to the TopOwl symbology. You need to use the different elements and aspects of the symbology for different phases of flight in a very deliberate fashion. So anybody that's used a HUD previously would understand that not all of the information is relevant all of the time. So at different points and different aspects of flight, your eyes need to focus on different parts of the HUD to gain the information required that is pertinent to that phase of flight.

- 10 In the same way that you have a series of MFDs, multi-functional displays, in the cockpit itself, you don't try and absorb all of the information at once. Different elements of the information are critical for different phases of flight. It's the same principle for the HUD. You just have to work less hard to get the information.
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COL STREIT: So if the STANMAN says to the pilot in July 2023 that you set your aircraft attitude by looking in at your Primary Flight Instrument but you're also, as the pilot, provided this capability with the HMSD with symbology projected on it telling you your height and your speed, et cetera, what's the purpose for that information being there if the order and instruction is telling you that you can't set your attitude using that information? You have to look at the Primary Flight Instrument.

D19: Sorry, does the STANMAN say you have to use Primary Flight Instrument, does it?

COL STREIT: That's my understanding.

- D19: I'm uncertain of that. If that is the case, it's an augmentation device so it gives you a reference point as part of flying eyes out. I'd need to go back and check the STANMAN myself to see exactly what that was and then talk to the person that wrote it to understand the implications behind it.
- 35 COL STREIT: Now, there's evidence before the Inquiry of two key things, that you set your attitude information by looking at the Primary Flight Display because that was required by the STANMAN. That was taught as the correct flying technique. On the other hand, there's evidence before the Inquiry that when flying in formation, at night, overwater, it's pretty important to keep your eyes out because the greatest risk to you is impact with the aircraft in front of you that you're formating off.

So in those circumstances, information is displayed on the HMSD giving you indications of height and speed and other things. But the information appears to – if the orders and instruction is saying you can't rely upon that

information as being accurate to set your aircraft attitude and you've got to put eyes in on the Primary Flight Instrument, then why have the information there at all?

5 D19: I think potentially you're correct, but I'd need to go back, and the point of an attitude or a device to set an attitude when flying is a known datum to sort of take it back a level of extraction. So what that means is you're just looking for a reliable source – a reliable datum from which to set the attitude, which attitude power performance is a way to think about 10 it.

In formation, the attitude is set from the other aircraft, generally speaking. So anyone that's flown in close formation knows that the contract always lies with the aircraft behind. There's a lot of Air Force sayings out there about formation and what you do when you fly in formation.

But in terms of setting a reference and a datum point with which you are responsible for not colliding with the other machine, as a way to think about it, the absolute contract lies with you not to crash into the aircraft in front of you. As a consequence of that, you must be aware of where that airframe is the entire time, which then I suppose takes us to the graduate solution of the training of our flight leads and the people that run the formation.

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So there's a very specific turn rate that is used. Nothing is ever fast. It's all very measured and very slow. In close formation, the settings, the way I describe that, it needs to be repeatable and common. So everyone in the formation needs to know exactly what's about to happen. So because of that -a long way around here, but your reference about the HUD and its usefulness, the primary source of where you set the airframe attitude with respect to a point in time and space will change.

If you're a single airframe operating by yourself on a dark night, in cloud, then the STANMAN's advice about setting the attitude from the Primary Flight Instruments may well be the most relevant one. If you're in close formation with respect to flying near someone else, you need to look at that other person and trust that other person is flying in a safe manner because they're trained accordingly as part of leading the formation around the sky.

So your point about the usefulness of it may be relevant, but I think it's critical to understand that it's an augmentation device. Therefore, the primary source of where your datum is set will change, dependent upon

the flight regime you're in at different points in time, in different contexts, naturally.

AVM HARLAND: So can you use the Helmet-Mounted Sight and Display attitude data as your primary reference for attitude?

D19: I'd need to go and check the STANMAN, sir. Off the top of my head, again, I'd have to go back and check the book based on the evidence given by Counsel Assisting, and the implication is no. But again, I would need to go and check the reference to be sure of it or otherwise.

AVM HARLAND: Okay, thank you.

MS McMURDO: So I get the impression that you would be a little surprised if that STANMAN is dogmatic on that point. It mandates it?

D19: It's in the name, ma'am. It's a Standards Manual so that a standard you fly to.

- 20 MS McMURDO: Sure. But I got the impression I might be wrong that you would be a little surprised if that was the case and that you would think that you could set, in a situational awareness situation, and you should be able to rely on the HUD?
- 25 D19: I think the context would certainly matter, yes.

MS McMURDO: Okay.

- COL STREIT: Because is it correct that part of your evidence as to why that context is important is because your opinion was that the distance to go – the distance to run figure for the HUD, was actually an important safety feature for the mission?
 - D19: In a mission-specific context, yes.
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COL STREIT: Now, can I just take you to – we'll finish off TopOwl, if that's okay. So you don't recall ever feeling uncomfortable using TopOwl once trained in the system. You do remember it taking a while to get used to the hyper-stereopsis associated with the system. However, once trained on the system though, it became the new normal for night flying, in the same way when you first learned to fly on NVGs it takes time until you

- same way when you first learned to fly on NVGs, it takes time until you get comfortable with the system you are using. That's correct?
 - D19: It is.
- 45

COL STREIT: Hyper-stereopsis, is that the phenomenon where things or objects appear closer than they are?

D19: I always get that a bit mixed up, but I believe it is, yes.

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COL STREIT: You and me both. Let's move to the next bit where you participated in operational evaluation on TopOwl version 5.1 in 2019 as one of the flying pilots. That's right?

10 D19: Yes.

COL STREIT: You were aware – and this is a reference to paragraph 28 – you were aware of an ambiguity of the TopOwl version 5.1 symbology relating to pitch and roll information as projected on the visor when the pilot turns their head to the left or right. But that was not something, I take it, that affected you in any way?

D19: I think in the context it was demonstrated to me, no.

20 COL STREIT: You say at 28 that this feature was part of the gap training pilots underwent during the IIS of the new system:

I have never been affected by it outside of it being demonstrated to me during the gap training.

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That's correct?

D19: It is, yes.

30 COL STREIT: The gap training, can you recall – it might be a little while ago now but can you recall what that gap training was that you had?

D19: No, I couldn't, sorry.

- 35 COL STREIT: This may or may not assist you. There's some evidence that an aspect of the gap training was to do a flight with a Qualified Flying Instructor who would point out the ambiguity to you and thereby exposing you to the ambiguity in the context of a real flight. Does that assist your memory in any way?
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D19: I believe because I was part of the Test and Evaluation activity, I think that may have counted as my gap training. So in real terms, my gap training was probably a fair bit larger than what the - if it was one flight, again, I'd need to go back and check the paperwork to see exactly what it said.

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COL STREIT: Now, do you have a specific – you've addressed later on some matters concerning the OPEVAL. We might just deal with those matters. I want to ask you some further questions. You were asked by Standards Section – this is para 29 – to participate in the activity. "As the OC, to the best of your recollection" – and the request was addressed to the unit and a cadre of experienced aircrew were made available to participate in the activity. The dates of the activity are in accordance with the report that was previously tendered into evidence. You say:

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Given the passage of time, I don't specifically recall the flight profiles or other specifics of the activity. I believe they were in accordance with the Test Plan.

15 So what I've just read out, which is paragraphs 29 and 30, are they accurate, what I've just said?

D19: Yes.

20 COL STREIT: You say at 31:

I was not concerned by the pitch and roll information as it is my recollection that the pilot had to look a long way off-axis to notice it appreciably, and my assessment was that it was unlikely to be a risk factor that far off-axis because it would be both counterintuitive and contrary to training where a pilot is looking that far off-axis to set an attitude on the aircraft using the HUD. The procedure, as taught from initial training onwards, is that aircraft attitude is set by looking forward and at the instruments where necessary. You may get information such as height and speed from the HUD but little more. This is my personal perspective, and I note that I hadn't used the HUD often at that point in time.

35 Is that correct?

D19: Yes.

40 COL STREIT: Where you say it's your assessment it was unlikely to be 40 a risk factor that far off-axis, because it would be both counterintuitive and contrary to training. First, dealing with counterintuitive, what did you mean when you used that word?

45 D19: It's at odds with what you're taught as part of your pilot training, 45 so it wouldn't necessarily make a whole lot of sense to do it like that.

COL STREIT: This is something the Inquiry is considering, but setting an aircraft attitude is the means by which you dictate where the aircraft is going and at what speed in time and space. Would you accept that?

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D19: In combination with a number of other inputs, but yes.

COL STREIT: So if I'm looking off-axis with TopOwl version 5.1 at 45 degrees still looking out the front windows of the aircraft but just to the far right now, and I'm seeing another aircraft there where I'm formating off that other aircraft, and it's, for whatever reason, moved left or right which requires me to adjust moving left or right in order to properly formate, can I not set the aircraft attitude whilst I'm looking at that other aircraft by making cyclic inputs to formate and maintain my position on station?

D19: Again, I will come back to the original point about which datum you were using to reference at that point in time. If you were lining up the other aircraft through a series of cues in the cabin, various aspects and elements of the windows, the doors, like the physical environment in terms of keeping an airframe fixed in a point in your field of view, that would be your primary flight source at that point in time, compared to the HUD.

25 COL STREIT: So I can set an aircraft attitude whilst I'm looking off-axis. That's as I understand your response?

D19: The aircraft attitude is relative to the other airframes. The setting of an attitude is station-keeping in formation. You don't necessarily look
inside to set your attitude in that sense. You're trying to keep the machine in a fixed spot relative to the other aircraft.

COL STREIT: There's a level of fluidity of this because you're formating off the aircraft in front of you. It's formating off the aircraft in front of it if you're ship 3 in a four-ship formation. Correct?

D19: Yes.

40 COL STREIT: So if ship 1 changes, for whatever reason, left and right 40 to avoid an obstacle or weather, one would think ship 2 would have to 6 change its attitude in order to continue formating off ship 1. That would be correct?

D19: Yes.

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COL STREIT: Then the flow-on effect would be you and ship 3 would have to do the same in order to formate off the new position that ship 2 has now taken in the formation?

5 D19: Yes.

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COL STREIT: So flying the aircraft, if you're looking out the far right-hand side of the front windows of the MRH-90 and seeing that occur in front of you, you can adjust the cyclic to move the aircraft to maintain station in the formation, without having to look off to your front and centre to your X-axis and then look out the front and then set the attitude. That wouldn't make any sense?

D19: You're right. But, again, you're not setting the attitude with respect to the HUD in that context. You're setting the attitude with 15 respect to the other airframe. So you might be taking certain elements of the information presented in the HUD, your height, your speed, and various specific snippets, but not the complete picture. So you cherry-pick the information you need with respect to the complete context 20 and picture offered to you at that point in time as a pilot to give yourself the best result.

COL STREIT: The essence of what I'm asking you is that I can set an aircraft attitude without looking out the direct front of the aircraft while I'm flying, whether I use the HUD or not?

D19: You would need a datum to set it from something and to something but, yes. So when setting an attitude of any kind, you need to understand where you're coming from and where you're going to. As part 30 of that change in the attitude, you're looking for a change in performance is a way to think about it. You need to understand exactly where you're getting your information from and where you're changing the attitude and where you're hoping to get to is a way to think about it.

35 COL STREIT: Thank you for that. I note the time.

> MS McMURDO: We might continue this conversation on Tuesday morning, 9.30?

40 COL STREIT: Yes.

> MS McMURDO: Could I remind Counsel representing that Counsel Assisting some days back sent an email about the DFSB ASIR report and how to move forward on that, and I think the answer is it is due on Tuesday.

COL STREIT: That's correct.

MS McMURDO: Thank you.

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<WITNESS WITHDREW

10 PUBLIC INQUIRY ADJOURNED UNTIL TUESDAY, 6 MAY 2025 AT 0930