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Level 4, 190 Queen Street, Melbourne 3000 Telephone: 03 8628.5561 Fax: 03 9642.5185  
Offices in: Melbourne, Brisbane, Darwin, Canberra, Perth, Sydney, Adelaide

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**TRANSCRIPT OF PROCEEDINGS  
TRANSCRIPT-IN-CONFIDENCE**

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**INSPECTOR-GENERAL AUSTRALIAN DEFENCE FORCE  
INQUIRY INTO THE CRASH OF A MRH-90 TAIWAN  
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, WEDNESDAY, 30 APRIL 2025**

**DAY 51**

**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**

<b>Signed</b>	.....	<b>Date</b>	.....	(Chair)
<b>Signed</b>	.....	<b>Date</b>	.....	(Recorder)
<b>Signed</b>	Epiq Australia Pty Ltd	<b>Date</b>	27/05/25	(Transcription)

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**.MRH-90 Inquiry 30/04/25**

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MS McMURDO: Yes, COL Streit?

COL STREIT: Thank you, Ms McMurdo. The next witness is  
MAJ Gavin Lewis. MAJ Lewis was a witness who gave evidence in  
5 Hearing Phase 8, and gave some evidence which, as a consequence,  
resulted in a conference with MAJ Lewis which identified he would be  
able to assist the Inquiry with further evidence. That necessitated an  
adjournment of his evidence at that time for the purposes of obtaining a  
further statement from MAJ Lewis. Upon review of that statement,  
10 Counsel Assisting formed the view – an intent to simply tender  
MAJ Lewis' statement without calling him to give evidence, as we have  
done with some other witnesses.

We informed Counsel representing of that particular matter, and invited  
15 them to make application should they wish to ask MAJ Lewis questions,  
necessitating he be called. A deadline was provided in relation to  
that. Shortly after that deadline had expired, a request was received from  
a member of Counsel representing to ask MAJ Lewis questions that was  
ultimately approved by you, and MAJ Lewis is appearing here today via  
20 audio-visual link.

My intent with MAJ Lewis is simply to have him identify his statement,  
ask some preliminary questions, and then tender his statement, and then I  
will sit down. And I understand at least one member of Counsel  
25 representing has indicated to me they may be 30 to 45 minutes in terms of  
questioning this witness, and that was the estimation yesterday.

MS McMURDO: Thank you.

30

**<MAJ GAVIN JAMES LEWIS, on former oath**

35 **<EXAMINATION-IN-CHIEF BY COL STREIT**

35

COL STREIT: MAJ Lewis, can you hear and see me?

40 MAJ LEWIS: Yes, I can, sir.

40

COL STREIT: MAJ Lewis, you gave evidence during Hearing Phase 8  
here in Brisbane. Do you recall that?

45 MAJ LEWIS: Yes, I do.

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COL STREIT: Now, can you not only hear and see me, but can you see also the Inquiry?

MAJ LEWIS: Yes, I can.

5

COL STREIT: That is, the Inquiry Chair and Deputy Chair?

MAJ LEWIS: Yes.

10

COL STREIT: Thank you. Now, if at any point in time the audio cuts out and you're unable to hear what I am saying, if you could just wave with one of your hands to indicate that and we'll briefly stand the matter down to re-establish the audio. Obviously, if the video link cuts out, then we'll all know that. Just stand by, and we'll seek to re-establish that link.

15

Do you understand those things?

MAJ LEWIS: Yes, I do.

20

COL STREIT: Do you have a copy of your statement of 14 April 2025 in front of you?

MAJ LEWIS: Sorry, no, I do not.

25

COL STREIT: Do you have access to a Defence Protected Network terminal where you are?

MAJ LEWIS: I do. There was a short outage this morning, and I can't confirm at the moment if it's - - -

30

COL STREIT: Are you comfortable to proceed with your evidence without having your statement in front of you?

MAJ LEWIS: Yes.

35

COL STREIT: If at any time you become uncomfortable, can you let the Inquiry know and we'll briefly stand the matter down so you can obtain a copy of your statement and have it in front of you. Do you understand that?

40

MAJ LEWIS: Yes.

45

COL STREIT: Just accept from me – or perhaps if I can ask you these things. First, did you receive a section 23 Notice from the Inquiry which contained a list of questions for you to answer for the provision of a further statement to the Inquiry?

MAJ LEWIS: Yes, I did.

5 COL STREIT: And in responding to those questions, did you complete a statement which you signed on 16 April 2025?

MAJ LEWIS: Yes, I did.

10 COL STREIT: Did the statement also contain an "Official: Sensitive" annexure which you digitally signed on 17 April 2025?

MAJ LEWIS: That's correct.

15 COL STREIT: The statement that you have provided to the Inquiry in response to that section 23 Notice, does it require any amendments or additions from the time of signing, or shortly thereafter?

MAJ LEWIS: No, it doesn't.

20 COL STREIT: Thank you. Ms McMurdo, I tender the statement of MAJ Gavin Lewis signed by hand on 16 April 2025, containing one annexure, being Annexure A. The classification is "Official: Sensitive". Digitally signed by MAJ Lewis on 17 April 2025.

25 MS McMURDO: All right then, that further statement of MAJ Lewis will be Exhibit 210.

30 **#EXHIBIT 210 - ADDENDUM STATEMENT OF MAJ LEWIS**

COL STREIT: Thank you. I have no further questions.

35 MS McMURDO: Thank you.

MAJ Lewis, would it help if we sent you a copy of your statement by email on the network? Have you got - - -

40 MAJ LEWIS: I don't think so, ma'am. I do have a – I do recall it quite distinctly because it was so recently.

MS McMURDO: Okay.

45 MAJ LEWIS: And I'm happy to proceed.

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MS McMURDO: All right then. We'll see how we go.

COL STREIT: We have this morning sent a copy of the statement on the Defence system, and so if the need arises, the Major can quickly access the Defence system.

MS McMURDO: So if you feel at any time you need to, you can go and attempt to get a copy of the statement. If you feel you'd like to have the comfort and use of that, just let me know.

MAJ LEWIS: Okay.

MS McMURDO: Also, if you have any trouble hearing or seeing any of the participants in the Inquiry let me know straightaway, and finally, if you need a break at any time, let me know.

MAJ LEWIS: Okay. No worries, ma'am.

MS McMURDO: Thank you. Yes, COL Gabbedy.

**<CROSS-EXAMINATION BY COL GABBEDY**

COL GABBEDY: Thank you, ma'am. Good morning, MAJ Lewis. I'm COL Gabbedy. I appear for GEN Jobson. Thank you for your time this morning. I just want to start with a few questions in relation to your qualifications. How long have you been a member of the Australian Army?

MAJ LEWIS: Since March 1991.

COL GABBEDY: Has all of that time been in Aviation Corps?

MAJ LEWIS: No.

COL GABBEDY: Apart from your initial training?

MAJ LEWIS: No, I commenced as a Reservist in Infantry, and then Ready Reserve, and then went Regular with Aviation in 1995.

COL GABBEDY: So Aviation Corps since 1995, nearly 30 years now.

MAJ LEWIS: Correct.

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COL GABBEDY: Tell me if I'm right in relation to my understanding of your roles and tasks. You've been the initial QFI for MRH-90 operations. Is that right?

5 MAJ LEWIS: One of three.

COL GABBEDY: You've been an MRH-90 Maintenance Test Pilot and Instructor.

10 MAJ LEWIS: Correct.

COL GABBEDY: You've been a Senior MRH-90 Instructor.

15 MAJ LEWIS: Correct.

COL GABBEDY: And you've been the Regimental Standards Officer for 5 Aviation Regiment.

20 MAJ LEWIS: Correct.

COL GABBEDY: And it says here on your statement you've been ITW. I don't understand that acronym. What does that mean?

25 MAJ LEWIS: Instructor Training Wing.

COL GABBEDY: What is your current role? Is that Instructor Training Wing?

30 MAJ LEWIS: It's a hybrid role with the UH-60, the Black Hawk integration. It's teaching instruction and also basic instruction to the pilots.

35 COL GABBEDY: I want to cover three areas with you today, Major. I want to look firstly at the first statement you provided to the Inquiry which deals with a conversation you had with GEN Jobson quite some time ago when he was Brigadier in charge of 16 Avn, then I want to look at fatigue and risk. So if I start firstly with that conversation, could you just put some context around it? You were asked a question by the General in relation to what – perhaps if you could relay in your words  
40 what that conversation was about?

MAJ LEWIS: And this is in relation to my statement in Hearing 8?

45 COL GABBEDY: It is, yes.



MAJ LEWIS: Okay. And that was when he was querying about what he thinks the next accident would be?

COL GABBEDY: Yes.

5

MAJ LEWIS: Yes. So this was a proactive approach that COL Jobson – sorry, GEN Jobson would normally take, that he’d try to understand or anticipate where the greatest risk is coming from, and try and put something in. I simply responded with the area where we had our greatest risk at the time, which was in the environment of overwater operations, particularly with the operations that 6 Aviation Regiment were involved in.

10

COL GABBEDY: So if I understand your answer to him, you were identifying the riskiest profile flown by Army Aviation at that time.

15

MAJ LEWIS: Correct. And that wasn’t a new profile, it was a profile that we’d been flying since the late 90s.

20

COL GABBEDY: So, again, I take it it was really a matter of logic in some ways. Your answer was, “Okay. This is the riskiest profile we fly. This is where the greatest risk resides. That’s what we should be looking at in terms of building up some controls”. Is that right?

25

MAJ LEWIS: Correct. It was an extant risk that we’ve known historically, and we’ve tried to treat accordingly.

30

COL GABBEDY: If I could look at fatigue with you for a moment, and if I start with the fatigue training that you and, by extension, all pilots receive, and my questions go to the fatigue training that all pilots receive? If you understand that premise?

MAJ LEWIS: Yes.

35

COL GABBEDY: Is it correct that fatigue awareness training is first provided by the RAAF Institution of Aviation Medicine at a Foundation Course? Is that right?

40

MAJ LEWIS: I don’t know what is currently delivered, but certainly the standard profile, and the one that I received, was on the initial training for Aviation Medicine. Fatigue is a significant part of that training. So everyone gets their initial foundation awareness, and they give, like, tools for addressing or trying to counter effects of developing fatigue.

45

COL GABBEDY: What are those tools?

MAJ LEWIS: Sleep hygiene is probably the biggest one, and understanding the barriers to effective sleep.

5 COL GABBEDY: Do they also talk about tactical use of caffeine, those sorts of things?

COL STREIT: Could I just raise a matter with my friend?

10 COL GABBEDY: Certainly.

COL STREIT: The timing of the delivery of the training is important.

COL GABBEDY: Okay.

15

COL STREIT: So is he talking about now, or - - -

COL GABBEDY: I'm going to get to that.

20 COL STREIT: Right.

COL GABBEDY: I thank my friend for that. I'll just quickly go to that question. I'll go to a next question that my friend has raised.

25 Did the training include tactical use of caffeine? Are you told, really, when that you should ingest that to assist with fatigue management?

MAJ LEWIS: When I did the training, and the training that I'm aware of – and I'm only saying that because it's something I was exposed to – was about using medicines to assist in altering circadian rhythms. I don't think caffeine was recognised as a formal method back when I did it. Certainly now we see that caffeine can be an assistant to helping with alertness.

30

COL GABBEDY: We've just been talking about the initial training. Is refresher training provided throughout your career?

35

MAJ LEWIS: Yes.

COL GABBEDY: How regularly is the refresher training provided?

40

MAJ LEWIS: For fatigue?

COL GABBEDY: Yes, for fatigue.

MAJ LEWIS: We have it in two instances. It's for Non-Technical Skills, or Crew Resource Management training was its former title, and also in Aviation Medicine training. So both of those have a frequency that requires all aircrew to be current with to continue with flying operations.  
5 So both of those events talk about fatigue.

COL GABBEDY: How regularly are those events provided?

MAJ LEWIS: Typically, you should be seeing everyone for some sort of fatigue training every one to two years.  
10

COL GABBEDY: Is fatigue also taught at the School of Army Aviation in the initial MRH-90 course, are you aware?

MAJ LEWIS: It's not taught as a bespoke topic, but fatigue is part of everything, as is safety. So it's always considered and incorporated in the training and the management around that training, like the flying programs, et cetera.  
15

COL GABBEDY: Are you a Flight Authorising Officer?  
20

MAJ LEWIS: Yes.

COL GABBEDY: Could you please explain what the role of an Authorising Officer is in terms of risk management for a flight that you're authorising?  
25

MAJ LEWIS: Well, really the Flight Authorising Officer is ensuring that the system is put in place. When I say "the system", I'm talking about the training and currency, and also local effects that come into play. So I make sure that they're qualified for the mission, they are experienced for the mission, and the environmental factors are within the skill set of the aircrew or the crew that's been selected for that particular task, and also their personal conditions like fatigue, their complacency, et cetera, are suitable to conduct the task as safely as possible.  
30  
35

COL GABBEDY: Is that role of Flight Authorising Officer, does that have the equivalent sort of status as a subject matter expert in terms of preparing safe flights or safe sorties?  
40

MAJ LEWIS: It does, but in a very broad sense. A Flight Authorising Officer doesn't need to be qualified on type in certain instances, but typically we prefer that they are qualified on type. But they're an SME as far as knowing what the crew might be subject to, and therefore identifying any barriers to success.  
45

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COL GABBEDY: Do you view that role, that Flight Authorising Officer role, as part of the risk management for any particular mission or sortie?

5 MAJ LEWIS: It's an essential part of it, but it's not exclusive. It's just essentially the person who identifies that everything that should've happened up to that point has been carried out.

10 COL GABBEDY: I think you've touched upon this, but as part of that role, and prior to authorising a flight, are you required to assess your own fatigue?

MAJ LEWIS: Yes.

15 COL GABBEDY: Are you then required to assess the fatigue of the crews that are about to undertake the mission or sortie?

20 MAJ LEWIS: You interrogate them to what they have, and you also have an understanding of what their work relationship has been lately. So because – I guess you may have covered this before – the worst person to assess a person's fatigue is themselves, so that's why we try and understand the environment they're in, to have a bystander sort of influence into their fatigue. So you might ask them if they're feeling fatigued, and they may say "Yes" or "No". They may say, "Yes, I'm fatigued", and that's then taken into account for the mission, and then the task might be altered, or the crew might be altered, to satisfy them. But they might say they're not fatigued when in fact they are, but their motivations to get the job done are not being taken into account.

30 COL GABBEDY: In those circumstances, if you're the Authorising Officer and you've got a crew member or an Aircraft Captain saying to you, "I'm not fatigued", but your assessment is that they are, what would you normally do?

35 MAJ LEWIS: I'd look at changing the task, making it simpler and making it shorter, changing the crew, or changing the task timeline to a further time, which would allow the crew to have a little bit more rest.

40 COL GABBEDY: What we're talking about here, this sort of role, we're talking about a small unit of people that know each other quite well, aren't we? We're not talking about me assessing your fatigue, having met you once. We're talking about people who live and work together for months, if not years.

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MAJ LEWIS: Yes, the intimacy of the knowledge of their fatigue should be at the lowest level, and when you're working in a small unit, living in the same environment, that should be acutely aware to everyone around.

5 COL GABBEDY: I think you've touched upon this, but there's a requirement for the Aircraft Captain and the crew to be open and honest with you about their fatigue levels as best they can, isn't there?

10 MAJ LEWIS: They are, and sometimes, like I said, that can be masked by motivation.

COL GABBEDY: You are familiar with the acronym FACE?

15 MAJ LEWIS: Yes.

COL GABBEDY: Could you tell me when FACE checks are performed? Are they performed just the once before a sortie, or are there several iterations of that check?

20 MAJ LEWIS: Well, typically it's done at the crew brief, and that's when the Aircraft Captain has the final chance to augment the task, or cancel the mission, because of the crew condition, but it's not a definitive one-off. You'll do it formally as part of the crew brief, but if you've got anything that may be lagging, or a potential degrading element, such as  
25 the environment, you can then have further checks within the mission, and say, "Look, everyone feels okay now", but if we have to fly into – if we're doing, for example a day to night mission, everyone feels okay during the night because fatigue is not as apparent when it's in a much easier environment to conduct your task. So if you go from day to night, you  
30 might say, "Let's review everyone's fatigue and alertness prior to going into night flying". So you can put a decision point throughout the task to review, formally or informally, how you're going.

35 COL GABBEDY: And I take it that if there were a long mission, for example, if there were a sortie that went for several hours and a crew member was exhibiting obvious signs, he was either looking sleepy or yawning, you could review at that stage and there would be options available for you. Is that right?

40 MAJ LEWIS: Correct.

COL GABBEDY: Would those options include cancelling or changing the mission in some way?

45 MAJ LEWIS: The Aircraft Captain has that absolute authority, yes.

COL GABBEDY: Are you aware whether or not FACE is formally checked in orders for all crews?

5 MAJ LEWIS: Well, it's the format that you're talking about, in orders. Now, in orders typically involves more crews than the one – or the subject aircraft. So they mention – I've seen it in orders where FACE checks are confirmed later on. Certainly FRAT is now making its way into the formal setting of orders for multiple crews, so hopefully the Authorising Officer that's doing formation, as an example, would have an understanding of the condition of the crews at the time, but typically and certainly the most effective form of its application is at the crew brief.

15 COL GABBEDY: Now, we've heard a lot of evidence about a system that you use called Patriot Excalibur, or PEX. My understanding is that prior to every flight, every member must be authorised to fly through PEX; is that right?

20 MAJ LEWIS: PEX is one of the forms of authorisation, and is the preferred method. If PEX is not available due to the network, for example, being down, we have alternative hard copy methods, but PEX is the primary method.

25 COL GABBEDY: Assuming PEX is up, what does that check, or what does that assure, having ensured that your crew are qualified for the flight on PEX? What assurance does that provide?

30 MAJ LEWIS: I wouldn't say that it gives you an assurance. I would say that PEX, as a reporting tool, has identified the currencies that are required, and it's still subject to human error. So, for example, if a currency or a requirement wasn't loaded correctly into PEX, it might mask a lack of currency or lack of experience. But, generally, we do audit the system to ensure its compliance and its correctness. So there's a very high level of confidence that PEX is fully accurate.

35 COL GABBEDY: So PEX ensures that your crew members are current; is that right?

40 MAJ LEWIS: It displays what's been recorded, and I don't have any reason to doubt it because of our auditing system around it, so whenever I do Flight Authorisation, when I see PEX, I don't have a concern that it's not accurate, and certainly the method of reviewing and looking at each of the currencies that you're looking at – because there's certain levels of – at PEX, there's like a dashboard level where you'll see typical facets of a person's qualification experience as green or red, and then further to that

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you can actually explore individual currencies, or experience, or qualifications to a deeper level, to understand if there's any deficiencies.

5 COL GABBEDY: One of the currencies that PEX would sign off on would be currency in Aviation Medicine training, wouldn't it?

MAJ LEWIS: Yes.

10 COL GABBEDY: And that would include fatigue education and training.

MAJ LEWIS: Yes.

15 COL GABBEDY: My understanding is fatigue education and training is Non-Tech Skills; is that right?

MAJ LEWIS: That's also covered in Non-Technical training as well; Non-Technical Skills. So there's two areas where it's actually covered, and that's Aviation Medicine training and Non-Technical Skills.

20 COL GABBEDY: Just to try and put a bow around this, my Understanding – and please tell me if I'm wrong – is that prior to every flight every aircrew member is checked for fatigue during both mission planning and pre-flight authorisation. Is that correct? Prior to every  
25 flight. Okay, sorry, my friend has raised something legitimate with me. If we're talking 2023, if we're talking a flight in 2023?

MAJ LEWIS: Okay. Yes.

30 COL GABBEDY: Prior to every flight, every aircrew member is checked for fatigue during mission planning via a FACE check and prior to flight; is that right?

MAJ LEWIS: Well, you've described mission planning as a discrete  
35 thing, and there's a start and end to that process. Certainly, the checks that cover fatigue would be within the mission orders, and the flight authorisation, and then the final check would be the crew brief.

40 COL GABBEDY: So they're checked by the Authorising Officer, and also by the Aircraft Captain for fatigue?

MAJ LEWIS: Well, the Authorising Officer typically is conducting a brief with the Aircraft Captain because getting the whole crew is very  
45 challenging. If you can get the whole crew, you can get the whole crew involved, but typically that's too difficult because concurrent activity



5 needs to happen in these – particularly exercise considerations, so the Aircraft Captain usually attends the flight auth brief with the Flight Authorising Officer, and then he'll actually propose the fatigue awareness to the Aircraft Captain. And that's why it's important at the sortie brief the Aircraft Captain carries on that fatigue enquiry to the crew, because the Flight Authorising Officer hasn't had the opportunity to interrogate each of the crew members.

10 COL GABBEDY: I understand that. So just tell me if I'm wrong. The Aircraft Captain represents to the Authorising Officer, the fatigue of his crew.

MAJ LEWIS: Yes.

15 COL GABBEDY: And he is required, obviously, to check and make sure that what he's representing to the Authorising Officer is correct.

MAJ LEWIS: Yes.

20 COL GABBEDY: Just finally, before the sortie or the flight starts there's a check on PEX to make sure that these people are current in relation to their fatigue training, amongst other things?

25 MAJ LEWIS: Well, that's actually pre-auth brief as part of – on PEX, that's where you'd understand if there's any deficiencies in that currency.

COL GABBEDY: Thank you for that. That's helpful. I want to just finish now with some questions about risk management, if I could. You're familiar with the MRH-90 Standardisation Manual?

30

MAJ LEWIS: Not at the moment, but yes, I am familiar.

COL GABBEDY: You have been familiar with that in the past?

35 MAJ LEWIS: Yes.

COL GABBEDY: Is that what you'd call an authoritative document in relation to aircrew responsibilities and non-tech skills?

40 MAJ LEWIS: It's really about the procedures of the aircraft, and how it's being employed as a crew environment. There's a chapter within the STANMAN which talks about airmanship, which details any sort of non-technical skills required and crew resource management, which would define how – like, for example, verbal communications and any  
45 brevity words used in the aircraft would be employed. And that's the way



you should do it. If you choose to go around the Standardisation Manual, you should have a reason, and report back that to the Authorising Officer.

5 COL GABBEDY: That Manual contains components that are aimed at managing risk in Aviation matters, does it not?

MAJ LEWIS: It is. However, risk management of a flight is the whole process, the whole Aviation system around that, and typically I've seen the Standardisation Manuals as the catch-all, or the document that  
10 highlights any sort of mitigation or elimination strategy, that the system is taking place.

COL GABBEDY: In relation to specific matters within the Manual, does it provide advice or a requirement to the Aircraft Captain to brief  
15 inadvertent instrument meteorological conditions prior to a flight at night?

MAJ LEWIS: Yes.

COL GABBEDY: What does that mean? What does that requirement  
20 entail?

MAJ LEWIS: It's also part of the crew brief, and it is certainly part of the authorisation brief as well. It's basically preparing the Aircraft Captain and the crew for a condition of reduced visual conditions, so  
25 inadvertent IMC. So the Standardisation Manual talks about how to actually do the initial drill, which is where the greatest acute risk is, but then also the subsequent actions about the recovery from those conditions to get back to a visual scene.

COL GABBEDY: So that's a requirement, to brief that. And I understand the Manual states that those conditions must be considered during planning, when marginal weather is forecast. I assume that's right?

MAJ LEWIS: Yes.

COL GABBEDY: And it then provides the drill that must be executed if the aircraft enters those conditions.

MAJ LEWIS: Yes.

COL GABBEDY: Can you recall whether or not the drill involves the sequence attitude, heading, power and air speed?

MAJ LEWIS: That's going to get the result. The acronym is subject to  
45 change about the order of those events, but essentially it's getting the

aircraft in a condition that it's as level as possible, climbing as much as possible, and an air speed that affords the best climb, and at a heading that's turning away from any obstacles.

5 MS McMURDO: Just a moment, MAJ Lewis.

COL STREIT: Very briefly, the STANMAN is "Official: Sensitive".

10 COL GABBEDY: Okay.

COL STREIT: So you can lead, but not specifically.

COL GABBEDY: I thank my friend for that assistance.

15 Just moving on from that, if you were undertaking this sequence and you were checking your attitude, where would you look to get your attitude reference?

20 MAJ LEWIS: The Primary Flight Display.

COL GABBEDY: Just on something slightly different, do you have a view on whether or not it is advisable to fly cross-cockpit, in formation? Is that best practice, or does it matter at all?

25 MAJ LEWIS: It does matter. Unfortunately it's the part of the trait of flying in formation because you can be flying a full day, for example, six to eight hours for a typical air mobile day, and it's very fatiguing when you're flying in formation as the flying pilot, so you share those duties in order to make sure everyone is getting sufficient rest. The risk to that is  
30 that when you're flying cross-cockpit, you've got reduced cues, and it's a high gain task, which means that you'll fatigue faster. It's not prohibitive.

Typically, formation training, as soon as you start your training, you're exposed to it all the time, so it's certainly not new. During critical phases  
35 of a formation flight, such as landing or departure, typically the active pilot, which would be the pilot on the side of the preceding aircraft, will take over. So there'll be no – usually you won't fly cross-cockpit in high gain environments, such as landing or take off.

40 COL GABBEDY: Thank you for that. Moving to something slightly different, are you aware of a risk management control contained in Standing Instructions that requires an automated altitude hold to be selected if you're flying overwater at night, and I'm talking about 2023?

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MAJ LEWIS: There would have been. I can't recall exactly what was recorded at that time because we've had a bit of a change with our regulations of late, but certainly we've always had a minimum height requirement since the late 90s for flight overwater, with either RADALT  
5 hold or BARALT, if you have it.

MS McMURDO: What was the last part of that, either RADALT hold or?

10 MAJ LEWIS: Barometric altitude hold. We call it BARALT hold.

MS McMURDO: Yes, I just didn't catch it. Thank you.

15 COL GABBEDY: How does that hold work? Does it just provide an audible warning or does it do something else if the pilot were to inadvertently fly below the level selected?

MAJ LEWIS: Well, there's two parts to that. You will get an audible warning in the MRH with your RADALT hold, with your RADALT  
20 height setting. So once you pass through that height, you'll get an audible warning. You won't get an audible warning for an exceedance of a pre-selected radar height hold, simply you're setting a reference. So when you establish the radar height, you're setting a reference for the aircraft and to fly through that you'll feel some additional pressures on the flight  
25 controls, but you won't hear anything.

COL GABBEDY: Could you talk us through what those pressures would feel like? So if I'm an Aircraft Captain – which I will never be – and you go below a certain pre-set height, would it push back on the  
30 stick? Would it try and set me back to the height that had been pre-selected, or would the stick just wobble? What would happen?

MAJ LEWIS: So for height, it's collective, which is the left-hand control. So when you establish the RADALT height hold setting, it sets a  
35 reference. So when the aircraft detects it's below that reference, it will try and pull the aircraft up, so therefore you'll feel the collective raise. And if you're above that, it'll pull you down to that height.

40 COL GABBEDY: Would you then have to push against the collective to keep going down? Would you have to push against a physical force?

MAJ LEWIS: Yes. So there's two ways. You can push against it, or if you engage the collective trim, which is the trigger switch under the collective, you are effectively resetting that height, or resetting that datum.  
45

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COL GABBEDY: Is it permissible to engage the trim if there's a requirement to set that hold?

MAJ LEWIS: How do you mean, "permissible"?

5

COL GABBEDY: So you say that you can - - -

MAJ LEWIS: Are you allowed to, or - - -

10 COL GABBEDY: Yes, are you allowed to? If you're required to set a minimum height using the RADALT, that would prompt you if you went below that height. Is it then permissible in flight to release that hold, and in what circumstances could you do that?

15 MAJ LEWIS: Well, it's always permissible because there may be a malfunction, there might be a change in circumstances, and there might be a different profile, but it's got to be a deliberate action. So when you do it, it needs to be, obviously, a fully – you need to be cognitively aware of what you're doing. So if you're descending, particularly overwater, which  
20 is obviously the greatest threat, you need to be understanding – and if you're going to do so, particularly you brief the crew about what you're doing.

COL GABBEDY: If I understand you correctly – and please tell me if I  
25 don't – you've got a requirement to set a pre-destined height that would give you push-back on the controls if you went below it. You would be allowed to release that, but in circumstances, I take it, where you understood what you were doing and where you were in terms of the aircraft, so that you could go below and then perhaps reset the height  
30 again.

MAJ LEWIS: Yes, there would need to be a requirement for it, and it needs to be communicated to everybody, because in that situation if there was a descent below a pre-determined minimum height, the non-flying  
35 pilot should challenge that in the first instance, and call "Attitude" or "Descending", unless it was pre-briefed.

COL GABBEDY: And again, I'm just trying to understand it from a non-flying point of view. You've got that, and I assume that's a safety  
40 feature, that setting that stops you going below a minimum height, and if you then, as the flying pilot, seek to release it, you would brief that to the crew, saying basically, "Releasing the hold", and if the co-pilot thought that was a problem, you would hear from him in relation to that?

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MAJ LEWIS: There should be some sort of challenge in that respect because then you're going outside of the mental model of the whole crew about what you're actually doing.

5 COL GABBEDY: Thank you for that.

AVM HARLAND: Can I just ask a question? Just in reverse, is there any feedback that happens if you fly high on your radar altimeter datum?

10 MAJ LEWIS: Yes, it will pull the collective down, sir.

AVM HARLAND: Yes, so you just get the opposite effect?

MAJ LEWIS: Yes.

15 COL GABBEDY: When you're flying formation, is that hold a problem then, if it holds you? Say we set it at 200 feet, does it make it difficult to fly a formation if you're set at that level?

20 MAJ LEWIS: It does, because a big part of the formation is about maintaining plane, and if you adjust that plane, then you can't see the aircraft, or it may disrupt the view of the aircraft that you are forming on, so it becomes more difficult. It's not unmanageable, but it certainly does become more difficult.

25 COL GABBEDY: Is it possible to set that control so that it only controls the distance or the height below which you descend, so that, for example, if you're flying an aircraft you can't go below 200 feet, but you're able to bob up above 200 feet?

30 MAJ LEWIS: No.

COL GABBEDY: It just holds you on a plane?

35 MAJ LEWIS: Yes.

MS McMURDO: Is it a common practice overwater, flying in formation, to override the RADALT hold while you're doing turns and so forth, to have better control of the aircraft?

40 MAJ LEWIS: I wouldn't say it's common practice, ma'am. But, for example, during a turn, it would be common to increase collective and not necessarily decrease collective. So in a turn you require more power to maintain the current height, so therefore you need to increase collective to

maintain that height. That's a typical time when you'd probably use it – pull against the control pressures that are put in by the RADALT hold.

5 MS McMURDO: But then usually, once you've finished that manoeuvre, you'd return to the RADALT hold function?

10 MAJ LEWIS: Correct. It would still be engaged through that whole manoeuvre, and you'd actually be overriding that force, not re-engaging or resetting the datum, but simply overriding it. And then once you've completed the turn, the collective will then have a force to go back to that pre-determined datum.

15 MS McMURDO: Come back automatically to the RADALT hold setting. Okay. Thank you.

AVM HARLAND: Does it feel like, in that sense, that you're fighting the aircraft to maintain your formation position?

20 MAJ LEWIS: I wouldn't say fighting, but certainly it's an additional control you need to input. And that's why I said before, it's not as easy as flying without that restriction.

25 AVM HARLAND: As you roll out of the turn, for example, and you're basically back to the datum, what if the aircraft that you're forming off is high? Do you still maintain that pressure against the collective?

30 MAJ LEWIS: It depends on if you think it's a transient height. So if the aircraft you're forming off is high, you'd hold that pressure against to maintain the plane, but he may be adjusting to a different height as well. As long as it's above the datum, I don't think it's a concern. If it's below that, obviously you'd want to understand that the aircraft is on final or on a pre-determined operation before you follow him down.

35 AVM HARLAND: Okay. Thank you.

40 COL GABBEDY: Thank you, Major. Thank you for those helpful questions. I just want to make sure that I understand what you've been saying, Major. It's the case, is it not, that you can override the hold, but it doesn't release the hold. So once you've finished overriding it, the hold returns; is that right?

45 MAJ LEWIS: Well, the datum is set by engaging the RADALT function through a control panel on the live control panel. Once that's set, you can then adjust that through – potentially on (indistinct) to change the height, or you can simply use your trim switches so you can what's called beep

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up or beep down, or actually engage the collective to move it up and down. So once you've got a datum set, if you simply push and pull against the collective without engaging any other trim, it will retain that datum.

5

COL GABBEDY: If I understand you correctly, you could change the datum. So if, for example, you were forming off an aircraft that was flying at 300 feet and you had the hold set at 200 feet, you could adjust the datum to 300 feet. Is that right?

10

MAJ LEWIS: That's correct.

COL GABBEDY: And that would just reset you at that higher altitude?

15

MAJ LEWIS: That's correct.

COL GABBEDY: Is there a circumstance where you're flying overwater where you would simply turn that hold off and leave it turned off?

20

MAJ LEWIS: I think if you're flying at height, and it meant that there was no threat by doing that, it would be okay, and certainly there wasn't any regulatory requirement that did require it.

25

COL GABBEDY: So if you were flying at below 500 feet, that requirement wouldn't apply, would it?

MAJ LEWIS: If you were below 500 feet, you'd need to have the RADALT engaged overwater.

30

COL GABBEDY: If, as a flying pilot, you elected to turn that off, that's something that should have been communicated to the entire crew, I take it?

35

MAJ LEWIS: Yes. And you could turn it off for a number of reasons, and typically a malfunctioning system would probably be the most apparent because it doesn't prohibit you from flying, but then you've got to override it, and you've got to be manually flying above 500 feet.

40

COL GABBEDY: Have you ever heard that hold function – and tell me if you haven't – referred to as the RHT upper mode?

MAJ LEWIS: Yes, the RADALT height upper mode. Correct. When you say "upper mode", it's just a function of the automatic flight control system.

45



COL GABBEDY: And that's the mode we've been talking about that sets you at a particular datum level?

5 MAJ LEWIS: That's correct.

COL GABBEDY: Thank you. Just one final question for you. That requirement to engage that RHT upper mode was a requirement that was in place in July 2023 and applicable to all pilots at 6 Aviation, was it not?

10 MAJ LEWIS: I can't confirm because I'm not sure about the regulation at that date, but certainly today it is, for example, but I know that there has been change. At one point it was 200 feet, and then it transitioned to 500 feet.

15 COL GABBEDY: But as far as you're aware, that requirement to have the hold was in in 2023 – and correct me if I'm wrong about this – you're just not sure what height it was set at?

20 MAJ LEWIS: There's always been a requirement for a RADALT hold overwater in low altitude such as I discussed. 200 hundred feet was the former one, and then it's transitioned to 500 feet. I just can't recall the actual date when that transition occurred.

25 COL GABBEDY: But there's always been a requirement for that hold to be engaged overwater?

MAJ LEWIS: Yes, that's correct.

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

AVM HARLAND: Could I just ask you a follow-on question while we've got your knowledge and experience online? The TopOwl HMSD, if you can cast your mind back to that, version 5.10, was that classified in your mind as a Primary Flight Display?

35 MAJ LEWIS: No.

40 AVM HARLAND: So it was for advisory or situational awareness purposes, as we've heard?

MAJ LEWIS: It's really a – I used it, and certainly the way that I've known it to be used, is as a supplementary display, and you can call on different parts of information that you need at the time. Typically

45



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RADALT is a common one. Certainly, with the TopOwl, the horizon line was commonly used as well, and the field of view of the other pilot, which I found probably the most beneficial for the HMSD.

5 AVM HARLAND: So that would tell you where the other pilot in the cockpit was looking?

MAJ LEWIS: Correct. And that's important for things like the form and also terrain flying.

10

AVM HARLAND: Where did you get the information that that was a supplementary display? How did you know that, that it wasn't a Primary Flight Display?

15 MAJ LEWIS: I think it's because it could fail at any time, and it didn't have any redundancy, whereas the Primary Flight Displays on the MFDs were there in a redundant form, and certainly transitioning from the ANVIS with (indistinct), we've always considered HUD as a supplement, and I know that there was discussions about the legitimacy of the  
20 symbology. That was – I can't remember. It was around over a decade ago. Certainly before these events, that we were talking about whether or not it was considered primary or supplementary, and I don't think I knew of anyone who considered it a Primary Flight Display.

25 AVM HARLAND: So you're basing that on the fact that it didn't have redundancy rather than anything specific in the publications telling you that it wasn't a Primary Flight Display?

30 MAJ LEWIS: Yes, I don't recall any OIP identifying that as a Primary Display.

AVM HARLAND: I'm just trying to think about how to best frame this. So I recall a warning in the Flight Manual which said that if you're going to be setting attitude using the TopOwl, that you're only to set the  
35 attitude when you're looking along the fore/aft axis of the aircraft. That kind of indicates to me that it is permissible to use it to set attitude in a Primary Flight Display mode, and I'm trying to understand how to rationalise that against the idea that it's not a Primary Flight Display.

40 MAJ LEWIS: Well, for me, and with relation to that, sir, I think attitude should always be set by looking to the front of the aircraft as a basic flight principle. I can't recall the warning of it being set when you're looking fore and aft. I think that makes sense though, because the display of the symbology, certainly the pitch ladder, doesn't give you like a typical AI,  
45 or other versions of symbology or Head-Up Displays have gull wings and

5 have a – it's, like, a zero degree pitch scale, whereas the HMSD just goes plus or minus 10, which really leaves quite an empty field of view within the centre of the symbology. And, therefore, reliance on the horizon line, which is not telling you anything in relation to the aircraft actual heading or - - -

COL STREIT: Can I just raise a matter? Sorry, MAJ Lewis. I think we need to stop the feed.

10 MS McMURDO: I see.

COL STREIT: The matter raised which you have just given evidence about seems to be addressed in Annexure A to his statement.

15 MS McMURDO: I see. Yes. Okay. So Annexure A – it might be that this has been redacted from your statement, this material, so we may not be able to discuss it with you in this forum.

20 COL STREIT: So if I might just have a moment, I'll just speak with the Security Officer we have here.

MS McMURDO: Sure.

25 COL STREIT: Thank you, Ms McMurdo. I've confirmed with the Security Adviser here. So MAJ Lewis, you can give evidence in the broad terms that you have given, but you can't go to the specific language contained in the matter in your "Official: Sensitive" component of your statement. The live feed can be restored. Thank you.

30 AVM HARLAND: So we can continue?

COL STREIT: Yes.

35 MS McMURDO: Continue in broad terms, but just being careful not to go into the detail that's in Annexure A.

40 AVM HARLAND: Thank you. I think I get the sense of what you're talking about there. But if you were to accept that the warning says that if you are to use the TopOwl symbology to set an attitude, you should only do it when using the fore/aft, aligned with the fore/aft axis of the aircraft. Would that be somewhat confusing to you in terms of whether it is a Primary Flight Display or not?

45 MAJ LEWIS: Well, I don't think so, sir, because thinking about it right now I don't feel that way. I feel that warning might be in relation to when

5 you're actually setting – when you're orientating the helmet with the direction of the aircraft. So, yes, I don't think that supports the Primary Flight Display, in my opinion, but certainly the Primary Flight Display has a lot more information presented in a different way to the symbology, and that's why I don't think it inevitably replaces the Primary Flight Display, or a flight display.

10 AVM HARLAND: Okay. No, that's good. Thank you. That's all I'll ask on that. A question just regarding your experience as a QFI. As a QFI, when you're instructing students, do you have any guidance on how you instruct students, what environments you wouldn't instruct students in, and the likes?

15 MAJ LEWIS: We don't have anything specified, as in like being definitive about certain environmental conditions, but certainly a big part of an Instructor's training is the making sure that the training environment is suitable for passage of information or retention of information. So if there's a challenging environment or a challenging situation, such as winds, visibility, workload, that's going to degrade the value of the information being retained, so then we'd try and change that to avoid that, and we do that quite commonly.

20 Certainly, where we are – even right now with Black Hawk, there's a number of times that we've had to stop or delay training due to the environment or the aircraft.

25 AVM HARLAND: Understood. So in those sort of more challenging environments that you inferred just previously, do you operate under any specific guidance, whether it be formal or informal, when you're teaching students low-level formation on night-vision systems? Is there anything that you have in terms of, like, weather limitations, visibility limitations, and the management of pilot versus non-pilot flying duties, so who's eyes in, who's eyes out?

35 MAJ LEWIS: I think that certainly for low-level formation, and if it's at night, nothing – we'd need to make sure that - if the formation is greater than two, we'd need to make sure that all the Aircraft Captains have what is considered an advanced NVD currency, which talks about the recency of their exposure to NVD. So if there was only a pair for formation training, low level at night, we'd want to see at least normal conditions so that there's no – we're reducing the amount of threats because flying formation low level there's enough threats as it is, and it's very easy to cross the path into full distraction with anything.

But that's on a learning level, but certainly in a regulation level, we're not permitted to go below normal for a pair, and if we're more than a pair, we need to have all the Aircraft Captains at an advanced - - -

5 AVM HARLAND: So is that a course, the advanced NVD currency you talk about, or is that just a requirement of having it done a number of times and within a certain time period before you're doing the multi-ship?

10 MAJ LEWIS: You have to do a low-level illumination qualification now as part of a pilot award.

AVM HARLAND: When did that come in? Was that before July '23?

15 MAJ LEWIS: No, that's a recent addition. It's always been – it's now been formalised, but certainly the way that it's been traditionally run within Army Aviation is that the award of Aircraft Captain at night, or NVD command, has always been after a period of exposure to all conditions, and that's why it's the hardest and the pinnacle flight award for most pilots, is an NVD command.

20 AVM HARLAND: How many multi-ship formations, so greater than two-ship formations, do you teach pilots when they're going through their conversion course?

25 MAJ LEWIS: During Regimental Officer's Basic Course, most of them should be more than two. Certainly, with MRH, I think two was the norm, but they would surge to four. Certainly, in other types – and I can only talk historically from Black Hawk for me – there weren't many missions that we did in basic training that weren't less than four aircraft.

30 AVM HARLAND: But for MRH-90, are you saying that two-ship was more the normal?

35 MAJ LEWIS: It was, yes.

AVM HARLAND: So would it have been feasible for an individual to go to an operating unit not having flown four-ship formation?

40 MAJ LEWIS: It would be unlikely, but it wouldn't be unfeasible.

AVM HARLAND: And even if they went to the operating unit, the picture that I'm getting from you is that they wouldn't have done many four-ship formations during their conversion course. Is that correct?

- MAJ LEWIS: That is correct, and I think that that will align to the Unit Training Assessment Program, so once they get to their units, that's when their experience is considered and they have a formalised path into their air mobile roles, which include more than two aircraft.
- 5 AVM HARLAND: Is a four-ship formation substantially more complex than a two-ship formation?
- 10 MAJ LEWIS: When you say "complex", what version of complex do you mean, sir?
- 15 AVM HARLAND: I guess just in layman's terms, if somebody is competent on a two-ship formation, does that automatically mean that they're going to be able to operate within a four-ship, or do they need to practise the four-ship?
- 20 MAJ LEWIS: They will need to practise the four-ship. Typically, depending on the formation type, they'll need to have exposure to what more than two aircraft does because when you're flying in a four-ship example like you're talking about, the aircraft in four is having to adjust for all the different requirements of two and three, so they need to have a greater awareness of anticipation, and of where the formation is going, and also about how they need to modify the controls to maintain good station, while anticipating what the aircraft in front of them are doing.
- 25 AVM HARLAND: The pilots that come to your training school, have they done formation by the time they get there at either 1 Flying Training School when they were flying fixed-wing aircraft with the Australian Air Force, or through the Helicopter Training School? Have they done formation by the time they get to you on conversion course?
- 30 MAJ LEWIS: It is in their syllabus, as in - - -
- 35 AVM HARLAND: Is that two-ship or four-ship formation?
- MAJ LEWIS: I can't confirm what number of aircraft that is, sir.
- 40 AVM HARLAND: But they have done some level of formation, and then you build on that during their conversion course?
- MAJ LEWIS: We have. There's been some development issues with these courses and we have received people on ROBC who have not flown formation.
- 45 AVM HARLAND: That's great. That's all the questions I have.

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Thanks, MAJ Lewis.

MS McMURDO: Anything arising?

5 COL GABBEDY: Ma'am, I have just one more question, sorry. Thank  
you very much for your time, Major. I want to refer you to, say, July  
2023, a four-ship formation. Are you able to tell me what the SOP is if  
you're flying in that formation, and you lose sight at night of the aircraft  
that you're forming off? What does the SOP require you to then do?

10

MAJ LEWIS: This is for in 2023, or is this - - -

COL GABBEDY: In 2023.

15 MAJ LEWIS: In 2023. Certainly if you're flying and you lose sight of  
the preceding aircraft, you're to try and separate from the form and try and  
contact the remaining form members. Now, that's going to have two  
different variations because you can lose sight because of visible  
obscuration, such as mist, dust, cloud, or you can lose sight because the  
20 spacing of the formation means that you've actually got physical terrain  
between you and the aircraft in front of you. They're two different  
concepts and two different parts of the mission.

25 So in all instances you'll have an immediate drill, which is to separate  
from the form if you can, and then go to an RV. Now, if it's because you  
just physically lose sight of them because of obscuration, that's just – the  
SOP didn't have that in detail, I don't think, at that time, but I can't recall  
whether the SOP had anything definitive about loss of visibility due to  
obscuration at that time.

30

COL GABBEDY: So if we're just looking at overwater, lose sight as a  
result of perhaps environmental conditions or some other reason at night,  
does that just require you to leave the formation and communicate where  
you are?

35

MAJ LEWIS: It does. And we did a bit of work on this because there's  
so many different occurrences where you could lose visibility, and this is  
terrain-dependent, for example. Overwater, that's not too bad. However,  
overwater with islands or mountains around it is a bit more difficult.  
40 There's no one procedure that's going to satisfy everything. There's a  
number of techniques of separating the form when you lose visibility,  
such as flying down, turning away, climbing, but there's no one definitive  
answer, so it's really up to the Aircraft Captain to make a decision at that  
time.

45

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5 The responsibility on the Aircraft Captain at that time is to separate from the form in order to not collide, and then immediately communicate with the flight lead to organise an RV. And typically the rendezvous would have been mentioned in orders, otherwise they can make a hasty RV and rejoin that way, in a better environment.

COL GABBEDY: Thank you very much. I have nothing further. Thank you for the indulgence, ma'am.

10 MS McMURDO: It looks as though there might be some more questions. Yes, LCDR Gracie.

15 <**CROSS-EXAMINATION BY LCDR GRACIE**

LCDR GRACIE: MAJ Lewis, my name is LCDR Malcolm Gracie. I represent CAPT Danniell Lyon's interests. Can I ask you something about flying currency? I'm referring to a document which is described as  
20 Standing Instructions dated 14 May '23. It's "Official: Sensitive", so I just need to step through it fairly carefully. In relation to mode of flight currency, it references day, night, unaided, and NVD flight currency as the first, the second is instrument flight currency, and the third is instrument approaches. Are you aware of flying currency – sorry, I withdraw that.  
25 Are you aware if formation flying is required to ensure flying currency?

MAJ LEWIS: I'm sorry, say that last part again.

30 LCDR GRACIE: Is formation flying a requirement of flying currency under the Standing Instructions?

MAJ LEWIS: As of 2023, it wasn't a formal currency, but it was considered in authorisation.

35 AVM HARLAND: Could I just clear – it was not?

LCDR GRACIE: It was not.

40 MAJ LEWIS: There was no formal time currency for formation; however, it was considered as part of flight authorisation.

AVM HARLAND: Thank you.

45 LCDR GRACIE: And what's the source of that?



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MAJ LEWIS: Sorry?

LCDR GRACIE: What's the source of that requirement?

5 MAJ LEWIS: How soon or how recently you've flown formation.

LCDR GRACIE: No, I thought you said that there was a requirement of it, although it wasn't a formal instruction.

10 MAJ LEWIS: Yes, was it authorised - - -

LCDR GRACIE: And what's the source of the requirement?

15 MAJ LEWIS: The authorisation, or the flight authorisation, needs to confirm that the crew is qualified and experienced and recent to perform that.

LCDR GRACIE: But PEX doesn't track formation flying.

20 MAJ LEWIS: No, it doesn't, but it doesn't cover a lot of things. So every aspect of that particular role would have been investigated.

LCDR GRACIE: Investigated by?

25 MAJ LEWIS: The Flying Authorising Officer.

LCDR GRACIE: In terms of, what, annually, six-monthly?

MAJ LEWIS: No, depending - - -

30

LCDR GRACIE: Or per sortie?

MAJ LEWIS: Well, that instance of flight authorisation. So, for example, you would have covered how long ago you did formation, how long ago you flew on NVD, how long ago you did a formation landing, dust, for example. All the elements of that particular mission.

35

LCDR GRACIE: Look, just while at the Standing Instructions, I want to have a look at the section dealing with night flight and see if you can help me understand it. It says, this is specifically in relation to Taipans, so I hope it's not as sensitive as the rest of the document.

40

MS McMURDO: Well, just a moment.

45 MS MUSGROVE: It's still "Official: Sensitive" and you're going to



read from the document.

5 LCDR GRACIE: Yes. No, no. Since we don't have Taipan operations, but there we go. There is a prohibition on night flight in ambient illumination below a certain millilux – I won't say what that is. And it says:

*Unless within the lateral boundaries of approved flight area or routes.*

10

What does that mean, "approved"? Get approval?

15 MAJ LEWIS: Typically, you'll have an area which is an operational area for terrain flight, for example, so low flying. You'll have a charted area which is survey, and that's for flight down to ground level. So that's sort of surveying all the obstacles. And an area of operation will be a bounded area, typically sectioned on the map, so you understand what the terrain and environmental aspects could be around that area.

20 LCDR GRACIE: So in the scenario that we're dealing with back on 28 July where they're flying overwater, that would include terrain. That would come within the term "terrain".

25 MAJ LEWIS: Potentially. I'm not aware of the TASKORD that may have been used as a tool for that exercise. But typically that's some of the artefacts which identify particular areas of operations and that I've approved or not.

30 LCDR GRACIE: So if you're flying in a littoral zone, which has islands, mainland, that could still be within a terrain zone?

MAJ LEWIS: I'm not sure what you're asking? On the terrain flight map?

35 LCDR GRACIE: Yes, there's a mix of overwater flying and overland flying. That could still be within a terrain map?

MAJ LEWIS: Absolutely. It's just the map, looking for obstacle clearance.

40

LCDR GRACIE: Excuse me for a moment. I'm now jumping around a little bit. This is the first iteration of the Standing Instructions prepared after the upgrade of the symbology, so it's about May 2021. In relation to Chapter 15, which is under the heading "Terrain", I just want to take you to the warning that the Air Vice-Marshal referred to. It says:

45

*Setting aircraft attitude using the HMSD V5.10 symbol set with line of sight not aligned with X-axis may lead to spatial disorientation.*

5

So I just want to go back to the Air Vice-Marshal's question. It doesn't there identify that you can't, as a primary flight instrument, set the line of sight. It provides the basis upon which you should do it.

10

MAJ LEWIS: Yes, there could be two or three different questions there. You might have to rephrase that, so I can understand what you're saying because there's two parts to this. Because the line of sight is separate to where you look, attitude, for example.

15

LCDR GRACIE:

*Setting aircraft attitude using the HMSD V5.10 not aligned with X-axis may lead to spatial disorientation.*

20

So it seems to suggest two steps. First is, you should set it on the axis, not off-axis. Do you agree with that?

25

MAJ LEWIS: Well, I could probably rephrase that question into something that's a bit more – something easy to understand. What that's describing is that, like, when you're driving your car and you're changing a lane, you change to a lane looking to the front or slightly off to the side that you're looking. You wouldn't look out to 90 degrees out to the left to change the lane because you could get disorientated in that sense as well. And I think that's what that's referring.

30

LCDR GRACIE: So it's saying that if you do not set it on the axis, you might suffer spatial disorientation.

35

MAJ LEWIS: Well, I don't think the symbology actually makes it better or worse. I think doing that in general is just poor technique. And it's unlikely that you'll be changing the attitude of the aircraft while looking out to that field of view.

40

LCDR GRACIE: So would your experience and opinion be something more positive, to the effect, "Do not set line of sight off-axis"?

MAJ LEWIS: You wouldn't get a good result.

45

LCDR GRACIE: No.

MAJ LEWIS: And it's - - -

LCDR GRACIE: And then there's a further warning:

5                    *HMSD software V5.10 horizon line is only correct when line of sight is consistent with looking to the front of the aircraft.*

What does that suggest to you?

10        MAJ LEWIS: In terms of?

LCDR GRACIE: A warning. Why would that warning need to be in the Standing Instruction?

15        MAJ LEWIS: Because the modelling in the horizon line would change depending on how far your field of view was off-set from the axis of the aircraft.

LCDR GRACIE: You get incorrect attitude information, you mean?

20        MAJ LEWIS: It wouldn't be exact. You'd still get correct, but it wouldn't be exact. Sorry, not that you wouldn't get correct, you'd still get the idea, but it'd be – yes, there is a minor change to it, so it wouldn't be 100 per cent correct.

25        LCDR GRACIE: It wouldn't correlate to the Primary Flight Display.

MAJ LEWIS: Correct.

30        COL STREIT: Can I just raise a matter? It's not an objection. There's a lot of information, I accept, before the Inquiry. I still don't understand what this witness – the source of the document my friend is putting to the witness. That might be a decision that he will bring to light in due course, but the risk is this: when the Inquiry ultimately adjourns to consider the  
35        evidence and propositions and matters put to witnesses by everyone at the Bar table that don't properly identify the source of the document, or a time period in which the question is propositioned, potentially puts at risk the purpose for which the question is being asked and the weight that the evidence can be given by this Inquiry, because the Inquiry has no  
40        confidence in terms of time or version of a publication of a document that the evidence actually relates to.

MS McMURDO: It's a point well made, COL Streit.

45        COL STREIT: Thank you.

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LCDR GRACIE: Well, it might be well made, but it misses, ma'am - - -

5 MS McMURDO: Could you just say – you've asked him to comment on it. Would you just ask him what you're asking - - -

10 LCDR GRACIE: I gave the date of the first Standing Instruction as May '23. And if my learned friend wants to know, it's part of Exhibit 100.

MS McMURDO: That is helpful, thank you.

15 LCDR GRACIE: Yes. I didn't want to complicate things for the witness, ma'am. And the Standing Instructions, which I said I think were May '21, are in MAJ McCall's witness statement, Exhibit 124A.

20 MS McMURDO: Just when you're putting the things to the witness, it would help the Inquiry and everybody listening if we knew what you were talking about. And as COL Streit said, it will have more usefulness to the Inquiry if we understand what that document is and the date it was made.

LCDR GRACIE: Well, there it is. I'm sorry, my learned friend could have just asked me.

25 COL STREIT: Could I just go over something to do with this? I'm getting, frankly, tired. I'm just tired of the issue of courtesy being ignored. I'm trying to help my friend, in one sense, as I will other Counsel representing, because they're all going to make submissions potentially on certain matters in relation to how this Inquiry should treat  
30 evidence. And the source of the document to the extent it can be disclosed publicly, the time the document was extant, are important when you seek to elicit an opinion.

35 MS McMURDO: COL Streit, I know. I've said the point is well made.

COL STREIT: The Chair has made ongoing statements of guidance to all of us in relation to how we do things. So can I just ask my friends to remember those things as we move forward.

40 MS McMURDO: Yes. Thank you, COL Streit. Yes, LCDR Gracie.

LCDR GRACIE: Thank you, sir. I just want to ask something in relation to your qualifications or the description "maintenance test pilot". Can I ask this? There's a distinction between a test pilot, who

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might conduct testing through AATES, and a maintenance test pilot, isn't there?

MAJ LEWIS: Correct.

5

LCDR GRACIE: Do I understand that the reference to "test" as a maintenance test pilot is that in your role you're testing whether or not the maintenance that's been performed has been performed correctly?

10 MAJ LEWIS: We're there to assure the serviceability of the aircraft after maintenance.

LCDR GRACIE: It's not operational testing?

15 MAJ LEWIS: No. And it's not experimental testing, which is a normal test pilot.

LCDR GRACIE: I just want to put this scenario to you in terms of some of the questions you were asked about the RADALT. The scenario is a  
20 four-ship formation, you're flying number 3. Number 2 is off to the right, two to three rotor di's away. 80 knots, something like that. Just want to go through a couple of altitude variations, this is over the space of one minute.

25 The second ship is at 300, 320, 300, 330, 290, 320. This is at night in formation, perhaps low cue environment, what are you doing in terms of maintaining station with that second aircraft?

MS MUSGROVE: I'm sorry.

30

MS McMURDO: There's an objection. Yes?

MS MUSGROVE: I didn't hear whether or not this was put as  
35 hypothetical, but it – I'd seek some clarification from my friend as to whether or not the numbers are hypothetical that he used in his example, or whether they are actually not hypothetical and taken from somewhere else? I'd just seek some clarification, because it may lead me into other objections.

40 MS McMURDO: The numbers that might relate to the specific facts of the flight are classified.

MS MUSGROVE: Correct.

45 MS McMURDO: Thank you.

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LCDR GRACIE: Well, now the cat's out of the bag, it's probably not hypothetical. But it was before that, so maybe I'll do it this way.

5 MS MUSGROVE: Well, sorry - - -

MS McMURDO: We'll need to cut the feed.

10 MS MUSGROVE: Yes, please.

MS McMURDO: Now, look, I know everyone is getting tired and stressed towards the end of this hearing. But we do all have to try and be careful that we maintain the standards that we've maintained up till this point, all right. So please take care. And I know some of the Counsel  
15 representing, they have particular pressures on them, and we all appreciate that. But we do have to be careful.

MS MUSGROVE: Yes.

20 MS McMURDO: And also to maintain professional courtesy at this time.

MS MUSGROVE: If my friends wants to put a hypothetical question, in the absence of the particular references, obviously that's not an issue.

25 MS McMURDO: Yes.

MS MUSGROVE: But it's the references and what we're straying into.

30 MS McMURDO: So we might just make – we'll cut the feed. The feed's been cut, so that will restart shortly, as soon as we're able. And if you could just make clear that the situation that you're putting is hypothetical.

35 LCDR GRACIE: Ma'am, I won't ask any questions on this.

MS McMURDO: Giving up. Well, you should feel that you – if you need to ask questions in the interests of your client, in the interests of CAPT Lyon, you should ask the question. You shouldn't just give up.

40 LCDR GRACIE: Ma'am, as - - -

MS McMURDO: But ask it in a way that is not "Protected".

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LCDR GRACIE: I understand, ma'am. And this isn't a criticism of the Inquiry, it is a criticism of the Commonwealth. It seems that secrecy overrides interests of those that I'm trying to represent.

5 MS McMURDO: Well, it is possible to ask the question, you just have to frame it in a certain way. All right, then, LCDR Tyson?

10 LCDR TYSON: MAJ Lewis, my name's LCDR Matthew Tyson. I represent the interests of CPL Alex Naggs.

MS McMURDO: Wait a tick. Have we restarted yet? Just wait till we restart it.

15 LCDR TYSON: I'll just wait, ma'am.

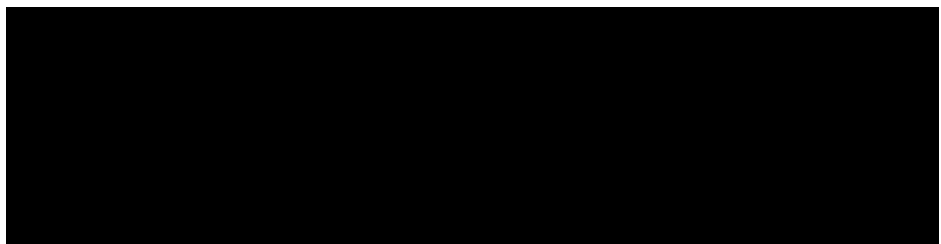
MS McMURDO: Yes, we have restarted now. Thank you.

20 **<CROSS-EXAMINATION BY LCDR TYSON**

LCDR TYSON: Thank you, ma'am.

25 Major, as mentioned just before that break, I'm representing the interests of CPL Alex Naggs. LCDR Matthew Tyson is my name. I'll be between five and 10 minutes with some questions for you. I want to state a proposition:

30



35

That's the proposition, do you understand?

MAJ LEWIS: Yes. That sounds like a deck landing operation.

40 LCDR TYSON: Well, the particular focus is that the restriction applies to reduce the likelihood of spatial disorientation and CFIT. Do you agree, as at July '23, that a serviceable autopilot RADALT hold is selected at all times overwater to reduce the likelihood of spatial disorientation and CFIT?

45

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MAJ LEWIS: I don't think it would reduce potential spatial disorientation. I think it's there as an additional cue or a protective measure against CFIT.

5 LCDR TYSON: Well, there are a number of cues. This is just one of them. When you say "additional cues", what do you mean, please, MAJ Lewis?

10 MAJ LEWIS: As in the RADALT hold would provide additional cue to undetected descent - - -

LCDR TYSON: Yes.

15 MAJ LEWIS: - - - because of the pressures felt in the flight controls. So if it's set and you're opposing those set conditions, you'll feel an additional pressure.

20 LCDR TYSON: Yes. And I think in answer to COL Gabbedy, you said one reason why you might not set the RADALT hold is if it's malfunctioning. Correct?

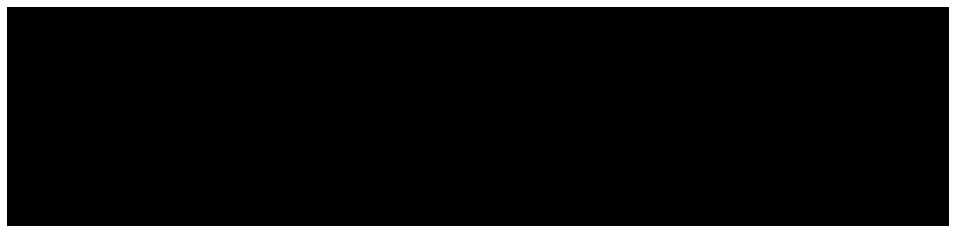
MAJ LEWIS: Yes. Not the RADALT hold specifically, but potentially some of the higher order devices that use it, like the flight control system.

25 LCDR TYSON: But certainly flying under 500 feet overwater at night, you would recognise the critical importance in July 2023 of selecting a serviceable RADALT hold?

30 MAJ LEWIS: Yes. And certainly a flight in those conditions requires a serviceable RADALT hold.

LCDR TYSON: Would you also agree with this proposition – and I'll just read it first – and if you need me to repeat it, please let me know:

35



40

That's the proposition. Do you understand that, MAJ Lewis?

MAJ LEWIS: Yes.



LCDR TYSON: Do you agree with that proposition, as at July 2023, that using the low height warning system decision height that runs off the radio altimeter would reduce the likelihood of spatial disorientation and CFIT?

5

MAJ LEWIS: Once again, I think it – I don't think it reduced the likelihood of spatial disorientation. I think it would offer a cue – once again, this is an audible cue – to descent – or an uncommanded descent below a predetermined altitude. And that would alert the crew to change their flight condition or flight path.

10

LCDR TYSON: So the audible warning would offer a cue to enhance the situational awareness of the MRH-90 equipped with decision height on the RADALT?

15

MAJ LEWIS: Yes, I do.

LCDR TYSON: Are you also familiar with a requirement as at July 2023 that when operating below 500 feet overwater at night, that all turns had to be level or climbing?

20

MAJ LEWIS: Yes, until established on finals.

LCDR TYSON: Yes. Thank you. Just in regards to publications such as Standing Instructions Aviation Operations, Standing Instruction 6 Avn Regiment Operations, can you just explain to the Inquiry, who were the authors of those documents? How were those documents prepared and produced, if you know?

25

MAJ LEWIS: Well, the 6 Aviation Standing Instructions for Aviation Operations is a further restriction on the parent document, which is the Aviation Command's Standing Instructions. So if there's any further definition or further restriction required, the CO of that particular unit, in this case 6 Avn, would authorise those instructions.

30

35

LCDR TYSON: But with these sorts of publications that are used in Army Aviation, would it be fair to assume that experts have had an input into drafting the documents and reviewing the documents? Experts, I mean, experienced Army Aviation aviators?

40

MAJ LEWIS: Yes, that's what you'd consider would be.

LCDR TYSON: Are pilots within 6 Aviation Regiment ever examined or tested? Or how does Command know that pilots flying within, say, a

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Squadron within 6 Avn Regiment are actually aware of the Standing Instructions that are applicable to flying operations?

5 MAJ LEWIS: They're required to be assessed annually from an Aviation Command requirement for all operational pilots as part of their Flight Category Test.

10 LCDR TYSON: So your expectation would be that pilots within the 6 Aviation Regiment Squadrons would be well aware of the requirements of the Standing Instructions applicable to 6 Aviation Regiment operations?

MAJ LEWIS: Yes.

15 LCDR TYSON: That answer was, "Yes"; is that right?

MS McMURDO: Yes, it was.

20 LCDR TYSON: Thank you. I just want to – you were asked some questions this morning by COL Gabbedy about a scenario where, in a formation, following aircraft has lost sight of another aircraft in the formation at night. Do you remember those questions?

25 MAJ LEWIS: Yes.

LCDR TYSON: I think in your answers to COL Gabbedy, you gave answers along the lines of the aircraft that lost sight would separate from the formation, would turn away from the formation. Do you remember those answers?

30 MAJ LEWIS: I do. And I want to further explain that. When I say the separation of that aircraft from the formation will be dictated on whatever scenario they're in at the time. So there's no one technique fits all.

35 LCDR TYSON: But if you were in that scenario where you're flying in formation, you've lost sight of one of the preceding aircraft and you're flying overwater at a low level, would you ever dive down back into the formation to try to find the formation or the aircraft that you lost sight of?

40 MAJ LEWIS: No.

LCDR TYSON: You wouldn't, would you?

MAJ LEWIS: For that particular flight, there would have been an

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inadvertent IMC formation drill prescribed, which would include the requirements of each individual aircraft. That procedure, that would have been briefed in orders, is for a climb only, and a turn away in a climb.

5 LCDR TYSON: So a turn away and climb. But you can't envisage a situation where you would pitch down and try to find the aircraft that you lost sight of?

10 MAJ LEWIS: No, that's incorrect technique.

LCDR TYSON: Thank you. No further questions.

MS McMURDO: Thank you.

15 AVM HARLAND: Could I just ask a follow-on question from that. So you're in formation and you're following your contract of 3 avoiding 2 in this case. If you momentarily lose contact, like just for a moment, it might be a bit of cloud or visual, is there a moment at which you may just be assessing before you actually go into that breakaway procedure? What  
20 I'm trying to establish here is, is it a hard, as soon as you cannot see the aircraft, you're away, or is there a moment that you might be waiting to see if you regain visibility, just in terms of practice?

25 MAJ LEWIS: I understand the question, sir. It's nothing that's formally taught. But this can be applied to any other sort of technique or procedure for any other mission. I think it depends on the environment. Flying that environment, you'll know the characteristics of the cloud or the obscuration. Then you'll be able to determine your delay into starting that drill, if it's going to be momentary or if it could be prolonged. Then that's  
30 something that the crew, particularly the flying pilot at the time, will determine on his risk assessment.

AVM HARLAND: Yes.

35 MAJ LEWIS: A good example of that would be dust landings or dust departures. So you've just got to make sure. It's your requirement to remain in visual contact. If you lose full contact and it's likely to be prolonged, then the drill needs to be activated. But there is nothing written and certainly nothing taught about delaying the response to  
40 inadvertent IMC.

AVM HARLAND: So there's a matter of judgment that's applied there and it may depend on the weather, your manoeuvre, your proximity to the other aircraft, all of those sort of factors. Is that reasonable?

45

MAJ LEWIS: Yes, it is. Because the inadvertent IMC drill is one thing, but the risk of the re-join, the follow-on risks from that manoeuvre, but that can be avoided by accepting a smaller risk in a different time and space. That's something that the Aircraft Captain is kind of there to make that decision for.

AVM HARLAND: Yes.

MAJ LEWIS: It's hard to put a box around that. But obviously there can't be – the level of risk that they're able to accept is very marginalised. So he can't take on a huge amount, or she can't take on a huge amount, of risk with the benefit of not performing an inadvertent IMC procedure.

AVM HARLAND: Understood. Thank you.

COL GABBEDY: Just a question that arises, sorry, ma'am.

MS McMURDO: Yes, COL Gabbedy.

**<FURTHER CROSS-EXAMINATION BY COL GABBEDY**

COL GABBEDY: Sorry, I don't want to prolong this. So just arising from that, Major. If you were the flying pilot and you were seeking to delay that drill, the first thing you would do would be ensure that you're in a safe position to do so, isn't it?

MAJ LEWIS: Yes. So the situation of the aircraft in terms of safety or risk is not going to degrade by your delaying that manoeuvre. That's the only instance where you can do that.

COL GABBEDY: Part of ensuring that you're in a safe position would be checking your altitude, would it not?

MAJ LEWIS: It'd be part of the SA environment you'd need to understand.

COL GABBEDY: Thank you. That's all I have, ma'am.

MS McMURDO: Re-examination?

<RE-EXAMINATION BY COL STREIT

COL STREIT: Very briefly. Thank you. First, MAJ Lewis, I won't  
5 keep you long. Thank you for your time this morning. You were asked  
some questions in relation to the application of the RADALT hold and  
when it's engaged. It was put to you a couple of times, a proposition to  
the effect that when flying overwater there's a requirement for the  
RADALT hold to be engaged, essentially setting a height that the aircraft  
10 will maintain unless you do something to the aircraft. Do you remember  
those questions?

MAJ LEWIS: Yes.

COL STREIT: You gave evidence to the effect that one method by  
15 which the operation of the RADALT hold can be negated – they're my  
words – is to depress the trigger mechanism on the collective. Do you  
remember that?

MAJ LEWIS: Yes.

COL STREIT: We're talking about 28 July 2023, just cast your memory  
back to the Standard Manual that operated at that time and Aviation  
Standing Instructions et cetera. When you engage a RADALT hold, if  
25 you depress the trigger in order to deal with something that's occurring in  
the formation momentarily before releasing the trigger, in the context of  
depressing the trigger, is the RADALT hold still regarded, for the  
purposes of instructions, as still engaged, or is it regarded as having been  
disengaged?

MAJ LEWIS: The effect of engaging the trim release is essentially what  
30 you're doing, is resetting the datum. So if you maintain the same altitude,  
the datum stays the same. If you climb or descend while you've got the  
trim release engaged, you are resetting the datum. The RADALT is still  
engaged and the RADALT is still serviceable. But by changing the  
35 datum, you're then moving the aircraft to a different level. If it's higher,  
that's okay. If it's a descent below a predetermined height, such as 500  
feet, then that's got to be acknowledged and it certainly needs to be a  
positive action.

COL STREIT: In your view – and we're talking about as at 28 July 2023  
40 – is there an inherent tension with a requirement to have the RADALT  
hold engaged overwater against maintaining your position in a formation  
of four, if you were ship 2, 3 or 4, in dealing with what's occurring in the  
45 formation at a point in time?

MAJ LEWIS: Actually, it makes it more difficult to fly, as far as there's more control inputs and the method of those control inputs means that there's a high workload. And that's why I think it's more challenging.

5

COL STREIT: Indeed, in your statement you identify, don't you – or you express an opinion that being in a ship 3 position of a formation of four is quite difficult. Is that correct?

10 MAJ LEWIS: It's the most difficult position to maintain.

COL STREIT: You were asked some questions by AVM Harland and also COL Gabbedy in relation to the issue of obscuration that might occur to a pilot's vision out the cockpit, which might get them thinking about engaging in a separation from the formation for safety reasons. Do you remember those questions?

15

MAJ LEWIS: I do.

COL STREIT: In relation to that decision point, is the Inquiry to understand, at least as at 28 July 2023, orders, instructions and policies issued by Aviation Command were silent in relation to the judgment to be engaged in by an Aircraft Captain or the flying pilot as to when an obscuration reaches a point that a separation from formation is required, in terms of timing?

25

MAJ LEWIS: I don't know if "silent" is the good word to describe, but I think it's because it's so dynamic. It's incorporated into training and judgment of an Assessing Officer when awarding an NVD command pilot. So those contingencies are always considered and certainly in formation that's probably the pinnacle task, as in the highest task. So understanding when you need to make a decision is certainly part of their training. The definition of those decisions have never been - - -

30

COL STREIT: Travelling in formation, whether at night or in the day, and for whatever reason visibility is lost of the aircraft you're forming off, if it's for one second – so 1/1000 – and then I gain visibility of that aircraft, I'm not going to worry about separating from the formation, am I?

40

MAJ LEWIS: You probably don't have the response time to be effective. And by the time you've got that visibility back, you'll be in the same place. But I think it gets you into a heightened awareness of your ability to maintain visibility with the preceding aircraft. I think that's going to have an impact on your decision.

45

COL STREIT: A natural response, would it be, in your experience, that the flying pilot would be eyes out and disinclined to scan in if they're having a challenge maintaining visibility of the aircraft in front of them  
5 that they're forming off? Would you agree?

MAJ LEWIS: Absolutely. It's because that becomes the greatest threat and that's the key information for the next decision. So that's where all the information's coming from, so that's where the – not a distraction, but  
10 certainly where you need to scan at that time.

COL STREIT: If I move through a rain shower and I lose visibility of that aircraft I'm forming off in front of me for 1/1000, 2/1000, 3/1000, and then I gain visibility, everything's good, I'm not going to initiate a separation, am I?  
15

MAJ LEWIS: That depends on the spacing. If your spacing is significant, say, 10, 15 plus rotor diameters, then the immediate threat is not apparent, potentially. I'd say you've probably exceeded your requirements, which is to separate. But certainly if you're in close formation and you have a prolonged obscuration, like more than an instant, that's when you'd be preparing and about to execute an inadvertent IMC manoeuvre.  
20

COL STREIT: If I'm the flying pilot and I lose visibility of the aircraft I'm forming off temporarily but the non-flying pilot has visibility and tells me so, is that sufficient for me to continue doing what I'm doing and then regain visibility?  
25

MAJ LEWIS: Yes. And I don't say that flippantly. I say that it depends on the crew dynamic, because especially with manoeuvring in a – not in this instance, but in terrain flight – the attitude of the aircraft will prohibit the visibility of at least one side of the aircraft in turns of more than 30 degree angle of bank. So that's when you rely on one side to do that. So it's a known action and it's something that everyone does. And that's when they manage the scan or the contact with the preceding aircraft amongst the crew.  
30  
35

COL STREIT: As at July 2023, if you just cast your mind back to being in the cockpit of an MRH-90 and the visibility that's available to you through looking through all windows, depending if you want to turn your head or not, forming off an aircraft in front of you can be achieved by looking through any of those windows; is that correct?  
40

MAJ LEWIS: Depends on your angle of bank at the time.  
45



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COL STREIT: Sure.

5 MAJ LEWIS: So on the level you are of the preceding aircraft. But typically yes. So you should be enabled to fly cross-cockpit.

10 COL STREIT: So if I can see the aircraft that I'm forming off even temporarily out the right-hand side window immediately to the right of where I'm seated, if I'm in the right-hand side of the aircraft, is that sufficient?

MAJ LEWIS: In terms of?

15 COL STREIT: In terms of not needing to execute a move away from the formation.

20 MAJ LEWIS: There's no absolute with that. So if you're finding that you're closing with the aircraft in front of you, and your visibility is restricted so that only the active pilot and the active aircrewman has visibility of the aircraft, then you might make a small action to increase the separation between you and the preceding aircraft and just being aware of the next threat. If they immediately change their heading and turn into you then you might be further compromised with your ability to separate if you need to.

25 So it's about maintaining your position and anticipating how you're going to maintain your visibility and what the aircraft you're forming off is going to do.

30 COL STREIT: Just in relation to forming and visibility of the two pilots and if the flying pilot loses visibility initially but the non-flying pilot has it and says so. Does that also extend to the aircrewman in the back? That is if the two pilots have lost visibility initially, but the aircrewman or one of the aircrewman has visibility of the aircraft in front of them off to the right and says so on the comms, is that sufficient to stay in formation or would the Aircraft Captain be – or flying pilot be compelled to execute the drill to move out of the formation?

40 MAJ LEWIS: He has to separate. You must have a pilot with access to controls, visible with – to actually fly.

COL STREIT: Yes.

45 MAJ LEWIS: Otherwise you have no means of countering.



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COL STREIT: Yes. So the line in the sand is the two pilots can mutually support each other in visibility of aircraft and other obstacles outside the cockpit. Correct?

5 MAJ LEWIS: Correct. As the flying pilot - - -

COL STREIT: But it doesn't – I'm sorry, I interrupted you.

10 MAJ LEWIS: No, sorry. As the flying pilot – so, for example, if the right-hand pilot is flying and they lose sight, but the left-hand pilot can see the aircraft, they must immediately initiate a handover takeover so that the pilot who can see that other aircraft is actually the flying pilot.

15 COL STREIT: Yes. So the line in the sand is it doesn't then extend beyond the two pilots to the two aircrewman?

MAJ LEWIS: Correct.

20 COL STREIT: Thank you. No further questions.

MS McMURDO: Thank you very much, MAJ Lewis, for making yourself available to assist the Inquiry again at this busy time in your life. So you're free to go now and you go with our gratitude. And could I thank you and also remind you that if you need any assistance because of the efforts that have been made in giving evidence today, don't hesitate to make use of what is available to you. Thank you.

MAJ LEWIS: No worries. Thank you, ma'am. Thank you, sir.

30

**<WITNESS WITHDREW**

35 MS McMURDO: Yes, FLTLT Rose? Do we need an adjournment to – no, excellent. No adjournment necessary. Yes, FLTLT Rose?

40 FLTLT ROSE: I have a number of documents to tender, Ms McMurdo. So on 4 April 2025 MAJ Chapman referred to a statement of GPCAPT Steve Young that was dated 28 March 2025. He provided a summary of the statement but did not tender it at that time. So I tender the statement. It's GPCAPT Steve Young dated 28 March '25.

45 **#EXHIBIT 211 - STATEMENT OF GPCAPT YOUNG**

FLTLT ROSE: On 24 March 2025 MAJGEN Hafner, who's the current Commander of Aviation Command, referred to a document in his evidence which the Inquiry has since received a copy of. It's the MRH-90 Taipan System Level Risk Assessment as at 1 October 2022. It's signed by the MRH-90 Military Type Certificate Holder and the Directorate of Continuing Airworthiness-Army. And it's also co-signed by MAJGEN Hafner and MAJGEN Jobson on 18 and 19 October 2022.

MS McMURDO: Exhibit 212.

**#EXHIBIT 212 - MRH-90 TAIPAN SYSTEM LEVEL RISK ASSESSMENT AS AT 01/10/22**

FLTLT ROSE: This document's "Official: Sensitive", but MAJGEN Hafner summarised the main finding in this document in his oral evidence which states that the system level risk associated with the risk to personnel, loss of aircraft during MRH-90 flight operations was assessed as medium as at 1 October 2022.

MS McMURDO: Yes, thank you.

FLTLT ROSE: Upon the request of Counsel representing BRIG Fenwick, Counsel Assisting tenders the Army Military Air Operator Response to Comcare Notice signed by BRIG David Hafner, as he then was, in his role as the Deputy Commander of Aviation Command on 30 May 2022.

MS McMURDO: 213.

**#EXHIBIT 213 - ARMY MILITARY AIR OPERATOR RESPONSE TO COMCARE NOTICE**

FLTLT ROSE: I'll briefly summarise it. Comcare wrote to the Army Military Air Operator, who was MAJGEN Jobson at the time, on 22 April 2022 asking him to respond to allegations that Army was operating TopOwl and the Forward-Looking Infrared systems of the MRH-90 in a manner that was exposing workers and other persons to unnecessary work health safety risk. It also stated that there were other issues concerning TopOwl which were also alleged to have contributed to a near miss occurrence in 5 Aviation Regiment on 11 November 2020. And

BRIG Hafner, as the Hazard Tracking Authority Delegate of the Army Military Air Operator Accountable Manager, responded to each of the allegations.

5 He summarised the references to pilotage controls when using TopOwl and FLIR in the various operational documents and how Army Aviation sought to eliminate or minimise the risks of using them on the MRH-90 so far as reasonably practical. And then he stated at paragraph 10 of that document:

10

*All operational risks associated with the ongoing use of TopOwl and FLIR on the MRH-90 Taipan within the current training system and operational flight envelope have been eliminated or minimised so far as reasonably possible.*

15

MS McMURDO: Yes. That's 213.

FLTLT ROSE: The next item is the report prepared by LTCOL Anthony Norton dated 7 November 2014, titled "Taipan Simulation Assistance to DFSB MRH-90 Collision with Terrain ASIT". And this report was enclosed with the draft DFSB report.

20

MS McMURDO: Exhibit 214.

25

**#EXHIBIT 214 - REPORT PREPARED BY LTCOL NORTON**

FLTLT ROSE: It's marked "Official: Sensitive", so I won't summarise it here. The next item is the statement of MAJ Sam James dated 3 March 2025 and Annexures A through X.

30

MS McMURDO: 215.

35

**#EXHIBIT 215 - STATEMENT OF MAJ JAMES AND ANNEXURES**

40 FLTLT ROSE: I'll summarise this statement. MAJ James is a Reservist Aviation Psychologist with a degree in Psychology and a Masters in Organisational Psychology. He served in Aviation Command in 2022 and 2023 as the SO2 Aviation Psychology Reservist reporting to LTCOL Vanessa Jordan. He is currently posted on SERVOP C as a Human Factors Psychologist to Army Headquarters.

45

MAJ James states that in August 2022, D14, who was the 6 Aviation Regiment Standards Officer, invited him to work with 173 Squadron to provide advice on the 2022 Snapshot survey results on 6 Aviation Regiment safety culture following a rotor strike incident, the design of the new Special Operations Qualification Course, and on fatigue risk management system, including how some fatigue measures the Regiment were trialling may sit within the DASR Aviation Fatigue Management Regulation. MAJ James agreed, and he conducted three visits to 6 Aviation Regiment between September and November 2022.

There are a number of emails annexed to his statement between himself and D14 and D10, who was the OC of the Squadron at the time, which summarise discussions that MAJ James had with D19, the Commanding Officer of the Regiment, about fatigue and the desire to obtain data to lead better decision-making about reducing fatigue.

MAJ James ultimately provided advice on the requirements in the regulation, the use of the Fatigue Risk Awareness Tool, the advantages and disadvantages and ethical considerations of using wearable devices for sleep and fatigue monitoring, which was part of D19's sleep study, and on interpreting the Snapshot survey results for the Regiment or the Squadron from 2022. He also drafted Standard Operating Procedures to manage fatigue and record work hours and shift scheduling. He also provided ideas for fatigue measurement.

MAJ James tried to coordinate some repeat visits to 6 Aviation Regiment in early 2023, but those visits didn't go ahead for various reasons. At the time of the accident on 28 July 2023 MAJ James's plans were still in draft form and he was not reapproached to discuss the plans after the accident. MAJ James is not aware of any specific actions that Aviation Command took in response to any recommendations that he made.

As a Reservist, his role was to provide advice and recommendations, but he was not responsible for implementing and monitoring those recommendations.

MAJ James did not deploy on Exercise TALISMAN SABRE 2023, although he did visit 6 Aviation Regiment twice soon after the accident to provide support to personnel there.

MAJ James expresses his sincere heartfelt condolences to the family, friends and colleagues of the individuals who died in this tragic accident.

I have another statement. It's the statement of Karissa Jane Lancaster

dated 13 March 2025.

MS McMURDO: Exhibit 216.

5

**#EXHIBIT 216 - STATEMENT OF MS LANCASTER**

10 FLTLT ROSE: Ms Lancaster was one of the persons that  
LTCOL Daniel Perren identified during his evidence on 4 March 2025 as  
being present in a meeting or workshop at Holsworthy Barracks in 2018  
where he alleges that D19 said words to the effect that, "We need to be  
prepared to crash a few aircraft".

15 Ms Lancaster is a civilian and was working for Nova Systems in  
2018. Ms Lancaster worked with LTCOL Perren in 2018.

20 She does not recall meeting D19 specifically at any workshop she  
attended in 2018, and she does not recall his name specifically, but says  
she may have met him.

25 She does not recall D19 saying words to the effect that, "We need to be  
prepared to crash a few aircraft". She does not recall anyone saying those  
words.

There's the tendered statement of LTCOL Bradley Stoker dated 18 March  
2025.

30 MS McMURDO: 217.

**#EXHIBIT 217 - STATEMENT OF LTCOL STOKER**

35 FLTLT ROSE: LTCOL Stoker is another person that LTCOL Daniel  
Perren identified as being present when he alleges that D19 said words to  
the effect of, "We need to be prepared to crash a few aircraft".

40 LTCOL Stoker was a helicopter pilot but is now a Defence tutor at the  
Australian Command and Staff College in Canberra. He is a peer of  
D19's. They've known each other for over 20 years. LTCOL Stoker also  
met LTCOL Perren in 2018.

45 He states that he attended meetings with D19 in 2018 when he was the  
Officer Commanding of 173 Squadron in 6 Aviation Regiment, and with

LTCOL Perren, but cannot recall if they attended meetings together. He does not recall D19 saying words to the effect that, “We need to be prepared to crash a few aircraft”.

5 He does not recall anyone saying words that were inappropriate or in poor taste at those meetings.

I tender the statement of MR Richard Gregory Buller, dated 19 March 2025.

10

MS McMURDO: 218.

**#EXHIBIT 218 - STATEMENT OF MR BULLER**

15

FLTLT ROSE: Mr Buller is a civilian and he worked for Nova Systems in 2018. He attended various workshops at Holsworthy Barracks at that time. He met D19 at one of those workshops. He also worked with LTCOL Perren at Nova Systems. Mr Buller recalls words to the effect of, “We need to be prepared to crash a few aircraft”, being said at one of the workshops he attended at Holsworthy Barracks, but he does not recall D19 saying those words.

20

25 Finally, I have two statements of BRIG Eamon - - -

MS McMURDO: Could you just clarify that? Is that he can’t recall who said the words or he specifically doesn’t recall D19 saying those words?

30 FLTLT ROSE: Both. He recalls the words being said, but doesn’t know who they were attributed to.

MS McMURDO: Know who said them. Thank you. Yes.

35 FLTLT ROSE: Two statements of BRIG Eamon Lenaghan CSC dated 4 March 2025. One’s at the “Official” level and one’s at the “Official: Sensitive” level.

MS McMURDO: Sorry, the name is?

40

FLTLT ROSE: BRIG Eamon Lenaghan.

MS McMURDO: The first will be 219A, and the redacted one will be 219B.

45

**#EXHIBIT 219A - STATEMENT OF BRIG LENAGHAN  
("OFFICIAL: SENSITIVE")**

5

**#EXHIBIT 219B - STATEMENT OF BRIG LENAGHAN  
("OFFICIAL")**

10 FLTLT ROSE: BRIG Lenaghan was the Chief of Staff of Army  
Headquarters until 7 March 2025. He outlines the records of Mrs Mary  
Holloway and Mr John Holloway's contact with the Defence Member  
Family Support Helpline following the crash of Bushman 83.  
15 Mrs Holloway is CAPT Danniel Lyon's mother. Mr Holloway is his  
stepfather.

The file notes of the calls are classified as "Official: Sensitive", so I will  
not summarise them here. But the records document calls from between  
20 30 July 2023 to 22 November 2024.

BRIG Leneghan further states that the first contact that members of  
6 Aviation Regiment had with the Holloways was on 31 July 2023, when  
they collected them from the airport and transported them to Caitland  
Lyon's house in Sydney.

25 Those are the documents to tender.

MS McMURDO: Thank you. We might have the morning break now.  
The next witness is – we're returning to D10, is that the position?

30 COL STREIT: D10, yes. Thank you.

MS McMURDO: Yes. We'll have the midmorning break – 10 minutes  
– and resume with D10.

35

**HEARING ADJOURNED**

**HEARING RESUMED**

**<D10, on former oath**

5

**<CROSS-EXAMINATION BY COL STREIT, continuing**

10 MS McMURDO: Yes, COL Streit?

COL STREIT: Thank you, Ms McMurdo. Can I just ask that the exhibit be returned to the witness?

15 MS McMURDO: Certainly.

COL STREIT: I just also indicate that I'll be making application for short breaks every hour, and I note that lunch - - -

20 MS McMURDO: Well, I think you can leave that with me. I'll stop on the hour.

COL STREIT: Thank you.

25 MS McMURDO: Or I'll ask the witness if he'd like to stop on the hour, and let me know if you prefer to continue. That's okay, but if you'd like a break then we'll stop. In fact, if you want a break before the hour, that's fine too. Just at any time, let me know. Thank you.

30 D10: Thank you, ma'am.

COL STREIT: D10, if I just take you, please, to your statement – that is, the statement you provided to the Inquiry – and to paragraph 11(e)(i) to start with. So yesterday, towards the tail-end of the questions, I was asking you – you were talking about flying hours in different aircraft types. Now, noting your Coronial statement was made in November of 2023, so it's earlier in time, you have confirmed in your Inquiry statement that there were no additional flying hours for you since signing your Coronial statement. That's correct?

35

40 D10: Correct.

COL STREIT: Now, if we turn to page 5, at the top there, (xi), you set out total MRH-90 hours on aircraft by day, night, and night including night-vision device and formation. Is that correct?

45



D10: Correct.

5 COL STREIT: In terms of the formation description, was that information obtained via PEX?

D10: It was, yes.

10 COL STREIT: So PEX does record if a sortie was in a formation; is that right?

D10: It's an interpretation of a PEX sortie, so I've listed it as 40 per cent of my total formation time or type.

15 COL STREIT: I see. So, to be clear, for the Inquiry's assistance, PEX records the number of flying hours by day and night; is that correct?

D10: Correct.

20 COL STREIT: And you, in looking at PEX in your records, were able to identify, were you, because you flew the sorties, approximately how many were in a formation?

25 D10: I've looked at my PEX data and I've made an interpretation based on that assessment, roughly 40 per cent of the total time was formation, yes.

30 COL STREIT: So it's not the case that PEX has a separate column where you're listing the date of flight, the time of flight, a separate column which is like a tick box, formation.

D10: It does not list formation for your conduct or the tally of flying hours, no.

35 COL STREIT: In relation to your estimation of the approximate time that you've flown – or percentage, rather, you've flown in formation, are you able to estimate whether the formation was two ships, four ships, or more than four?

40 D10: I am unable to, from the PEX data itself, come up with the number of aircraft in that formation. There would be a way to interpret that, based on the mission data held on a separate system, and the amount of aircraft allocated to that flight.

- COL STREIT: And again, not a memory test at all, but you sitting there, are you able to give the Inquiry a sense of whether the number that you mentioned there for formation flying, approximately half is in two-ship, or a quarter is two-ship, or is it substantially less than that?
- 5 D10: My recollection is generally four-ship was about what I would estimate as the 40 per cent of that time.
- COL STREIT: Would it be correct to infer that the majority of your formation flying has been conducted whilst posted to 6 Aviation Regiment?
- 10 D10: The majority is, yes.
- COL STREIT: On the MRH-90?
- 15 D10: Sorry, to clarify, are you asking is my total time – sorry, is the majority of my formation flying on MRH in 6 Avn unit, or the majority of my total formation time on all types?
- 20 COL STREIT: I'll be clear. So where you identify (iv)(a), the total MRH-90 hours where you have flown that aircraft by day and night, and you give an estimation as to formation, is it your understanding most of your formation flying has been on the MRH-90 at 6 Aviation Regiment?
- 25 D10: I understand. Yes.
- COL STREIT: Because in 2021 it's the case, isn't it, that you did a conversion from Black Hawk to MRH-90.
- 30 D10: I did a Transition Course, yes.
- COL STREIT: And that it was overseas?
- 35 D10: No, the Transition Course was conducted at Oakey.
- COL STREIT: Apologies, at Oakey, and do you recall doing formation flying at Oakey as part of your training?
- 40 D10: Yes, there was a formation component of the training course.
- COL STREIT: Do you recall how long that Transition Course was for?
- 45 D10: I recall it was roughly five months, but there was a period of no flying fleet-wide for MRH during that time.

COL STREIT: When you completed that course, are you able to – if you cast your mind back to 2021 when you finished the course, do you remember a month, or was it in the second half of the year?

5

D10: I'd have to check my PEX, sorry.

COL STREIT: Sure. Where were you posted to at the time you did the conversion course in 2021?

10

D10: I was posted to – sorry, I'll just reference my statement. I list my posting location at Enclosure 1(4)(e).

COL STREIT: Thank you. And you arrived and took up command as the Squadron Commander, Special Operations Aviation Squadron, 6 Avn in January 2022.

15

D10: Posted in as of January '22. Correct.

COL STREIT: So is it the case that your formation flying in MRH-90 at 6 Aviation Regiment is effectively that period of posting in January 2022 to July 2023?

20

D10: No, for clarity, I conducted some flying courses at the end of 2021, and those courses were conducted in 6 Aviation Regiment.

25

COL STREIT: I see. Similar to what D9 was doing on 28 July 2023 in gaining certain qualifications to take up the role of OC?

D10: I was conducting the Special Operations Qualification Course and the follow-on Unit Training, or UTAP, qualifications.

30

COL STREIT: So your experience in flying in formation in MRH-90 at 6 Aviation Regiment actually occurred earlier in time, the January 2022, because you were doing courses in that second half of the year of 2021, after you had qualified on the MRH-90. Is that right?

35

D10: Correct.

COL STREIT: You set out at paragraph 12 some evidence in relation to the question you were asked, and that is if you flew less than 180 hours per year between 2020 and 2024 to set out some reasons as to why that occurred, and you've set those out there. That's correct?

40

D10: Correct.

45

COL STREIT: At paragraph 13 you identify that as at 28 July in terms of your currency, proficiency and recency that you were confident in your currency, proficiency and recency as an MRH-90 pilot as at 28 July 2023.  
5 Is that correct?

D10: Correct.

COL STREIT: You go on to explain in subsequent paragraphs your  
10 experience flying the MRH-90, and I'm just going to take you to some aspects of that evidence that you've given. You express at paragraph 14(b) as the Aircraft Captain for Special Operations mission, where you would sit on the aircraft. That's right?

15 D10: Correct.

COL STREIT: If we turn the page to page 6, you describe in relation to paragraph 16 the cockpit workload for an MRH-90, and how it compares to the workload in other airframes you have flown. You say that you  
20 found the level of automation and sophistication in the MRH-90 cockpit to significantly reduce your workload as Aircraft Captain, compared to the S-70A Black Hawk. Is that right?

25 D10: Correct.

COL STREIT: You say at paragraph 17(a) this. You say:

*I would consider a complex aircraft to be one that provides the  
30 pilot with significant automation and advanced sophisticated systems. A complex machine provides one key advantage, which is the ability to reduce a pilot's workload when used correctly. The pivotal disadvantage lays with a lack of system familiarity, which may increase pilot workload. Non-technical skills are heavily relied upon to operate this machine in a crewed  
35 environment.*

Is what I have read out correct?

40 D10: Correct.

COL STREIT: When you talk about your evidence, you give evidence about the pivotal disadvantages from your perspective, and you mention non-technical skills. First, what do you mean by "non-technical skills"?

45 D10: I understand non-technical skills refers to the way that a crew

operates in the machine, and how the human interacts with the machine itself, coupled with how the machine interacts with the human.

5 COL STREIT: Would that include the importance of the crew maintaining a level of discipline when interacting with each other for the operation of the machine?

D10: Yes.

10 COL STREIT: Is that discipline something that means that the crew would communicate with each other in a particular way, or particular manner, whilst flying the aircraft?

15 D10: Your question overlaps what I would deem as non-technical skills with a level of captaincy as an Aircraft Captain, and airmanship as a general pilot.

20 COL STREIT: So if we just focus on crew discipline and the non-technical skills component, if we can, and would you regard an aspect of crew discipline is the manner between which the flying pilot might hand over to the non-flying pilot, and the language used and the mechanism for that?

25 D10: However, I would substantiate that with it's covered through airmanship and captaincy. It's a layered approach.

COL STREIT: So when you say "airmanship", is that a reference to the airmanship chapter in the Standardisation Manual for MRH-90?

30 D10: Yes.

AVM HARLAND: Just before we move on from that, COL Streit, I'm just interested in understanding what you mean by:

35 *The pivotal disadvantage lays with a lack of system familiarity, which may increase pilot workload.*

40 The reason I'm asking the question is because I would accept that if somebody is in training, but I would anticipate that once somebody is trained and converted to an aircraft type, that they would have system familiarity, and in that sense they could take advantage of all of the positives of an aircraft type that's complex.

I'll frame it a different way. Are you saying that when people had finished their conversion course they remained unfamiliar with the system, the automated systems?

5 D10: No. What I'm getting at, sir, is I don't think there's ever a time at which you fly and you're not learning something, either about yourself or the aircraft, and there are multiple ways, particularly in an MRH-90, to conduct the same task, and there are also multiple ways that you either can find efficiencies, or you can find yourself, particularly from that  
10 paragraph, making things a lot harder than they could be.

AVM HARLAND: I guess my ordinary expectation would be that standardisation would be the thing that sits on top of all of the alternatives the systems allow you to do, so that for a unit, or a group of people  
15 operating the same aircraft type, they would do it the same way essentially unless another way was decided, so you didn't end up with that confusion. So were you comfortable with the standardisation overlay for the MRH-90 and its systems operations?

20 D10: Yes.

AVM HARLAND: And that that should have removed that confusion?

D10: I would say, sir, that the standardisation provides the process that is deemed as the standard, and that could be used against that aircraft type  
25 in either of the units. The additional part to the question is that standardisation still allows a level of flexibility because of how complex the system can be. I provide an example of how to use the navigation system in the MRH-90, in particular.

30 There are multiple ways you can get from A to B, and there are multiple ways you can use the systems to get from A to B. The standardisation taught on course teaches you one of those ways, and shows you, through examples or exposure, other ways to do it. It doesn't mean it is not the  
35 standard. It is just an example of how to do it, in my opinion.

AVM HARLAND: If you, operating as a formation, were going to operate outside what the normal standard is, would that be briefed as a formation practice for that particular activity? So, for example, if you say,  
40 "For this formation activity we're going to use the autopilot system in a different way to achieve a particular outcome", would that be specifically briefed so that everybody knew what was happening?

D10: I would just clarify, sir, that the formation orders generally do not  
45 direct how an Aircraft Captain is to use a system unless it's a specific

requirement because of a hazard control that's been applied to the profile. The level of flexibility that sits with an Aircraft Captain allows them to choose how they conduct that task, as long as it's within the Standard. Sorry, to clarify, as long as it's within the rules.

5

AVM HARLAND: Yes. Okay. Thank you.

COL STREIT: Can I just take you to paragraph 18, please, D10? You were asked to outline how many times per year you would've flown a sortie in the MRH-90 which included the following parameters: at night, on night-vision device, overwater, in formation, lower than 500 feet. You identify at paragraph 18(a) how many times you've completed that profile. Is that correct?

10

D10: Correct.

COL STREIT: You identify at paragraph 18(b) that PEX does not, at least at the time of making your statement – sorry, I'll start again. That PEX did not, at least at the time you stopped flying, have functionality to track that data. Is that correct?

15

D10: Correct.

COL STREIT: Now, you say at paragraph 18(c) this:

20

*Any formation flight at night is difficult and requires considerable experience to operate in that environment as the Aircraft Captain.*

25

Is that right?

D10: Correct.

COL STREIT: So does that evidence apply, putting to one side Special Operations profiles, but does that evidence apply to just general – to flying that perhaps 5 Aviation Regiment might do at that time?

30

D10: Yes. I would clarify that to fly by night, on night-vision goggles, as an Aircraft Captain is a Brigade qualification, which is the night-vision command, and that's held as a pilot perspective, in my opinion, as the top qualification to progress to.

35

COL STREIT: When you say that as far as you're concerned:

40

*Any formation flight at night is difficult, and requires*

*considerable experience to operate in that environment as the Aircraft Captain.*

5 What is it in particular that makes formation flight at night difficult, from your perspective?

D10: There's probably two parts to that question.

10 COL STREIT: Sure.

D10: The first part is formation flight. The second part is flight by night on night-vision goggles. Formation flight, in my opinion, whether it's by day or by night, requires a level of anticipation and understanding (1) as a pilot, and (2) as an Aircraft Captain, on what is happening within the formation and, more importantly, what is happening within a mission.

20 When you add night and night-vision goggles to that circumstance, you're also applying the additional considerations that come with flying at night on night-vision goggles, and the level of experience that generally is required (1) to achieve the qualification, and (2) to conduct the activity.

25 COL STREIT: Is it fair to characterise the evidence you have given in this way: that at a minimum, any formation flight is difficult for the reasons you've identified? Is that right?

D10: Correct.

30 COL STREIT: And if you were to add a layer of a mission profile on top of that formation flight, then that's another level of complexity that would increase the difficulty of formation flight.

35 D10: I would agree with the premise that it increases the level of difficulty as a pilot. I would substantiate it with it also adds an additional layer of qualification required, which can be managed from a unit perspective through the UTAP.

40 MS McMURDO: When you said you flew 11 sorties on NVDs, overwater, in formation, lower than 500 feet, in the 12 months preceding the incident, would they all have involved formation of four aircraft, or would some have been less than four?

45 D10: There would be a number of those sorties that would be less than four aircraft. I've interpreted the data on my PEX logbook from the sortie details, and I list in those details what the activity was. There's a way to get back into the mission product to define what that sortie was in its



entirety, and who was involved. So my assessment was those 11 sorties involved that profile. I just cannot give you a firm detail at this time on how many - - -

5 MS McMURDO: No, sure. But I'm just asking so there wouldn't necessarily have been four aircraft in formation, it may have been two or three. Would that be right?

10 D10: I couldn't answer that, ma'am, without pulling the data, I'm sorry. I would say the majority were.

MS McMURDO: So generally when you do formation flights, they are in fours, are they, or three or fours, or more than two? We have heard evidence that to do a four-flight formation is more complex than a  
15 two-flight formation, and obviously enough, not surprisingly.

D10: I've pulled the data, ma'am, based on the exercise name, and that name will dictate (1) what we're doing, (2) where we are. And sorry to be  
20 vague.

MS McMURDO: No, that's okay. I just wanted an idea as to whether they would have been mostly four formations, or some – or half and half, sometimes three, sometimes four. Just an idea, if you can give me one?

25 D10: I would estimate the majority were, ma'am.

MS McMURDO: The majority would be four?

30 D10: Yes. I guess I'd probably just follow up one piece. I wouldn't deem that adding additional aircraft – I wouldn't agree that adding additional aircraft increases complexity by itself.

MS McMURDO: Depending where you're flying in the formation.

35 D10: Less about where you're flying in the formation, ma'am. More about the context of the formation. What the mission is, where you're going, who you're working with, and the context specifically of the profile that you're flying.

40 MS McMURDO: Is flying in the third in a four formation not more complex than flying first or fourth?

45 D10: I'd say the – and I've heard the evidence through one of the tranches on that specific subject – I'd say it's spatially you are further displaced from the second aircraft than 2 is from 1, which can increase the

5 difficulty in that position. I'd counter that with because you have increased space, you also have increased reaction time. And from a formation perspective, usually in the last aircraft, 4, can be worse than 3 because you are anticipating what the entire formation is doing, as opposed to two other aircraft that potentially are a little bit further away. So it's not a great answer, ma'am. It depends.

MS McMURDO: Okay. Thank you.

10 COL STREIT: We've heard some evidence from an MRH-90 pilot to the effect that being in ship 3 is the most difficult of the ship positions in a formation of four. Would you agree with that?

15 D10: I'd agree it can be, yes.

COL STREIT: At paragraph 20 you give some evidence about this matter that the Inquiry Chair was asking you about in relation to if you flew ship 3 in a four-ship formation, outline any additional difficulties, if any, that you experience flying in this position, and you said that:

20 *In general, depending on the formation type, the third aircraft's visual cues can be further away unless you're using the manoeuvre position or arc of freedom. Alternatively, inaccuracies from the third aircraft only affects the formation position for the fourth aircraft, via 1 or 2.*

25

Is that correct, what I've read out?

30 D10: Correct.

COL STREIT: You go on at paragraph 21(a) to say:

35 *Dependent on which side of the formation the third aircraft is on, the third and fourth aircraft can find themselves in a position where they are either inside or outside of a formation turn. It becomes important for these aircraft to either use their manoeuvre position or arcs of freedom, and understand and anticipate turns.*

40 Is that correct?

D10: Correct.

45 COL STREIT: Does that mean in relation to if there's a requirement to have the RADALT hold engaged, it may be necessary, even though

temporarily, to depress the trigger of the collective to make adjustments to the height of the aircraft to stay within a formation?

5 D10: Sorry, I might have lost you there. Are you referencing 21(a)?

COL STREIT: Yes. So where you talk about it becomes important for these aircraft to either use their manoeuvre position or arcs of freedom, and understand and anticipate turns. So perhaps I'll deal with it this way. Where you say at 21(a):

10 *It becomes important for these aircraft to either use their manoeuvre position or arcs of freedom.*

What do you mean by "manoeuvre position"?

15 D10: Right, I understand. So the manoeuvre position is a physical location within the formation that allows you – it provides additional visual cues, and it allows you to be in a position that is known, whether you're on the inside or the outside of a turn, provides the best position, for lack of a better term, in your formation position. The arc of freedom is a defined area in formation that allows you a level of freedom to, as an Aircraft Captain, decide where you need to be, based on what's occurring.

25 So if you – I'd substantiate that with if you're on the inside of the turn, so you're heavy left, turning left, you can move all the way to the right of the formation, so you've got a position that allows you to maintain the outside of the turn, should you deem it fit. They're physical positions which are taught for the formation, and they're not specific to any formation type. It's formation technique.

COL STREIT: If we just break it down to simple lay terms – I'm not a pilot – the freedom of movement is that ability to move your aircraft horizontally in the formation, subject to what's happening in front of you with the aircraft you're forming off?

40 D10: You can move within your arc no closer than the authorised distance or spacing, but there is still a requirement because of the formation contract to maintain below – sorry, behind your preceding aircraft.

COL STREIT: Sure. So I'm not suggesting you would move in front of the aircraft you're forming off, but simply horizontally moving left or right without changing your height, that's part of that freedom of movement you're talking about.

D10: Left or right on the arc, yes.

5 COL STREIT: If we deal with vertical, up and down axis, that freedom of movement would permit, would it, to move vertically, to climb vertically, to descend, provided not below the authorised height, to maintain position within a formation?

10 D10: No, the arc of freedom allows you to move left or right on the arc. The formation technique generally is to stay on the plane. There is an ability, and a flexibility, for an Aircraft Captain to move above and below to a certain level, but that would be within an area that I couldn't define.

15 COL STREIT: Sure, but if the lead aircraft in a formation of four climbs to a certain height, let's say 50 feet above what it had been flying which everyone else was forming off, and the other aircraft, ship 2, followed suit, and ship 3 followed suit, and ship 4 followed suit, that would be within that arc of freedom, would it not, for each of those individual flying  
20 pilots in each of 82 – sorry, in ship 1, ship 2, ship 3, to alter their height to formate off 1?

D10: Sorry, I might have misspoke. So the arc of freedom is a physical  
25 position left or right of your normal formation position, dependent on what has been briefed. If 1 in this scenario is changing their height, context is important. It's dependent on is it transient or deliberate, which would have been covered in some form of brief. Formation technique would dictate that if 1 is changing their plane and it's deliberate, 2, and 3, and 4 would also change plane because one is setting that.

30 COL STREIT: Yes. You describe at paragraph 22 – just turning to a different topic – you were asked to describe any times you have lost situational awareness flying an MRH-90, and what the circumstances were that led to this, and what you did to correct it. So first, what is your  
35 understanding of loss of – well, first, what is your understanding of situational awareness in the context of flying?

D10: It's an awareness – sorry, I'm not an expert, so this will be  
40 probably a poor example – but it's an awareness of your actual and perceived perception of position within space.

COL STREIT: In answer to the question in your evidence, you go on to say that – you were asked if you had lost situational awareness in MRH-90 aircraft. You say, “Yes, experienced spatial disorientation  
45 Type 2.” I pause there for a moment. When you say “spatial

disorientation Type 2", and by reference to the footnote that appears at the bottom of that page 7, what do you mean by, "spatial disorientation Type 2"?

5 D10: Sorry, I'm just reading that. So I understand that the disorientation that occurred in my example, I've provided was transient in nature.

COL STREIT: Yes. Do you mean spatial disorientation Type 2 in this context, in that your vestibular system was telling you something different  
10 to what the aircraft instruments were telling you as to the aircraft's attitude?

MS McMURDO: And that you were aware of it.

15 D10: Yes, I would - - -

MS McMURDO: Do you agree with that sensation?

D10: Yes, ma'am. I would substantiate it with the example I've  
20 provided is of the leans, and I understand that is my perception of reality based on the position is incorrect, based on some vestibular input, and that example was me getting the leans, relying on the Primary Flight Displays, to get myself in a position that allowed me to align actual with perceived position.

COL STREIT: There's some evidence before this Inquiry that Type 2 is  
25 a form of recognised spatial disorientation because the pilot's body is telling the pilot it's doing one thing, climbing or descending, whereas the pilot looking at the instruments, the aircraft might be reflecting you're flying straight and level. Is that your understanding of Type 2?  
30

D10: That's my understanding.

MS McMURDO: So that you're aware that there's an issue?  
35

D10: Yes, ma'am.

MS McMURDO: Yes.

40 D10: I recognised there was something that did not line up.

COL STREIT: And therefore you had that cognitive, that thinking capacity, to look at the instruments and think, "Hang on, the aircraft is saying everything is at this attitude, is what the aircraft is at, whereas my

body is telling me something different. I have to follow what the primary flight instrument is saying”.

D10: Yes, correct.

5

AVM HARLAND: Did you put in a safety report on that incident at all?

D10: No, sir. The aircraft never departed safe flight. It was a disorientation based on a visual illusion essentially, from my understanding, and it was able to be recovered inside the bounds of controlled air space. It never departed from what it was planned to do. I just had a moment of lean.

10

AVM HARLAND: Yes. In Army Aviation were you, like, tracking in, like, a consolidated way episodes of spatial disorientation, even if they didn't end up in a safety outcome?

15

D10: Potentially – sorry, to be clear, I'm not aware of a tracking mechanism as a pilot. I'm not sure I can answer that fully, sorry, sir.

20

AVM HARLAND: That's okay. I think you have. Did you talk about that episode in the debrief, or to the Regiment, in terms of sharing experience and saying, “Hey, look. I had this the other day. I was in this mode, suffered from the leans”, and basically share your experience? Was that something that you did, or something which was routine in Army Aviation?

25

D10: So this example, sir, occurred in Oakey during the Transition Course for me quite early on, and just to backtrack on the last question, my understanding of the safety architecture and the way to capture any significant incidents, or areas that could be significant, would be through an ASR. From a cultural perspective, safety culture perspective, particularly at the unit, anything that we deemed to be an ASR was put through, but from a learning loop perspective, which I think is Aviation-wide, in my experience. We tried to close those loops as soon as we could.

30

35

So, yes, there has been multiple examples of an incident that followed with a brief to all of the crews to make sure (1) that it didn't happen again, and (2) that individuals are aware of everything going on within their environment.

40

AVM HARLAND: Did that happen in the case of your Type 2 episode?

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5 D10: No, sir. There was four people on course with me, completely separate to a Regimental environment. The training environment was very much just a debrief point from a QFI of – I can't recall exactly, but nothing memorable, is probably the best way to put it.

AVM HARLAND: Okay. Thank you.

10 COL STREIT: Just in relation to the questions the Air Vice-Marshal asked you, when you had this experience of Type 2 spatial disorientation, there's the discussion I think you've given some evidence about with the Qualified Flying Instructor about that. Is that right?

D10: Yes, it was, sir.

15 COL STREIT: Yes. Did that QFI say anything in the discussion with you about the phenomenon of spatial disorientation? Do you recall?

20 D10: I don't recall the specifics. I would probably provide for context, I've encountered the leans multiple times whilst flying, whether by day or by night. It's a common phenomenon, I would provide as context.

25 COL STREIT: At the time you've given this evidence of experiencing spatial disorientation Type 2 whilst doing your Conversion Course at Oakey in 2021, was that the first time you experienced the leans?

D10: No, not at all.

COL STREIT: So have you experienced it flying Black Hawk?

30 D10: Yes.

COL STREIT: Did you experience it post this event at your conversion course at Oakey whilst flying at 6 Aviation Regiment in the MRH-90?

35 D10: Not that I recall, no. This specific incident was – there's a very specific system on the MRH-90 with its heading. And the automated flight control, if it is more than 180 degrees out from what you're asking it to do, it will take the shortest arc to get you to that heading. I was supposed to turn left through an air traffic clearance. I pressed the  
40 heading button and it turned right. It was 179 degrees to my right, and it was in a period of intermittent cloud during an IF flight. So it's more a – in my mind, it was more a user error, which increased my workload.

45 COL STREIT: That was in the context of you training on a conversion course.

D10: Correct.

COL STREIT: The MRH-90 is a complex machine. Yes?

5

D10: Yes.

COL STREIT: But once you got across the automation, is it your evidence it reduced your workload as a pilot if using the automation correctly?

10

D10: Yes, correct, and for clarity, every flight you will learn something, and that was one that I learnt that day.

COL STREIT: Now, can I turn to TopOwl, which is at the bottom of page 7 of your statement? You have flown on both versions of TopOwl, version 4 and version 5.1; is that correct?

15

D10: I cannot comment on the version that was in Oakey in 2021. I did fly on 5.1 in the end of '21 and '22.

20

COL STREIT: Can I just briefly deal with one aspect? You give some evidence on page 8 in subparagraph 23(c). You say:

25                   *The S-70A-9 Black Hawk night-vision goggles provided better visual acuity, notably without hyper-stereopsis.*

First, the night-vision goggles for the Black Hawk, were they the ANVIS-9 set?

30

D10: Yes.

COL STREIT: When you say "better visual acuity", what does that mean? What do you mean by "acuity"?

35

D10: And this is a – sorry, for context, this is my opinion based on what I was seeing.

COL STREIT: Sure.

40

D10: I could easily see items in my – or things in my field of view on ANVIS-9 that were a little bit more difficult to see on HMSD.

COL STREIT: Is visual acuity really, in lay terms, about how clearly an item might appear to you?

45



D10: Yes.

5 COL STREIT: You give some evidence about hyper-stereopsis. What do you understand hyper-stereopsis to be?

D10: Sorry, it's been a while. I understand it occurs due to a field of view – sorry, a – I'm trying to think of the exact terms.

10 COL STREIT: What if I put it this way: is hyper-stereopsis where, looking through the HMSD TopOwl version 5.1, things appear closer to you than what they are, or appear further away from you than what they are?

15 D10: The former. So they can appear closer.

COL STREIT: They appear closer to you.

20 D10: Yes, by night on the night-vision goggles.

COL STREIT: You go on at (c) to say:

25 *The Heads-Up Display, however, did not provide the same level of functionality that was available through TopOwl.*

So that's a comparison to the Black Hawk night-vision goggles did not provide a level of functionality available through TopOwl. So when you talk about functionality and TopOwl, what are you referring to?

30 D10: So the Black Hawk – sorry, and this might be a conversation potentially not in this forum.

35 COL STREIT: So let me put it this way then. The ANVIS-9 – and if this is above the classification, just say so. The ANVIS-9 NVGs is just straight-up NVGs that don't – give you the image of what you're looking at, but don't give you any other information from the primary flight system.

40 D10: ANVIS-9, being the goggle itself.

COL STREIT: Yes.

45 D10: The Heads-Up Display is a separate system that attaches to the Image Intensifier Tube for the ANVIS-9 itself from a Black Hawk, for the example.

COL STREIT: When you flew Black Hawk and used ANVIS-9, did it provide you information from the Primary Flight Control System?

5 D10: Yes.

COL STREIT: When you are comparing that to the functionality of TopOwl, are you simply comparing the level of information that the ANVIS-9 Black Hawk system would provide as against the level of  
10 information the TopOwl system would provide?

D10: I'm specifically referring to the ability to overlay FLIR and other bits of data into the TopOwl that was not provided as functionality on the Black Hawk.  
15

COL STREIT: Now TopOwl itself, there's evidence before the Inquiry as to the extent of the information that it provides; that is, version 5.1. That information included some attitude information – your height, for example. When flying MRH-90 at 6 Aviation Regiment did you rely  
20 upon that information that was given to you via TopOwl through the symbology?

D10: I used the HMSD as a supplementary system. There was a lot of other things included in there, but "supplementary" was the key term.  
25

COL STREIT: When you were flying in formation and if you were ship 2 or ship 3, for example, meaning you're forming off the aircraft in front of you – you had that experience, I take it, in formation flying?

30 D10: Yes.

COL STREIT: And you're looking out of the aircraft, and observing what's happening in front of you with the aircraft you're forming off, are you using the symbology information from TopOwl at all to give you  
35 information about your height, your speed, for example?

D10: I'm using parts of – it is one of the inputs, visual inputs, that I would be using, yes.

40 COL STREIT: I suppose did you – when you're seeing that information, a quick check on your height, for example, looking through the night-vision device while you're following ship 1 or ship 2, depending on where you are, you get that information. You're not then eyes in, looking at the Primary Flight Control System to check, are you, as to what the

height symbology said you were at – is the height the primary control system is saying you're at?

5 D10: So there's a very specific scan that is taught as a standard for each of the pilots as they go through their training. How that scan develops as you gain exposure and experience is different, depending on the pilot. In my experience, there was never a time I was flying that I wasn't scanning internal to the aircraft by night, momentarily gaining different bits of data that I needed.

10 COL STREIT: This might be too broad a question – and if it is, please let me know – but what did you understand was the purpose of the symbology information appearing through the HMSD taken from the Primary Flight Instrument Display, showing your speed, your height, for example? What did you understand that purpose was to have it?

20 D10: I understood, like, it's not related specifically related to HMSD. It's Heads-Up Display in general. The data that you get is supplementary to what's physically internal to the aircraft, being the Primary Flight Displays. I used the supplementary information to get general weights, rates and amounts, but I found the Primary Flight Displays were easier, in my opinion, to read to get specifics.

25 COL STREIT: One issue the Inquiry has received a lot of evidence about and needs to consider is the purpose for which information was being displayed on the HMSD replicating, to a large extent, what the primary flight instrument information was, in circumstances where the pilots were required under orders, instructions and policies to obtain the attitude information from the aircraft by looking at the Primary Flight Display. That's the context.

30 So, in that circumstance, do you recall in your training, if it was ever explained to you what the purpose was of the HMSD symbology information taken from the Primary Flight Display? I mean, why even have it if you've got to take your attitude information from the Primary Flight Display, eyes in?

35 D10: For clarity, I would just add the attitude information which is taught as a technique, as a pilot, early on in your training, in my experience is done without Heads-Up Display. The two aircraft, being CT/4 and Kiowa, do not have Heads-Up Display, and the attitude is set with reference to physical locations on the aircraft as the primary technique. If you're setting specific attitudes, you will need to reference the Primary Flight Displays. Sorry, does that answer your question?

45

COL STREIT: It does because it leads into another aspect of your evidence concerning TopOwl and the irregularity, or error, as it has been described in some evidence. If you look off-axis, the information that might be provided to you on the TopOwl contains – in some aspect it contains an irregularity, and you’ve dealt with that in some aspects of your evidence. That’s correct?

D10: Sorry, can you clue me on where I put that through?

COL STREIT: So if we go to paragraph 25, page 8, you were asked:

*State whether you are aware of the flaw in TopOwl relating to the attitude information that is projected onto the visor when the pilot turns their head to the left or to the right.*

So what the Inquiry understands, and has received by way of evidence, that there is an error in the attitude information as displayed on the TopOwl HMSD when a pilot looks off-axis left or right, and the severity of the error increases as the pilot’s head transitions from through 45 all the way to 90 degrees. Do you understand the issue that I am identifying in terms of the error?

D10: I do understand the issue. I would disagree that it was a flaw. I would just state it’s probably more appropriate as a design feature, and I haven’t experienced that flying.

COL STREIT: First of all, just to be clear, what do you understand was the design feature in relation to that attitude information off-axis?

D10: I can’t remember who talked through it in one of the hearing blocks, but I understand that the attitude information that’s displayed on the HMSD has a fidelity error that is different to the Primary Flight Display at a certain angle, looking out to 90 degrees.

MS McMURDO: You’ve described it there as an error. You said it’s not a flaw. You said it was a design feature. What was the purpose of it? What did it achieve as a design feature?

D10: When I say “a design feature”, ma’am, I’m just saying there is code. There has to be code in the system for that to occur. I don’t understand what that code is.

MS McMURDO: Do you mean it was done deliberately in the design of it? Is that what you mean? It was deliberately designed that way?

D10: Potentially – sorry, for clarity, ma'am, I understand the system. It was a design feature in the system when I got my brief on 5.10. I don't understand the background of why and how it occurred.

5 MS McMURDO: No. No, I just wondered why you said it wasn't a flaw, it was a design feature, and then later you described it as an error, that's all. I just - - -

10 D10: Sorry.

MS McMURDO: That's all. I was just trying to clarify whether you saw it as a useful design feature in any way.

15 D10: I didn't notice it flying, ma'am. My point on designed feature versus flaw is the system itself - - -

MS McMURDO: Designed it that way. It was deliberately designed that way?

20 D10: Yes.

MS McMURDO: Yes, I understand.

25 D10: And I understand the error – sorry to interrupt – the error occurred at a certain angle.

MS McMURDO: Yes. So you still saw it as an error at a certain angle. Yes, thank you.

30 COL STREIT: Now, just for some context. You didn't become aware of the background concerning the acceptance into service of version 5.10 of TopOwl until you've heard evidence in this Inquiry; is that correct?

35 D10: Correct.

COL STREIT: When you did your training on MRH-90 and version 5.10 TopOwl, you were informed of the error – we'll use your word – during a mass brief that you received in August 2021.

40 D10: Yes.

COL STREIT: But the reality for you was – and you say this at paragraph 26, where you were asked to state whether you've even been affected by this flaw when flying MRH-90, and if so, what you did to

overcome this flaw. And you answer, “I did not notice this whilst flying MRH-90”.

D10: Correct.

5

COL STREIT: So even you, turning your head off-axis and if you hadn’t turned off a particular declutter mode so the error was there, you’ve not noticed it any way. You’re looking through the visor and not paying attention to the error about that attitude information.

10

D10: Correct. I’d clarify that my understanding of how that system worked is, I needed to be looking almost 90 degrees to see a tangible difference. Generally, the only time I’m looking that way is if I’m lost or I’m trying to find something specific. When I’m flying as a pilot, I’m generally looking within the main windscreen shield of view.

15

COL STREIT: The windscreen in front of you?

D10: Yes.

20

COL STREIT: Obviously, there are – well, not obvious – there are windscreens to the left and right of you. That’s right correct?

D10: Yes, out to your – yes.

25

COL STREIT: But your evidence is, you’re principally looking through the main windscreen that’s in front of you?

D10: For clarity, the windscreen wraps around to about there, yes.

30

COL STREIT: Sure.

AVM HARLAND: Can you help us understand why you would have a display that displays an error when you look off-axis? Why would you bother having it there if nobody uses it?

35

D10: I’m not sure, sir.

AVM HARLAND: If you had a choice between a system that blanked that display or displayed an error, which one would you choose when you’re looking off-axis, I’m talking about?

40

D10: I think you’d have to choose the system that blanked it, if it was at a point that was degrading you or your performance.

45

AVM HARLAND: Thank you.

COL STREIT: Have you ever - - -

5 D10: Sorry, just for clarity.

COL STREIT: Yes.

10 D10: My understanding of what actually occurred – which I agree would be appropriate based on what I’ve understood so far is – if there was a system – sorry, if the system had it, you needed a deliberate way or mechanism to ensure that everyone was aware of it, which is where, I think, the mass brief came in and was covering that specific issue.

15 AVM HARLAND: No, that’s fair enough. Thank you.

COL STREIT: Have you flown any other aircraft whereby the  
20 Helmet-Mounted Sight Display was projecting symbology for you to interpret where you knew that an aspect of that symbology was wrong, depending on where your head was?

D10: The Heads-Up Display for the Black Hawk itself had a multitude  
25 of things that it displayed. One of them was doppler from a positional perspective, that was not exactly accurate. So similar in fashion, but not the same.

COL STREIT: Unless it’s going into a security classification issue, was  
30 this something as part of the Primary Flight Display that gave you that information accurately?

D10: On that system, no.

COL STREIT: So that Heads-Up Display was providing you additional  
35 new information, effectively, an estimation of a matter; is that correct?

D10: It was displaying based on limitations of the aircraft, yes.

COL STREIT: But it was not replicating an aspect of the Primary Flight  
40 Display for the Black Hawk because that didn’t exist in the Primary Flight Display of the Black Hawk?

D10: No.

MS McMURDO: We have been going for about an hour. We’d

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normally sit for another 10 minutes until lunch. Do you want to go on until lunch or are you ready for a break now?

5 D10: Do you mind if we have an early lunch, ma'am?

MS McMURDO: No, of course not.

COL STREIT: No problems at all.

10 MS McMURDO: Well, anyway, perfect timing because we have a streaming issue, apparently, and we need a break. So there we are. We'll resume at 1.45.

15 **HEARING ADJOURNED**

**HEARING RESUMED**

20 MS McMURDO: Yes, COL Streit.

COL STREIT: Thank you, Ms McMurdo.

25 D10, can I just now take you to a different topic. If we go to page 9 of your statement where you give evidence in relation to fatigue management at 6 Aviation Regiment. At paragraph 28 you list some orders, instructions and policies that applied to 173 Special Operations Aviation Squadron aircrew in 2023; is that correct?

30 D10: Correct.

COL STREIT: And those matters concerned the management of fatigue. That's right?

35 D10: Yes.

COL STREIT: Now, as at 28 July 2023, it's correct, isn't it, that, at least to your understanding, Aviation Command was moving through a process of assessing its existing fatigue management policies for the purposes of assessing alignment with the new Aviation Fatigue Management Regulation?

40 D10: Yes.  
45



COL STREIT: Now, at paragraph 28 in relation to orders, instructions and policies about the management of fatigue within the Squadron that you commanded, you refer again to Non-Technical Skills training. Who was responsible for that Non-Technical Skills training?

5

D10: Sorry, I'm just trying to think who owns that course. I believe it's delivered from a DFSB structure.

10 COL STREIT: Do you remember receiving any Non-Technical Skills training in 2023, the first seven months?

D10: Sorry, let me just quickly look. I think I've listed when I got that training. I just can't remember where it is. If you might be able to clue me on?

15

COL STREIT: Sorry, we can come back to it.

20 D10: All right. I would just add, sir, that Non-Technical Skills training is an iterative course that is either every two years or three years, and it's an aircrew-specific training course.

COL STREIT: So you would do it every two years, did you say?

25 D10: It's two or three. I can't - - -

COL STREIT: Two to three years; you're not sure. That's okay. Now, at paragraph 29 it says:

30 *The Inquiry's received evidence to the effect that the DASR Aviation Fatigue Management Regulation came into effect in October 2021 and had a two-year implementation period.*

And in respect to the DASR Aviation Fatigue Management Regulation, you were asked to respond to the following questions. The first one was:

35

*When did you become aware of the DASR Aviation Fatigue Management Regulation?*

40 And you give evidence to the effect that it was around October 2022 through a discussion with MAJ Sam James; is that right?

D10: Correct.

45 COL STREIT: And MAJ James was a psychologist working within Headquarters Aviation Command at the time.

D10: Correct.

5 COL STREIT: And he had the rank of Captain at that stage; is that right?

D10: Yes.

10 COL STREIT: So you, in one sense, became aware of it as a result of a discussion with MAJ James, as you say. But what was the genesis of the discussion? Was it the Fatigue Management Regulation or did that just come up because you were talking about something else?

D10: Sorry, I'm sure you'll get to it in the statement.

15 COL STREIT: Yes.

D10: I've covered that in detail. And the genesis was the 2022 Snapshot and the results and understanding that, while working towards improving how we manage it.

20 COL STREIT: Now, if we just turn the page, we'll come to what is paragraph 29(i). You were asked:

25 *To your knowledge, what steps and actions did 6 Aviation Regiment take in relation to implementation of DASR Aviation Fatigue Management within the unit, and what steps and actions did you take in relation to the Squadron?*

30 And you give evidence at the top of page 10 which says:

*I understand the actions taken by our unit to conduct field studies and other activities to understand fatigue are examples of what steps were taken.*

35 And then you make reference to some annexures to your statement, some of which are at the "Official: Sensitive" level. That's correct?

D10: Correct.

40 COL STREIT: You say that your first step was to begin to understand fatigue at the Squadron level was to establish what pressures and stresses your team was under and that you utilised D150 to run a Squadron Safety Day in May '22 that focused on mental health. And you again refer to an annexure to your evidence dealing with that matter; is that right?

45

D10: Correct.

COL STREIT: Now, you say at 29(b)(ii) that 2022 Snapshot results were released to you in July 2022 and became your key reference to seek additional support to help understand what the results were conveying. And you refer to an aspect later in your evidence. That's correct?

D10: Correct.

COL STREIT: So can I just ask you this question? We'll go in a bit later in relation to the Snapshot results. But, when you received those Snapshot results from the '22 survey in July 2022, did the results surprise you as compared to what you yourself were observing on the ground in the Squadron?

D10: I'm just thinking about exactly what was in that. I wouldn't say that surprised me, no.

COL STREIT: If you weren't surprised, were the results of the '22 Snapshot survey consistent with what you were observing of your workforce on the ground?

D10: I would say there was a portion of those results which the Snapshot provided tangible evidence towards.

COL STREIT: Which previously you didn't have any knowledge or a sense of?

D10: I didn't have the tangible evidence, no.

COL STREIT: Did the Snapshot survey results have the effect of confirming suspicions you may have held privately to yourself about how the Squadron as actually travelling with the workload that it was undertaking?

D10: Yes.

COL STREIT: Now we'll return to the Snapshot surveys shortly, but you got on and give evidence on page 10 to the effect of taking part and in highly encouraging your team to take part in two sleep studies directed by D19. Is that right?

D10: Correct.

COL STREIT: One was in Exercise Iron Rotor '22 and the other was a

Special Operations Qualification Course 02/2022. That's correct?

D10: Correct.

5 COL STREIT: Now, can you just explain, very broadly, to your understanding, how the sleep studies came about as something to engage in?

10 D10: I understand the sleep studies were subsequent to the Snapshot results and as a – sorry, it became apparent and were a driving factor for the Regiment because of what was in those results.

COL STREIT: Was the first time you participated in such a sleep study – was that the first time you've participated in such a sleep study?

15 D10: I think so, yes.

COL STREIT: And so was that an initiative of the CO in terms of this sleep study to gather some data and information in order to assist making decisions about the management of fatigue within the unit?

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D10: Yes.

25 COL STREIT: And if you can recall, when you first posted into 6 Aviation Regiment in January 2021 or even earlier, do you recall having any discussions with the Commanding Officer as a bit of an in-brief to the effect that one of the key challenges was the management of the workload and fatigue within the unit?

30 D10: Sorry, are you referring to my time as an OC in January 22?

COL STREIT: Yes.

35 D10: I'm just trying to remember the earlier conversations. I recall in broad terms it was covered, but it was the Snapshot, the specific information contained within the Snapshot, that highlighted the need for closer management.

40 COL STREIT: I see. Was it your understanding that the Snapshot results 2022 for 173 Special Operations Squadron, were those results the genesis of the CO engaging in a process which led to the sleep studies?

D10: Yes.

45 COL STREIT: Now, you say at (iii) on page 10 that:

*Importantly, these sleep studies made use of the DFSB FRAT.*

So FRAT, Fatigue Risk Awareness Tool?

5

D10: Correct.

COL STREIT:

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*Importantly, these sleep studies made use of the DFSB FRAT as the basis for the survey. However, we were using this in the absence of any further guidance or education. And I understood, because of the nature of the survey members taking part must volunteer to provide data, the subsequent participant rate was low. Ultimately, I was pursuing my primary line of effort with MAJ Sam James that was seeking to use 173 SOAS as the test case for Headquarter Aviation Command to test the draft Standing Instruction for DASR Aviation Fatigue Management Alignment within Army Aviation –*

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via the annexes that you identify there. Is that correct?

D10: Correct.

25

COL STREIT: So is the Inquiry to understand your evidence to be that one of the matters that MAJ James was working on was a process by which Aviation Command could seek to align its processes against the requirements of the Defence Aviation Safety Regulation on Fatigue Management.

30

D10: Sorry, I might have misunderstood that. Can you rephrase that?

35

COL STREIT: That's okay. Let me put it this way. Was it your understanding what MAJ James – one of the things that MAJ James was doing was developing processes including a sleep study and the data that might arise from that, to assist Aviation Command meet the requirements of the new DASR regulation on fatigue management?

40

D10: I don't recall Sam James being involved in the sleep studies, the development or the execution. I am aware – and it's in the annexes, that we shared the data with Sam James. My input with him was to seek a way for a longevity change, or long-term change to improve how we manage fatigue based on the results from the '22 Snapshot.

45

COL STREIT: So where you say you're pursuing a primary line of effort

with MAJ James, that was seeking to use your Squadron as a test case for Headquarters Aviation Command to test the draft Standing Instruction for DASR Aviation Fatigue Management Alignment within Army Aviation. What are you really saying there, I suppose. To my line of effort, we're supplementary but separate to the CO's line of effort.

The CO's line of effort was the long-term – sorry, the unit's line of effort was a long-term change to how we were managing it as an organisation to inform that through an evidence-based approach. My primary effort at the Squadron level after I learned of the existence of a Standing Instruction – or the process of developing that Standing Instruction was to use the Squadron that I was running and managing to test it to ensure that the little inputs required to improve could be done as early as possible.

COL STREIT: This draft Standing Instruction referred to in (iii) on page 10, is that a reference to the Special Flying Instruction that was issued in December 2023 on Aviation Fatigue Management within Aviation Command?

D10: It's a reference to what Sam James has put in his emails in – I can find the annex for you.

COL STREIT: That's okay. If you just summarise it.

D10: But in summary, he identified through the Operational Airworthiness change, we're developing a Standing Instruction which would inform – sorry, which would improve the alignment with the DASR AVFM and once I'd learned of that draft, I was requesting and driving to get our Squadron as the test case, which I saw as supporting for what the Regiment was already doing.

COL STREIT: So at subpara 29(c) on page 10 you give some evidence in relation to your understanding of the evidence that has been given by other witnesses in these proceedings concerning the alignment of Aviation Command against the DASR AFFM, AVFM. Correct?

D10: Correct.

COL STREIT: But you, at the time in 2023, prior to leaving command of the Squadron at that time, you didn't have any awareness whether or not Aviation Command in fact was compliant or not with the Aviation Fatigue Management Regulation?

D10: I would state I wasn't in a position to make an assessment on whether it was compliant or not.

COL STREIT: And what I'm really asking is, you hadn't received any briefing or otherwise by anyone above you in the Chain of Command that Aviation Command was already compliant with the new DASR Fatigue Management Regulation?

D10: Not that I can recall, no.

COL STREIT: Because what you were observing was in fact Sam James, MAJ Sam James, or CAPT Sam James at that time, was working in relation to matters concerning a draft instruction to seek Aviation Command alignment with the DASR on fatigue management. Is that correct? Is that your understanding of what he was doing?

D10: No, I would – to my knowledge, we were seeking his input and working with him to improve the alignment, or the drafting of that Standing Instruction, which, to my knowledge, was a way to improve the system that we were currently operating within.

COL STREIT: Did you ever see a draft of that instruction when you were doing this work with MAJ James?

D10: No.

COL STREIT: Did he discuss it with you, its contents?

D10: Only the – what's marked within those annexes.

COL STREIT: Can I take you to paragraph 30(a)? So you were asked here about when you first became aware of the DFSB Fatigue Risk Awareness Tool and when you first commenced using the Fatigue Risk Awareness Tool when you were the OC. Now, you say:

*I first became aware of the name DFSB Fatigue Risk Awareness Tool in late June 2022 through D21, who is executing a sleep study –*

*using your Squadron –*

*– while conducting exercise Iron Rotor '22 during June 2022.*

So June 2022 is the first time you became aware of the Fatigue Risk Awareness Tool?

D10: Yes, correct, and used.

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COL STREIT: You participated in the sleep study using the Fatigue Risk Awareness Tool. That's correct?

5 D10: Correct.

COL STREIT: And also using the Fatigue Risk Awareness Tool in the subsequent study conducted during an exercise, a Special Operations Qualification Course 02/2022 which was done in September '22; is that  
10 right?

D10: In Melbourne, yes.

COL STREIT: So at that point in time, insofar as September '22 is  
15 concerned, the use of the FRAT that was not something that was mandated, to your knowledge, within Aviation Command?

D10: No, not at all.

COL STREIT: And it was not something that was mandated within  
20 6 Aviation Regiment at that time?

D10: No. For clarity, the use of the FRAT was for the survey and  
25 because of the nature of that survey, it needed to be voluntary.

COL STREIT: Sure. Are you aware that in December 2023 the Special Flying Instruction was issued for fatigue management within Aviation Command. Are you aware of that?

30 D10: Yes.

COL STREIT: And are you aware that as a consequence of that flying instruction, it mandated the use of the Fatigue Risk Awareness Tool?

35 D10: Yes.

COL STREIT: By aircrew. Correct?

40 D10: Correct.

COL STREIT: And, sorry, just for completeness, you say at paragraph 30(b) that you handed over as the OC of 173 Special Operations Aviation Squadron prior to Special Flying Instruction 12/23 which  
45 mandated the use of the Fatigue Risk Awareness Tool. That's correct?



D10: Correct.

COL STREIT: I'll just take you now to the Snapshot surveys in a little bit more detail. So you give some evidence commencing at paragraph 31 in relation to matters concerning the Snapshot surveys. At paragraph 31(a) you say:

*The 2022 Snapshot survey results were released to me on 4 July 2022 by D19. I discussed my initial thoughts and the findings with D19 on the afternoon of 4 July 2022.*

You say:

*I understood the 2021/2022 DFSB Snapshot survey to indicate that my workforce was under pressure due to a number of factors, which I understood to be aircraft transition, unit mission and cumulative fatigue.*

Just pausing there. Is what I've read out correct?

D10: Correct.

COL STREIT: So just casting your mind back to 4 July 2022, and you're looking at the Snapshot survey results and understanding what they were disclosing to you. Where you identify that your workforce is under pressure due to a number of factors, the first being aircraft transition, what do you mean by "aircraft transition"?

D10: The unit, at that time, was in the middle – sorry, was partway through a transition from Black Hawk to MRH, and then MRH to Black Hawk again, which involved a transition of workforces.

COL STREIT: And another factor contributing to workforce being under pressure was unit mission. Is there an aspect of that you can indicate to the Inquiry what you mean in this form?

D10: In this forum, I can indicate that Annex A and S are probably worth a discussion at some point for fullness.

COL STREIT: Sure. So unit mission is just the mission that the unit had at that particular point in time. If we leave it at that, would that be okay?

D10: Correct. Yes.

COL STREIT: And you say "cumulative fatigue". First, what do you

understand “cumulative fatigue” to mean?

D10: For clarity, that sentence is my initial – sorry, is reference to my initial thoughts.

5

COL STREIT: Yes.

D10: Based on what’s contained within the survey.

10

COL STREIT: Yes.

D10: I understand cumulative fatigue to be – well, I would define it as fatigue that had accumulated over time from a number of factors as opposed to acute fatigue, which is over a short period of time. I’m not an expert on it.

15

COL STREIT: No, I understand that. So these are only – as you say, they’re your takeaways from reading the Snapshot surveys of 2022. That’s correct?

20

D10: Correct.

COL STREIT: And you then took action in relation to those matters because on 11 July 2022 you emailed your key staff within the Squadron Headquarters and you organised a group discussion to seek their input to improve the Squadron and reinforce your intent to remain transparent. Is that correct?

25

D10: Correct.

30

COL STREIT: When you say to reinforce your “intention to remain transparent”, what do you mean by that?

D10: For context, the Snapshot survey, it’s an anonymous survey that each member fills out within the organisation. It’s based on function. So aircrew, maintenance – it’s broken into rank, soldiers, into officers. The survey results come back to the unit, from what I’m aware of, in a brochure style format. It’s a PDF that provides a nice picture with percentages against different matrix.

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It also comes back with raw data of a breakdown based on that rank and function for each of the questions, as well as a “Sensitive” version of some of the comments, particular comments that were relevant. In my experience, Commanders will deal with them differently as the data comes back. My take, as I briefed in my initial comments to the Squadron at the

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start of the year, was providing the raw data for them to make an informed decision, which is what I did.

5 COL STREIT: Now, relating to some of the evidence you gave earlier that that Snapshot survey 2022 had – my words – confirmed suspicions that you had held privately about how your workforce was travelling and the pressures that applied to your workforce. Is that a fair summary of your earlier evidence?

10 D10: Correct.

COL STREIT: You then took additional action by having discussions with your key staff in July 2022 and small group discussions occurred also in July 2022. And a small group discussion with D19 occurred later in  
15 July 2022; is that right?

D10: For clarity, I would just add that I sent the details to the entire Squadron.

20 COL STREIT: Yes.

D10: Those small groups were based on the function and rank which the data had represented tangible matrix against to understand what, in my opinion – for myself to understand what those matrix were actually telling  
25 me or what I should be interpreting from them.

COL STREIT: Yes.

D10: Which my responsibility, as the Officer Commanding, was to provide a debrief to the CO with the analysis of (1) what it means for me as an OC in the Squadron environment, and (2) what it means for the  
30 workforce.

COL STREIT: Sure. Now just in relation to your people in the Squadron at the time, 2022 in July, by reference to the pseudonym list that you have in front of you, who were your two Troop Commanders?  
35

D10: What did you say? There were three?

40 COL STREIT: Three.

D10: Two seconds, D20 – sorry, I've got a mind blank, I can't remember who my other Aircrew Troop Commander was at this point.

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COL STREIT: CAPT Lyon, what function was he performing in 2022, do you know?

5 D10: He was my Executive Officer, so my 2IC of the Squadron. And my Maintenance Troop Commander – I can't see their name on this list at the moment. I might get back to you if that's all right.

10 COL STREIT: We can come back to that. It might occur to you a little later, thank you. At paragraph 31(b) you say that:

*During my Squadron brief, I outlined my understanding of the data and reinforced the need for individuals to speak up and report because we are an organisation that makes evidence-based decisions.*

15 Why did you make that point to your Squadron?

D10: Sorry, I'm just reading that.

20 COL STREIT: Take your time.

25 D10: I was very deliberate at the start of the year with my brief to the Squadron. And one of the key points I made was the organisation will continue on its path until it's informed to make a change. And I used that as the analogy and drove the importance of individuals in the process. And one of those key matters was being able to report to perform the evidence basis for future decisions.

30 COL STREIT: So you were encouraging individuals to speak up and report matters concerning, what, workforce pressures from aircraft transition, unit mission and cumulative fatigue? That's correct?

D10: Correct. As an example of a small few, yes.

35 COL STREIT: And CAPT Lyon was part of that discussion, I take it, as your Executive Officer?

D10: Correct. The entire Squadron was a part of that.

40 COL STREIT: And D20 was part of that discussion as one of your Troop Commanders?

D10: Correct.

45 COL STREIT: Are you aware, just jumping ahead in time, that – were

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you aware that CAPT Lyon had raised concerns in a Regimental Officer's Aviation Course in August 2022 about, in effect, workload pressures that he was grappling with?

5 D10: I was not aware of the ROAC, no.

COL STREIT: No. So you only became aware of that, did you, because of hearing evidence in this Inquiry?

10 D10: No. The first time I became aware of that was during one of the Safety Day updates post incident, 08/23, when there was a separate question asked by a member in the crowd of one of the Directors during that brief.

15 COL STREIT: I see. Maybe if we can just deal with that matter briefly now whilst your mind is there. So this is a Safety Day brief post 83's crash. So is it occurring in October 2023?

20 D10: I can't recall exactly when, sorry.

COL STREIT: Was it a unit Safety Day brief or was it an Aviation Command Safety Day brief attended by MAJGEN Jobson, for example?

25 D10: I can't recall who commenced the Safety Day, but there were key staff from Headquarters Avn Command there.

COL STREIT: I see. And was that conducted – so key staff from Aviation Command and then in the audience, who did the audience comprise of?

30 D10: The audience was the entire Regiment of 6 Avn.

35 COL STREIT: 6 Aviation Regiment, right. And in the course of that Safety Day event, your recollection is, what, a staff, a member of the unit, raised a matter about what CAPT Lyon had said at the Regimental Officer's Aviation Course about workload and pressures and fatigue?

D10: That was my understanding, yes.

40 COL STREIT: Do you remember who the question was directed to?

D10: I don't remember who the question was directed to. I vaguely remember who asked the question, that's about it.

45 COL STREIT: Is it somebody who might have a pseudonym?

- D10: They would, yes. They were the Regimental pilots.
- 5 COL STREIT: If you could just indicate what their pseudonym number is?
- D10: I didn't see their name on the list either. I can find it for you though.
- 10 COL STREIT: That's okay. Maybe, we'll make arrangements for – we'll do this now, actually. I'll just ask you to write the person's name down on this piece of paper without mentioning it. I'll then have this marked as an exhibit.
- 15 D10: Am I able to cover that perhaps when we take the next break and I'll just make sure I spell that correctly and find the exact name, if that's okay?
- 20 COL STREIT: If there needs to be a correction - - -
- D10: It's one of those names.
- COL STREIT: - - - we'll recall the exhibit and you make the correction. But at the moment, if you just - - -
- 25 D10: Yes.
- COL STREIT: While it's in your mind, if you just write down, even phonetically, what you say is the name.
- 30 D10: I can write his position. I just, yes, need to double-check a list, sorry. I'll be able to fill their name out in the next break.
- COL STREIT: Sure. I'll just have that marked as an Exhibit - - -
- 35 MS McMURDO: Could I see it, please?
- COL STREIT: - - - 15.
- 40 MS McMURDO: Exhibit 15? Do you mean - - -
- COL STREIT: Sorry.
- MS McMURDO: We'll do it as an exhibit, I think.
- 45

COL STREIT: Exhibit whatever we're up to, Exhibit 15.

MS McMURDO: Yes, that's right. We're well past 15, I'm afraid. 220.

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**#EXHIBIT 220 - NAME SUPPLIED BY D10**

10 COL STREIT: I had the pseudonym name in my head at that time. Now, can I just come back to a matter to clear this up. What is your recollection of what the member raised at the Safety Day to a member of the Headquarters Aviation Command Staff about CAPT Lyon? So put aside what I've indicated.

15 D10: Yes.

COL STREIT: What do you actually recall?

20 D10: I recall it was a very direct and somewhat specific question I didn't have the context for, to which I asked, after the brief, what the question was about. To which I found out it was the same – or it was a very similar question that was raised by Dan.

25 COL STREIT: You understood was raised by Dan?

D10: I understood, after I was told.

COL STREIT: CAPT Lyon.

30 D10: Correct.

35 COL STREIT: And I may have said to you that – did the member raise anything along the lines of CAPT Lyon saying at the Aviation Course issues about workload and fatigue. Do you remember that? Just remove the word "fatigue". Do you recall whether this person who asked this question of this staff member at the Safety Day referred to workload as something CAPT Lyon had raised on the Aviation Regimental Officer's Course?

40 D10: Sorry, for clarity, he didn't state it was the same question that Dan had raised.

COL STREIT: Yes.

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D10: I found out subsequent to the brief that it was a similar question, hence the relevance and why it stuck.

5 COL STREIT: I see. So subsequently to the brief, what were you told, that you can recall, CAPT Lyon had said at the Regimental Officer's Aviation Course?

10 D10: I just recall that I was told it was a similar question. The reason it flagged for me, for which I sought out why it was asked was because it was a previous – similar to a previous question that had been asked.

15 COL STREIT: I see. So what you're recalling is a similarity in the question and what you were later told CAPT Lyon had actually said on the course, but you don't know the nature of the question. Is that correct?

D10: Correct, yes.

20 COL STREIT: Thank you. Can we just return to the Snapshot surveys, please? Sorry, I withdraw that. And the last question on this particular matter, but in relation to that exchange question at the Safety Day of a staff member from Headquarters Aviation Command, do you recall what they said, if anything, in response?

25 D10: No. Sorry.

COL STREIT: Is your recollection that that topic then ended and the Safety Day went on to something else?

30 D10: I can't recall, no. But I just remember it's flagged for me as something that occurred that was worth remembering.

35 COL STREIT: Sure. Now, you say at 31(b) you reinforce your commitment to safety has not changed from your Commander brief delivered in January 2022, and you reinforced that you were not afraid to say no and let the system fail should demand exceed capacity. Correct?

D10: Correct.

40 COL STREIT: You then say this:

*What I mean by that comment is that we can be our own worst enemy and accept work beyond our capacity to achieve organisational outcomes.*

45 Is what I've said correct?



D10: Correct.

COL STREIT: What do you mean by that statement?

5

D10: What I'm getting at is the workforce that I had command of and the organisation aircrew in general, is a very intrinsically motivated workforce that have spent a number of years to get to the point that they are when they reach a unit. And the act of flying or the role itself is what motivates them to come to work.

10

COL STREIT: So, the benefit that the Army receives in the context of a motivated workforce moving towards achieved mission success has to be balanced against that workforce not accepting not being tasked to undertake work beyond its capacity. Do you accept that?

15

D10: I would clarify with I understood it was my priority as the Commander to manage the balance, and as aircrew I understood, through experience, what the left and right of arc looks like.

20

COL STREIT: And the risk that you were identifying, was it that the workforce, including individuals within it, can be their own worst enemy in accepting work beyond capacity to achieve what the organisation was asking it to do or asking them to do?

25

D10: Sorry, can you rephrase that?

COL STREIT: So what you're identifying where you say, "What I mean by that comment is that we can be our own worst enemy and accept work beyond our capacity to achieve organisational outcomes", is what you're identifying is the risk that the motivated workforce and individuals within it in order to achieve mission success may be their own worst enemy to accept work beyond their capacity?

30

D10: I would accept that there is a risk with a motivated workforce to work beyond their capacity.

35

COL STREIT: Yes.

D10: And there will be a need to make a measurable – sorry, a need to be measured in that approach.

40

COL STREIT: And what you're trying to manage is, with that workforce, is to get that workforce to be confident enough to say, "No, stop, we've reached capacity. We can't achieve what we've been asked to

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do here”.

D10: No. What I’m saying is it’s their responsibility or our responsibility to know when we’re coming to that point.

5

COL STREIT: Sure.

D10: And success can actually be saying “No”.

10 COL STREIT: The reason I ask the question in that way is because when you turn the page, which is the continuation of your evidence on this point, you talk about:

*I refer to this in my team as hitting the big red button.*

15

So I take it the big red button is the stop button, we’ve reached capacity, enough. Is that what you mean?

D10: Correct. It was my colloquial term for the safety button.

20

COL STREIT: Sure. And so is that example you provided to your team is a recognition with a highly motivated team that you have described keen to achieve the mission and do what the organisation has asked it to do also needs to be confident to say no to the organisation and hit the big red button when they’ve hit their capacity.

25

D10: I would disagree with the word “confident”; it’s their requirement or our requirement.

30 COL STREIT: Sure. But you see, the Snapshot survey, understanding your earlier evidence, has confirmed your private suspicions that your workforce was under pressure for the reasons you’ve identified. Correct.

D10: Correct, yes.

35

COL STREIT: And so when you’re having the discussion with your team, it’s the case, is it, that you’re doing that knowing now that the true position of where they are is as a result of you having reviewed the Snapshot survey, results which you’re attempting to understand. Correct?

40

D10: Correct.

COL STREIT: And you’re concerned to convey to them a Command message, in effect, “I know you’re motivated, I know you’re wanting to achieve mission success, but when you reach capacity, you need to say,

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“Enough. I’m at capacity”, and not go beyond that? Correct.

D10: For clarity, there’s a difference in time.

5 COL STREIT: Sure.

D10: My message of being at capacity and acknowledging what that looks like was actually the start of my tenure as an OC, which I reinforced a second time – well, multiple times, but one of those was in the Snapshot debriefs.

COL STREIT: Sure. So the Snapshot debrief is the second time you’ve reinforced this point. Is that accurate?

15 D10: Roughly, but yes. Yes.

COL STREIT: Yes. And is it the case that in fact throughout your tenure you were constantly reinforcing this point with members of your sub-unit?

20 D10: Correct.

COL STREIT: Because did the issues about all workforce being under pressure with aircraft transition, unit mission and cumulative fatigue, those issues continued, did they, into 2023?

D10: I would just say I was acutely aware of them into 2023.

COL STREIT: Yes. I ask you this because in 31(e), so on page 12 now at (e) you there identify that you received the 2023 Squadron Snapshot survey on 10 July 23 from D19 which the survey was in a similar fashion to the previous year. Is that correct?

35 D10: I can’t recall exactly, but yes, roughly. Yes.

COL STREIT: So does that mean similar fashion to the previous year that the Snapshot survey results as at 10 July 2023 for the 22/23 year were similar results as the 21/22 Snapshot survey?

40 D10: Inferring that the frictions, for lack of a better term, or the context was still there, the same context was there.

COL STREIT: So the workforce under pressure. The factors being transition of aircraft, mission requirement and cumulative fatigue.

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D10: Correct.

COL STREIT: And so for your tenure, the management of those issues which you were live to and you took actions to address were ongoing for  
5 that period of time, from when you started command through to just short of the accident.

D10: Sorry, I'm just thinking about that.

10 COL STREIT: I'm only referring to the Snapshot survey result timing.

D10: Right.

COL STREIT: So you start command in January, you get the results for  
15 the '22 Snapshot survey in July '22, and then you get the '23 results in 10 July '23. So just that period of time.

D10: Yes, correct.

20 COL STREIT: Grappling with the same challenges. That's right, isn't it?

D10: Yes.

25 COL STREIT: I'm just going to turn to a different topic.

D10: Sorry.

COL STREIT: Sorry?

30

D10: Just going back to that. I've been thinking about the particulars of the Snapshots. I would change that the challenges that were apparent, in my eyes, were probably more indicators as in they were indications of those events as opposed to they were definitively those events, which is  
35 why the investigation part was occurring from my side.

COL STREIT: And that the Snapshot survey process is to provide Command feedback on discrete topics anonymously. Would you agree?

40 D10: I'd agree, yes.

COL STREIT: For the purpose of assisting Command understanding what the workforce is reporting is occurring on the ground anonymously. Do you agree?

45

D10: Yes.

COL STREIT: In order to assist Command take action to address those matters within the workforce without calling out any individual person, because you're just dealing with the results which are indications of issues.

D10: Correct.

AVM HARLAND: So did you feel like there'd been any progress represented between the 2022 survey and the 2023 survey in the results?

D10: I believe there was, sir. The Snapshot results themselves, which I've annexed in my evidence provides a – there's a nice diagram on one of the pages. I can't remember which page it is. But it's a chart which references this year and previous years. There were some parts of the chart that had improved. There were other parts of the chart that were around the same. And I believe there were also a few parts that were worse.

AVM HARLAND: No, that's good. Thank you.

D10: I would just add, sir, for clarity, I can go through those and discuss if you require. It's probably worthwhile.

AVM HARLAND: Yes, okay. Thank you.

COL STREIT: Just finishing off the aspect concerning the Snapshot surveys. So page 12, para (c), you say following your discussions with all Squadron members, you conducted another verbal brief on analysis for the 2022 Snapshot survey. You don't recall the specifics of the conversation; however, you do recall key point that your team were feeling the pressures of introducing a new platform into the Regiment.

You say:

*D19 was supportive and communicated further investigation was required. I understood this to be the catalyst for the sleep studies mentioned –*

earlier in your evidence. That's correct.

D10: Correct.

COL STREIT: And you engaged some assistance from MAJ Sam James

concerning the 2022 Snapshot survey results; is that right?

D10: Correct.

5 COL STREIT: Now, in relation to the 2023 Snapshot survey results you also had a discussion with your command team using the raw data on the – and this discussion was on 11 July 23.

D10: Correct.

10

COL STREIT: At that time CAPT Lyon, he had transitioned, had he, from being your Executive Officer to one of your Troop Commanders?

D10: Correct.

15

COL STREIT: And that D20 had remained one of your Troop Commanders?

D10: Yes.

20

COL STREIT: Can you recall when CAPT Lyon had transitioned from the Executive Officer role to Troop Commander, was that at the start of 23 or a little earlier?

25

D10: I think the position was effective from January '23.

COL STREIT: Now, you also caused, didn't you, the raw data to be sent to the members of your Squadron on 11 July to inform the Squadron discussion the next day? That's right?

30

D10: Correct.

COL STREIT: And you drafted your thoughts on the Snapshot survey on 16 July 2023 and you sent these notes to D9 and your senior soldier D34 to review and made additional comment. That's right?

35

D10: Correct.

COL STREIT: You say that this was all being done during the execution phase of Exercise TALISMAN SABRE and was not finalised until you sent your comments to D19 on 15 August 2023.

40

D10: Correct.

45 COL STREIT: I note the time.

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MS McMURDO: Pretty close to an hour. Would you like a break?

D10: Is that all right, ma'am?

5

MS McMURDO: Yes, of course. Of course. No problem at all. We'll have a 10-minute break.

10 **HEARING ADJOURNED**

**HEARING RESUMED**

15

MS McMURDO: Yes, COL Streit.

COL STREIT: Thank you, Ms McMurdo.

20 D10, I understand you may have remembered the name of that particular individual. So can I just ask for the last exhibit to be provided.

MS McMURDO: Exhibit 220, yes.

25 COL STREIT: If you could just write that person's name and the pseudonym, if they have one. Thank you. So this pseudonym is D129; is that correct?

D10: Correct.

30

MS McMURDO: D129.

COL STREIT: The pseudonym number you've presented is D129. So is that the person you recall at the 6 Aviation Regiment Safety Day after the  
35 accident in July '23, at some stage before the end of the year, where D129 has raised what you understand is a similar question that CAPT Lyon had raised?

D10: Yes.

40

COL STREIT: And that it's D129 that's raising that question to a member of the Aviation Command Headquarters staff that was attending that Safety Day?

45 D10: Correct.

COL STREIT: The question was asked in the presence of the assembled Regiment?

5 D10: Correct.

COL STREIT: Can I turn now briefly to the topic of human factors, using human factors psychological support services on page 12, at paragraph 32. You were asked to outline any human factors psychological support services provided to your Squadron in 2022/23 and the reasons the services were provided. You give some evidence there about engaging with MAJ James heavily through 2022/2023, and that, as an organisational psychologist, his input was extremely helpful to the unit. That's correct?

15 D10: Correct.

COL STREIT: You pursued his input in particular to understand and interpret the 2022 Snapshot results, how you could better manage training design and to create an enduring way to measure and manage fatigue that would align with the new DASR Aviation Fatigue Management Regulation. Is that correct?

25 D10: Correct.

COL STREIT: You say at paragraph 32(b) on page 13 that Aviation psychologists were embedded into the unit and extremely useful after the March 2023 and July '23 accidents. Is that correct?

30 D10: Correct.

COL STREIT: Is that on the basis that they were also providing a level of individual psychological support to aircrew involved in those matters?

35 D10: To unit members, yes.

COL STREIT: Now, can I just turn to the area where you set out your engagement with the Commanding Officer of 6 Aviation Regiment during your tenure which is page 13, paragraph 34. You were asked to describe broadly any discussions you had with D19 in 2022 to '23 about the impact workload fatigue within 173 Special Operations Squadron and the outcomes of such discussions.

45 Now, you set out your evidence in the subsequent subparagraphs, but in short you say D19 and you had multiple discussions about the impact of



the workload on your Squadron. A notable discussion you recall was in-depth about workload fatigue after the 2022 Snapshot survey was released. It highlighted that the Squadron were reporting a concerning level of fatigue and tempo compared to other elements across ADF Aviation.

Furthermore, you were concerned that this seemed to be a trend that was reoccurring since you first posted into the unit in 2014. Is that correct, what I've read out?

D10: Correct.

COL STREIT: In 2014 you were a line pilot, were you, flying Black Hawk at 6 Avn?

D10: Yes.

COL STREIT: You say:

*The outcomes of the discussion with D19 resulted in seeking expertise to help understand the problem and gather evidence to inform change.*

Is that right?

D10: Correct.

COL STREIT: Your recollection of the discussion that you've highlighted at 34(a) with D19, what was your impression of his response to what you were saying?

D10: He was supportive of what I was proposing and because of his previous experience in the unit, I think he was aware of some of the acute frictions that are particular to that unit.

COL STREIT: Did he suggest to you, that you can recall, any mechanism by which to address the concerns that you had highlighted?

D10: Not that I can recall, no.

MS McMURDO: So he was supportive in principle but there were no practical outcomes. Is that a fair assessment?

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D10: Sorry, I understand that question now. No, ma'am, the practical outcomes came in the form of sleep surveys and the evidence-gathering period for fatigue and the management of fatigue, in particular.

5 COL STREIT: The discussion you had with the Commanding Officer about the 2022 Snapshot survey results, was that a discussion that was occurring in July 2022 that you can recall.

10 D10: It was around the time of the results being released to the Squadron.

15 COL STREIT: If you go back to 31(a), you say there that you discussed your initial thoughts on the findings with D19 on the afternoon of 4 July 2022. Is that the same discussion you are referring to at paragraph 34(a) of your statement or is it a different discussion?

20 D10: No, I believe it's a different discussion. The discussion that occurred on 4 July was the initial chat to understand my understanding of the raw data. But after a period of analysis and discussions with my team, there were subsequent chats and a final debrief from my position as an OC to him as a CO.

25 COL STREIT: I see. Do you recall whether he gave any specific guidance to you? Other than the issue of sleep studies, did he give any specific guidance to you about how best to approach managing this workforce issue?

D10: I believe he would have. I can't recall specifically what it was.

30 COL STREIT: At paragraph 34(b) you say:

35 *I also recall constant discussions surrounding our Squadron's ability to complete simultaneous or successive tasks, some of these often at short notice. The outcomes to these discussions are always the same. D19 was supportive of what the Squadron needed in a way that deliberately balanced operation necessity and safety.*

40 If you could just provide a little clarity around that. What do you mean by that D19 was supportive of what the Squadron needed. That's correct?

D10: Correct.

45 COL STREIT: But what did he actually do that you can recall to demonstrate the support?

5 D10: There's probably a few examples that would be relevant; I'm just trying to think of the most topical. In general, it was the level of tasking that came from the organisation. The Squadron was the action element essentially for the Regiment, being the active Squadron. There was often times where we would find ourselves either successively or simultaneously tasked for multiple things or against multiple things. I would go to him for prioritisation discussions from a unit perspective to help him – sorry, to inform him of what the Squadron needed from a tempo management perspective which he was supportive of.

15 COL STREIT: So when the taskings are issued and you then have a discussion with the Commanding Officer at a later stage in relation to tempo and taskings, who is initially providing you the taskings?

D10: I'm just trying to think of a vague way to say it.

20 COL STREIT: So is it the Headquarters of the Regiment through the Operations Cell provides the tasking to the Squadron or is the tasking coming from outside 6 Aviation Regiment?

25 D10: For clarity, it is probably worth discussing Annex Y in detail to provide an example and a timeline of a relevant time for clarity, if that helps. I can provide a general answer.

COL STREIT: If you could just provide the general answer. But let me do it this way, the taskings for the Squadron, did some of those taskings come from the Headquarters of 6 Aviation?

30 D10: Annex Y provides what tasks the Regiment – an example of what tasks the Regiment gets. The Regiment is an action element of an Army unit. They receive tasks from their Operational Commanders for whatever those may be. The unit needs to prioritise how and when they get done. The unit also has internal tasks which – sorry, I'm just trying to think about how to answer this without referencing the document.

35 COL STREIT: Well, let me put it this way. Operational tasking would come from an organisation outside 6 Aviation Regiment?

40 D10: Correct.

COL STREIT: A training task might come from Headquarters 6 Aviation Regiment?

45 D10: No, not necessarily. Training tasks may also come from an

Operational Headquarters if it has an operational outcome against a said mission.

5 COL STREIT: What I'm trying to distinguish is – perhaps I'll ask it this way. Operational taskings did not come from the unit Headquarters?

10 D10: For clarity, I would state operational tasking comes from the Operational Commanders to the units. The units are the ones – sorry, it is a unit's responsibility to direct its own forces to complete those tasks in support of the Regiment task, if that provides clarity.

COL STREIT: I understand. So, ultimately, you're the end user of the task that's been given, whatever it is?

15 D10: Correct, yes.

20 COL STREIT: So when you receive the task, however it is conveyed to you, whether it's an outside organisation through your Headquarters to your subunit or whether it's internal to your unit from your Headquarters to your subunit, you're the end user of the task. You have to consider at the time, did you, whether the task was achievable, having regard to what the Squadron is doing at that time. Yes?

25 D10: Yes, and I would add to your original question of 34(b), within the remit of the CO and the Regiment tasking, it would be a prioritisation discussion which is what I'm referencing by the deliberate balance. If the task was not owned originally by the unit or the CO, it would be a further discussion at higher levels about the necessity or priority of said task.

30 COL STREIT: But that discussion at the higher level is you, the end user of the task request, making an assessment for whatever reason that the task can't be achieved either at all or within the timeline because of other competing pressures. You would raise that with the Commanding Officer and he would have to make an assessment as to whether he would give  
35 you direction to complete the task and put other things to one side, or whether he would go in to bat for you, so to speak, up the line and say that task can't be achieved in this time or needs to be reprioritised. Is that an engagement you had with the CO?

40 D10: Yes, correct. And it's the feasibility discussion of the cost of conducting said task.

45 COL STREIT: Now, that process, at least in your experience in Army, would not be unusual in the sense of Army units being tasked by higher Headquarters to do various things and then the particular unit might go

back to that Headquarters to push back on the task because it can't be achieved because of other things the unit's been asked to do. It's just a workload management thing, isn't it?

5 D10: Correct.

COL STREIT: Now, you describe – just turning to training if I may, paragraph 36 – you were asked to provide details about what training, if any, 173 Special Operations Squadron members received up to 28 July  
10 '23 concerning workplace fatigue management and identify when and where you received that training. You give some evidence about that in the following subparagraphs. You identify on page 14(e) a Defence Fatigue Awareness course conducted 25 January 2023. That's correct?

15 D10: Correct.

COL STREIT: Do you remember attending that course?

D10: I believe that course is an online mandatory training conducted at  
20 the start of every year.

MS McMURDO: So it was an online course. Did you do it?

D10: Yes, ma'am.  
25

MS McMURDO: Do you know how many of your people did it?

D10: I recall that course is one of the ADF mandatory courses all members need to do, ma'am.  
30

MS McMURDO: Mandatory. Thank you.

AVM HARLAND: So that would mean it would get flagged if anyone under your charge hadn't done it?  
35

D10: Yes, it will, sir. There's a specific date set by Chief of Army of when those mandatory courses need to be done and a commensurate level of direction if it's not done.

40 AVM HARLAND: Okay, thanks.

COL STREIT: You had a Squadron Safety Day planned for 24 March '23 but that didn't proceed because of the Jervis Bay ditching. That's correct?  
45

D10: Correct.

COL STREIT: Now, very briefly, you were asked to describe any difficulties you experienced with the serviceability of the MRH-90 and how these serviceability issues impacted your workload, and you say at 37(a):

10 *MRH-90 serviceability impacted aircrew workload and acute fatigue to a limited extent, dependent on the circumstances. An example of this limited impact would have been moving between aircraft during the execution of a mission due to unserviceability.*

What I read out is right?

15 D10: Correct.

COL STREIT: So as happened on 28 July 2023, one of the aircraft became unserviceable for your depart at Proserpine. That's right?

20 D10: Correct.

COL STREIT: The aircrew of that particular aircraft, which was captained by D2, had to move to another aircraft?

25 D10: Correct, as planned.

COL STREIT: Now, at paragraph 38 you were asked to outline what shifts you were working in 2023, day shifts, night shifts, or a mixture of the two, and how many hours you generally worked per day. You say that you generally work the same hours as the majority of your workforce, which consisted of a mix between day and night shift. You typically work between eight to 10 hours each shift or up to 14 hours during flying exercise periods. Your flying rate varied, dependent on the circumstances, with periods of limited flying mixed with periods of intensive flying during exercises.

D10: Correct.

40 COL STREIT: In terms of flying hours in the MRH-90, as at July 2023, compared to other members in your Squadron and the QFIs in the Regiment, where did you sort of place yourself in terms of whether you were in the group at the lower end of hours, in the group in the middle of hours flown, or towards the top?

D10: I could provide a general answer, but without the data, I couldn't say exactly.

5 COL STREIT: The reality for you was you had, can I say, extensive hours on Black Hawk, which is your primary aircraft you've learnt and flown on for years. Correct?

D10: Correct.

10 COL STREIT: And that your hours on the MRH-90, you did the transition course in 2021. So you've flown in 2021 and 2022, and half of 2023. That's correct?

15 D10: Correct.

COL STREIT: As a consequence of being in command of the Squadron in 2022 and 2023 up to the accident, did that impact on your ability to jump in the aircraft and fly in terms of time available for you?

20 D10: "Impact" is probably not the right word. I would state it was a deliberate prioritisation on what I was doing and when. As the OC, my workload was different to others within the Squadron.

25 COL STREIT: Yes. You're in command of the Squadron; correct?

D10: Correct.

30 COL STREIT: So you have to fly to maintain your currency and the qualifications that come with that to perform your role. That's right?

D10: Correct.

35 COL STREIT: But you also have to give prioritisation to the Command function that you're tasked to perform?

D10: Correct. I would add that there is opportunities for junior members to conduct flying as well. So it's a deliberate prioritisation to ensure that the experience is being shared.

40 COL STREIT: Yes.

45 MS McMURDO: When you're trying to train up the junior members to gain further qualifications that it needed for them to progress through the service?

D10: Correct, ma'am. It's the main aim, to make sure that someone else can do your job.

5 MS McMURDO: You say you worked typically between eight to 10 hours each shift, or up to 14 hours during flying exercise periods. Could you just expand on that a bit because I would have thought during exercise periods where you're flying, you have to be particularly careful about fatigue and you would work less rather than more. Is that not the case?

10

D10: Just so I understand your question, ma'am.

MS McMURDO: Yes. If you look at 38(a), you'll see that, what I quoted there. You said:

15

*I typically work between eight to 10 hours each shift, or up to 14 hours during flying exercise periods.*

20 So that just struck me as a bit unusual in that you work longer when you are flying, whereas I would have thought that you might work shorter periods when you're flying because you're managing the fatigue and ensuring that you're not fatigued when you're flying.

25 D10: No, ma'am. The 14 hours for us is the specified limit within the Standing Instructions. But because of my position, even if the exercise day or the flying day were shorter, there was still only work that I could do as an OC which is what I prioritised.

30 MS McMURDO: Sure, I understand that. So on days that you'd be doing flying exercises, you'd be flying and also working up to 14 hours catching up with your other demanding roles?

D10: Yes, correct, ma'am.

35 MS McMURDO: So it was just an additional burden that you carried during flying exercises?

D10: Correct, ma'am. Sorry, I wouldn't use the word "burden".

40 MS McMURDO: It's loaded. It's a loaded word, yes. You were happy to do it.

D10: What I had chosen by taking up the role.

45 MS McMURDO: Yes, I understand that. While I've interrupted



COL Streit, could I ask you this: talking about the pushing of the big red button earlier and the culture really that you described as being one where you felt people understood the need to push the big red button if they needed to. With hindsight, and knowing what you now know about fatigue and its management in the Aviation safety context, do you think the Squadron, keen to meet Army expectations, set the bar too high – that individuals in the Squadron set the bar too high in using that red button at that time? I'm talking to you about hindsight, not so much what you knew then but what you know now.

10

D10: Sorry, are you able to rephrase that question, ma'am? Are you asking should I have pressed the button?

MS McMURDO: No, no. You talked about the big red button and the culture with your Troops and you said that you thought they understood and you showed by example that if you needed to FACE out, push the big red button, they could do so. Now, looking back to 2023, the first half of 2023, knowing what you now know about Aviation fatigue management, do you think because of the desire amongst the Troops to meet Army expectations, expectations they placed on themselves and not wanting to let the organisation down, they set the bar in pushing that big red button a little too high.

D10: Are you referring to the middle of '23, ma'am?

MS McMURDO: Yes, just prior to the crash.

D10: I would state, ma'am – there's probably a few questions in there – we were a workforce that had a March ditching and it's probably not the time you want to push safety incidents or the risk of safety at the expense – sorry, push a mission at the expense of safety.

MS McMURDO: So are you saying then that the March incident made your people more prone to push the big red button, rather than less prone to push it, if they felt there was fatigue?

D10: Not just fatigue, ma'am, but yes. We were acutely aware of the tangible risks of what we were doing.

MS McMURDO: Did that change then after the March incident? Was that a change point?

D10: I would state it was a tangible example of what could happen any day of the week.

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MS McMURDO: It was a reminder to everybody about how serious safety was, priority of safety?

D10: Correct.

5

MS McMURDO: So if you could just tell me then, post the March incident, do you feel the Troops were more likely to push the big red button than they were before that?

10 D10: I would say without a doubt, yes.

MS McMURDO: Thank you.

15 AVM HARLAND: Can I just ask a question about the concept of pushing the red button, or saying, “No, I’m pushing back”, and I’ll ask it in a simplistic way. Is it easier to say “Yes” and go on with it, or go and say “No”? Are there overheads with saying “No”?

20 D10: Are you able to rephrase that, sir? Sorry.

AVM HARLAND: Perhaps you could describe what happens if you are given a task and you, as the OC of the Squadron, look at the laydown of the unit, where they’re at in terms of qualifications, fatigue, whatever it may be, a whole bunch of factors, and you go, “I don’t think we can do that”. What happens then? What are the next steps? Obviously, you might put your hand up and say “No”, push the red button – however you want to phrase it – but what happens after that?

30 D10: For clarity, I’ll define what I think the big red button is. So for me it’s not as simple as I’ve woken up and I’m not up to flying today. I’m going to FACE out. That is a very simple predicament to be in and, as a professional, it’s actually your job to make that determination. Pushing the red button, for me, is deliberately stopping what the Squadron is doing, regardless of what else is occurring. It will always be, I think, easier to say “No” than “Yes”. But I would follow that with the context is important. An Aviation Squadron gains experience by conducting its tasks, and for aircrew that’s flying.

40 So to get experience, you need to actually do the tasks. That needs to be tempered with everything else that’s going on. The complexity comes in with successive or simultaneous tasking because now you are stretching potentially different elements to achieve those. So, in short, the answer is it’s always a balanced approach. Sometimes there’s never a right answer, there’s just a less worse answer.

45

AVM HARLAND: I'm trying to rationalise the results you're getting in the Snapshot surveys, which you reflect on going all the way back to 2014 – cumulative fatigue, a high tasking rate – and then that's the inference you have. Is my understanding correct in your statement?

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D10: Indications towards it, yes, sir.

AVM HARLAND: So we have that and it's saying, yes, people are tired, they're fatigued, they feel overloaded. The idea that it's easy to say "No" – in fact, easier to say "No" than it is to say "Yes", I find it difficult to reconcile the two things. The fact that you've got a unit which is perpetually fatigued and reporting so, and yet it's quite easy to say "No" to tasking. In which case it would seem to me easy to balance the ledger so people aren't feeling perpetually fatigued. Can you explain how that works in 6 Aviation Regiment?

D10: I would offer there is a dichotomy there where you have an individual – there's individuals involved in the scenario. The tasking is an organisational element. There are a set number of tasks that must be done, or should be done, I should say, for a particular mission set which I can go into detail in a different forum. Those tasks are the ones that build progression for the individuals. So the dichotomy exists where individuals will want to do more to achieve the progression and that's potentially at the expense of themselves and that's where the management and the balance comes in that I spoke about earlier.

AVM HARLAND: This is where I'm trying to understand in the easy to say "Yes", easier to say "No" thing. What you're describing there is a situation where it's actually not easier to say "Yes", not because the organisation doesn't allow it, but that the conditions are more favourable to people saying "Yes", because they want something on the other side of the "Yes".

So I'm talking about, effectively, a structure in terms of tasking and benefit that means that "No" isn't as easy to access as you've said it was.

D10: I'd say – and for clarity, I'm separating here the task itself and the individual. It's, from a tasking perspective, adding additional things into the timeline which is probably worth going through Annex Y at some point to provide clarity for that point. Adding tasks into that timeline, may improve progression, flying experience, et cetera, but it's actually quite hard to do. So that's why it's easier to say no to additional things.

From a clarity perspective, the set tasks that are planned 12 months in advance, "You're going to do this", a little bit hard to say not to until you

get to the point of actually executing it. Sorry, I'm being a little bit vague here. I could probably cover that in a different forum in significantly more detail.

5 AVM HARLAND: Yes. I'm not really after the details of individual taskings. I'm more looking at conceptually how your program is structured and where the noes come from. So perhaps to just frame it a different way, by the time it gets to you down at the Squadron level, how many filters has it gone through to ensure that it's just not an unachievable  
10 program at your Squadron level?

D10: There's multiple levels, sir. The example I provide for the noes is as a Squadron I got maybe six to seven weeks of training that I could deliberately plan months in advance. That training did not occur the first  
15 year and I believe I never got the chance to do it during the second year because it was at the expense of other things that were going on. So saying no to it was significantly easier than forcing the team to go through it.

20 AVM HARLAND: So other tasks ran over your training program. Is that what you're saying?

D10: Correct.

25 AVM HARLAND: So getting back to my previous question about how many levels and filters, did you get the sense that that filter system from higher level down to the Squadron level resulted in a manageable program for your Squadron?

30 D10: I'd say it's – sorry, I'm just thinking it through. I'd say the program was manageable but it was reliant on the input from – and this is where the individuals come in now, reliant on the individuals to inform and provide the evidence to state contrary to that it was manageable.

35 AVM HARLAND: So there's an overhead in saying "no", basically because you've effectively got to make your case as to why you can't do whatever's arrived at the Squadron?

40 D10: I see what you're saying. In that circumstance, all decisions require some form of evidence from my perspective and directions is probably worth clarifying.

45 AVM HARLAND: So you couldn't just say "No" to a block tasking. TALISMAN SABRE '23, for example, if you felt things were a little bit breathless and a little bit difficult, you couldn't just say "No" and then that

5 would be the end of it and you'd get on, and there would be a gap in the program, and you could catch up with your training? That's not how it would work out. There'd be discussions and justifications and all of those sorts of things to make sure you'd done your sums correctly. Is that a fair assessment?

10 D10: Two parts to the answer. If I deemed, and this is for any exercise or directed outcome, if I deemed there was a risk of safety, that's where the big red button, from my perspective, comes. If I deem or assess that that is the case, I would be extremely surprised if there was any direction contrary to that from anywhere in the chain. But from a directed tasking perspective, which is where I suspect Annex Y will be worth discussing, the answer is the owner of that exercise or the Director or Directions will need evidence as to why. In my understanding, that's a normal part of  
15 military directions.

AVM HARLAND: No, that's good. That's really what I was trying to establish, was that it's not just a hit the red button and everything just disappears and goes away, but there's actually more to it. Clearly safety –  
20 of you feel like it was a clear safety issue – when I say “clear”, not a marginal “I think”, it's a definite “I know” – you felt like that would pretty well be the beginning and the end of it. But other than that, in terms of tasking and workload, managing fatigue and other overheads, you'd have to go through a process of explaining exactly why to whoever the authority was who needed your unit's assistance or activity?  
25

D10: Yes, correct, sir. Sorry, I probably poorly articulated that.

AVM HARLAND: No, I think I'll leave it with that. Thank you.  
30

MS McMURDO: Thanks, COL Streit.

COL STREIT: Thank you, Ms McMurdo.

35 Can I take you to paragraph 39, please, in your statement. You were asked to state whether you experienced acute or cumulative fatigue in 2023 and, if so, outline the causes of your fatigue and whether you reported being fatigued to anyone, and what was their response. You say you recall:

40 *experiencing periods of acute fatigue during long weeks of intensive flying while conducting exercises, which I felt I could recover from after a weekend off. I do not recall reporting being fatigued or requiring help managing it as an individual.*  
45

That's correct?

D10: Correct.

5 COL STREIT: You were asked to describe at paragraph 41 on page 15 whether you think there was a culture of aircrew being honest about their fatigue levels in 2023 and feeling comfortable to disclose that they were fatigued and could not fly a sortie because they were fatigued. Your answer was:

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*Our unit culture was very supportive of individual aircrew being honest about fatigue and they were comfortable when disclosing it in 2022 and 2023. Formally, the mechanism for aircrew to have these fatigue discussions was called a FACE check. FACE stands for Fatigue, Attitude, Complacency and External factors. It's my experience that open and transparent communication, coupled with consistent behaviour from Commanders, encouraged honest discourse throughout all aircrew. Furthermore, this supportive culture is fostered when Commanders reinforce and reward this behaviour.*

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Is that correct, what I've read?

D10: Correct.

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COL STREIT: So can I ask this: in circumstances where the unit culture was very supportive of individual aircrew being honest about fatigue and they were comfortable when disclosing it in 2022 and '23, how did you, in your mind, at that time, reconcile that unit culture with what the Snapshot survey for 2022 was telling you about the workforce pressures within your Squadron, which included cumulative fatigue as a factor?

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D10: Sorry, I might have lost you along the way there. Can you restate that question?

35

COL STREIT: Sure. Let me just put it another way, if it helps, and if it doesn't help, tell me again and I will try to rephrase. So the efforts that you and the CO, and no doubt other Commanders, were going to in the unit in 2022 and 2023 to foster a unit culture that was supportive such that people could raise issues concerning fatigue, for example, that culture and your engagement in it, but then you get the Snapshot survey in 2022 and similar terms in 2023, which identifies workforce pressures, achieving the mission, transitioning to a new aircraft type and cumulative fatigue are still key indicators coming through. So there's what the culture is of the unit and what you're seeing on the ground. You're then getting a bit of

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ground truth in the Snapshot surveys that are telling you something different. How did you in your mind sort of seek to reconcile that at that time?

5 D10: It's probably worth just clarifying one thing.

COL STREIT: Sure.

10 D10: The safety culture was not a – sorry, the safety culture is separate to the indicators I was receiving or Command was receiving from Snapshot. By that I mean, Snapshot's outcomes or the output of Snapshot indicates that, from my assessment, cumulative fatigue, transition, and a few other things, it was apparent for individual members. In my mind, the safety culture is what mitigates some of the hazard concerned in the Snapshot, which means – and this is what I drove with my team – as the professional you were either good or you were not good to conduct your role. My opinion was if you won't do it in training, you will not do it on operations, which is why it was important, if that answers that.

20 COL STREIT: Sure. So the issue that you've identified in your evidence of workplace pressures, which included a factor of cumulative fatigue, you say were in existence back to 2014 when you were a line pilot. That's right?

25 D10: I'm saying that the indicators from Snapshot in my understanding were still apparent in that.

COL STREIT: But you would have a level of comfort in the authenticity, wouldn't you, about the factors in a Snapshot survey because the survey is being conducted anonymously?

30 D10: Correct.

COL STREIT: So therefore – in my words – it gives you some ground truth about some indicators about what's happening in the workforce which you're not directly observing yourself in the workforce on a day-to-day basis. Correct?

40 D10: Correct.

COL STREIT: You had indicated in your evidence earlier that in your mind you had some private suspicions that things that you were observing on the ground, that there might be some issues which were confirmed when you got the Snapshot survey for 2022; is that correct?

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D10: Correct.

COL STREIT: So you embarked on a program – reasonably, can I suggest – to try to get your workforce to be confident enough to push the big red button and say “No” when they’d reached capacity, even though the system was asking them to perform a task taking them outside that capacity? Is that right?

D10: It is. I would just clarify that the big red button was separate to saying “No” as an individual. It was we’re saying “No” as an organisation, from a Squadron perspective.

COL STREIT: I’m going to ask you this question now as to whether you thought of this at the time and, if not, I’ll ask you in hindsight, the difference in hindsight questions is it’s not what you knew at the time, it’s about what you know now. We look back in time and it assists the Inquiry identify things that might assist in improving a system, for example. So in circumstances where I take it you had a level of confidence in the culture at 6 Aviation Regiment in 2022/2023, as you’ve described in your evidence. That’s right?

D10: The safety culture, yes.

COL STREIT: The safety culture. So in circumstances you had that confidence but then in circumstances where you were receiving the indications from the 2022, 2023 Snapshot surveys about the matters you’ve given evidence about, did you start thinking that perhaps the culture and the way we’re going about managing safety within the unit is not working the way we would want it to work because if it did, we wouldn’t be getting these Snapshot survey results in the way they are?

D10: Sorry, is that in hindsight or at that time?

COL STREIT: So that’s whether you thought of it at the time and, if you didn’t think of it at the time, can you just tell me that now. Did you think that at the time trying to reconcile, “We’ve got a good culture. I’m comfortable, good safety culture but I’ve got these survey results anonymously giving me these indicators which are not good”, and trying to say, “Well, does that mean the safety culture is not working in the way we want it to?” Did you think that at that time?

D10: I thought that the indicators warranted further investigation, which is why I went down the path I did. I was confident that the safety culture was working, and all cultures can be improved, which is why we were doing what we were doing.



COL STREIT: Now, a question in hindsight. So now putting together what you knew at the time in 2022/2023 and having listened to the evidence of various witnesses and aircrew, pilots within 6 Aviation come forward, do you consider, looking back, that although you have a level of confidence and comfort in the operation of the safety culture within 6 Aviation Regiment – I’m certainly not suggesting otherwise, but the reality on the ground is there needs to be some change because you’re still dealing with issues arising in surveys 2022/2023 where these issues of the unit cumulative fatigue, transition to a different airframe, still exist?

D10: Sorry, your question in that is did I consider the safety culture was appropriate at that time, in hindsight?

COL STREIT: Looking back on it now, do you consider that the safety culture at present exists, that it’s there but it’s not working to the level that Command wants it to work because the Snapshot surveys in 2022/2023 are showing a different picture?

D10: No, my answer is the same as at the time, and in hindsight, and I’d base that on being within the culture and improving it, or that it will give an approach to improving it.

COL STREIT: Now, you provide an example of your leadership here in paragraph 41(c) in relation to setting an example to your sub-unit where you deliberately FACE’d out of a mission. Is that correct?

D10: Correct.

COL STREIT: You did that, you say, at (c), that you did it verbally in front of all staff and you noted collectively the fatigue levels you were observing in the team; is that right?

D10: Correct.

COL STREIT: So was it a FACEing out because you yourself felt fatigued, or was it a FACEing out because you saw the team was fatigued, or both?

D10: Both.

COL STREIT: So that example that you provide where you FACE out, that’s you demonstrating to your people what should happen. When you reach a certain point and you can’t go on, you FACE out and everything is fine. You’ll just do it. Is that right?

5 D10: Yes, correct. I would follow it with I held a qualification that was required to conduct that sortie in the subsequent night phase, and it was an example that, regardless of where you fit, you hit your limit and that's it.

COL STREIT: That's the other part of your evidence. But the question I want to ask you is that before you set that correct example – if I can put it that way – to your sub-unit to FACE out, “We're not going on”, because you're tired, prior to that, did any one of the Troops you're addressing  
10 who you were saying appeared collectively fatigued, FACE out?

D10: No. So to clarify, in that sortie on that day?

15 COL STREIT: Yes.

D10: No, not that sortie on that day.

COL STREIT: So did that example that you were experiencing there do two things. One is it allowed you to provide example to your Troops, you're tired, “I'm FACEing out, mission cancelled”. That's the first  
20 thing, would you agree?

D10: Correct.

25 COL STREIT: The second thing is it must have revealed to you that there was still a challenge here on FACEing out because you're observing a collective fatigue in your workforce, but none of them are coming forward to FACE out?

30 D10: I would state it was a challenge with FACEing out as a process. I'd say as a safety culture, particularly at the Squadron level, it was an example that the intuitive – sorry, as the Flying Supervisor, intuitively I understood that the team were starting to reach a collective level of fatigue that was worth monitoring and, as a workforce, that intrinsic motivation to  
35 complete the task to continue progression and need to be balanced. That was an example of that.

COL STREIT: This is a question in hindsight now. If you, at that time in that mission, considered you were good to go, so you didn't FACE out, but you, nonetheless, were observing the collective fatigue levels in the  
40 Troops in front of you, you would have stopped the mission, I take it?

D10: If I'd observed – sorry? Your question is if I didn't FACE out on that night due to my fatigue, would I have still cancelled or aborted the  
45 subsequent task?

COL STREIT: That's right, yes.

D10: As an example, yes.

5

COL STREIT: Because of the collective fatigue you were observing in the Troops?

10

D10: For clarity, it's not just the collective fatigue I'm observing in those elements on that night, it's my knowledge and understanding of the team and their activities over the previous four to five weeks. It's one input.

15

MS McMURDO: I think we've probably had the hour.

COL STREIT: Yes.

MS McMURDO: Would you like a break?

20

D10: I will if I can, ma'am, yes.

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

25

**HEARING ADJOURNED**

**HEARING RESUMED**

30

MS McMURDO: Yes, COL Streit.

35

COL STREIT: Thanks, Ms McMurdo. I understand – I have spoken with D10's Counsel. Perhaps I should check after about 30 minutes to see how D10 is travelling. Is that all right with you?

D10: Thank you, sir.

40

MS McMURDO: Okay, and you let us know if there is any issue before then. We're not halfway through, really, the evidence that COL Streit is leading, and I imagine there's going to be a bit of cross-examination, is there? Could we have some possible idea as to time frames for the cross-examination?

45

LCDR GRACIE: I'll start. It would be an estimate of 30 minutes, and

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it's possibly up to 45 minutes.

MS McMURDO: And that's one of your estimates.

5 LCDR TYSON: I will be 15 to 20 minutes, ma'am.

SQNLDR THOMPSON: Five minutes, ma'am.

10 SQNLDR GILES: 10 to 15 minutes, ma'am.

MS McMURDO: Any others?

COL GABBEDY: It depends on the other questions, but possibly  
15 15 minutes, ma'am.

MS McMURDO: No others?

UNIDENTIFIED SPEAKER: (Indistinct). No.

20 MS McMURDO: So we've still got a fair way to go. Should we start at  
9 o'clock tomorrow because we are progressing fairly slowly, or do you  
think 9.30 would be adequate?

COL STREIT: Perhaps if I could just have a moment to - - -  
25

MS McMURDO: Certainly.

LCDR GRACIE: If I reduce my estimate, could it be 9.30?

30 MS McMURDO: Deal.

COL STREIT: What might be of assistance is if we proceed for the time  
for D10, whether it's 30 minutes or slightly longer, then D10 is excused.  
He can give some instructions to SQNLDR Nicolson on that topic, and  
35 then the Squadron Leader can quickly come back in the room and inform  
me and the Inquiry of D10's wishes, and then that can be considered,  
whether it's a 9 or 9.30.

MS McMURDO: Okay. That sounds sensible.  
40

COL STREIT: Yes.

MS McMURDO: Thank you.

45 COL STREIT: D10, I understand – and we spent a bit of time in that last

5 piece of your evidence, and you may have considered that some questions  
were overlapping with others, so I'll move away from that approach of  
asking you questions, and I will skate over the top of some things. If you  
consider that's an area you would like to have the opportunity to say more  
10 about in your evidence publicly, you can indicate that to me. The  
alternative is that your Counsel can, in re-examination, ask you some  
questions if there's an area that I've skated over the top in your interests,  
and the interests of time but you want the opportunity to expand on that  
area a bit more, okay. So do you understand that little difference that  
15 we'll approach to try to help you and move through your statement more  
quickly?

D10: Understood. Thank you, sir.

15 COL STREIT: I am just briefly going to turn to paragraph 43. This  
concerns your evidence in relation to interactions with D20 at a point in  
time, and you were asked this question:

20 *Noting the evidence of D20, do you recall having a sit-down  
discussion with D20 and D19 to the effect about the impact of  
increasing administrative workload on 173 Special Operations  
Aviation Squadron members?*

25 And you answer underneath in paragraph 43 to the effect that you recall  
the administrative workload of the Squadron was discussed with D19 and  
the majority of the unit pilots, which included D20, during their  
information-gathering session post the 2022 Snapshot debrief. You recall  
a discussion with D19 and D20 about one of her members having  
30 difficulty managing workload after a number of years at the unit, and it  
resulted in you engaging that member's career adviser to get them posted  
into a lower tempo role, and that was supported by D19. Is what I've read  
correct?

35 D10: Correct.

COL STREIT: You recall a discussion with D20 about her career in  
2022 where she decided to request an extension to her posting at the unit,  
and you recall a discussion, noted how long she had already been at the  
unit, and her desire to leave fully qualified, and you recall having a  
40 discussion about this request with D19 and getting his support to keep  
D20 at the unit for 2023. Is that right?

D10: Correct.

45 COL STREIT: You recall a discussion with D20 in early 2023 which

was in relation to evidence that she had given in June of last year. You recall discussing her high leave balance, work ethic, and ways to manage her workload moving forward. You recall notifying D19 and booking a meeting in for D20 to meet with him. You did not attend the meeting with  
5 D19 and D20. You don't recall any other specifics of that conversation. Is that right?

D10: Correct.

10 COL STREIT: Can you remember how many years D20 had been in the unit at that time in 2023, approximately?

D10: She was there as a maintenance member and as an aircrew member. I can't recall exactly how long. It was considerably quite a  
15 while.

COL STREIT: As far as your perspective is concerned, she had been one of your Troop Commanders since you had marched in in January 2022.

20 D10: Correct.

COL STREIT: I am just going to deal with a matter concerning your evidence about the relationship with members of Bushman 83. I am going to read out those paragraphs for you, and I'll come to the end of where  
25 you address each individual member, and I'll simply ask you whether what I've read is correct. Is that okay?

D10: Correct. Yes.

30 COL STREIT: In relation to CAPT Lyon, you say you first met Dan towards the end of 2021. You flew with him for eight days and nights. As a pilot, you thought he was competent and experienced on the MRH-90. As a Troop Commander, you thought he was highly competent and focussed on helping those around him. He was a loyal and committed  
35 officer who always made sure everyone felt included. Is what I've read correct?

D10: Correct.

40 COL STREIT: In relation to LT Max Nugent, you first met Max in 2023, when he posted into 173 Special Operations Aviation Squadron. You did not have the pleasure of flying with him as crew. From your observations of him, and the comments of trusted Flying Supervisors:

45 *He was a keen and competent military pilot, the quintessential*

*Lieutenant Aviation. As an officer, it was clear he knew what he wanted, and worked extremely hard to achieve it. He was going to make an excellent future Commander the organisation deserves.*

5

Is what I read correct?

D10: Correct.

10 COL STREIT: In relation to WO2 Laycock, you say:

15 *I first met Phil in 2016. I flew with him for 19 days and nights. Throughout the time, I was fortunate to work with him. As an aircrewman, he was exceptional. I found him to be a steady hand on dark nights, who would always speak his mind. As a Standards Warrant Officer, his Aviation knowledge and experience was second to none. He would always ensure we were heading in the right direction, and wasn't afraid to speak his mind, regardless of rank. I had the pleasure of deploying*  
20 *many times all over Australia with Phil.*

Is what I've read correct?

25 D10: Correct.

COL STREIT: In relation to CPL Naggs, you say:

30 *I first met Naggsy in late 2021. I was fortunate to fly with him for 10 days and nights. As aircrewman, he was a consummate professional, with a steadfast dedication to all things he set his mind to. He always knew what needed to be done and was the example for his peers.*

35 *I would note that because of the nature of our work, and the shared journey we all went through to become qualified, I felt I knew what type of people Dan, Max, Phil and Naggsy were. Moreover, I had the pleasure of spending a large portion of my life with them between 2022 and 2023.*

40 Is what I've read correct?

D10: Correct.

45 COL STREIT: Thank you. Now, very briefly, I might just deal with something, if it's okay with you, concerning the Regimental Officers

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Intermediate Course.

5 MS McMURDO: We might just have a short break, and perhaps we could deal with that matter with FLTLT Nicolson now. So we'll just stay in the courtroom, and if you would like to go out and speak to your Counsel? Thank you.

D10: Thanks, ma'am.

10 MS McMURDO: Just come back when you're ready. We'll have a brief adjournment. Just let me know when you're ready to resume.

15 **HEARING ADJOURNED**

**HEARING RESUMED**

20 MS McMURDO: Yes, COL Streit.

COL STREIT: Yes, Ms McMurdo. Thank you for the time. I am told by SQNLDR Nicolson that 9 o'clock tomorrow would be fine, and that concluding at about 5.15 today would also be fine, subject to D10.  
25

MS McMURDO: Sure.

COL STREIT: D10, can I just take you to page 17, paragraph 49? Those questions in that section and over the page, to page 18, deal with matters concerning the Regimental Officers Intermediate Course conducted in 2022 in which the Inquiry has received evidence that CAPT Lyon attended with other Aviation Command aviators. You did not attend the course, did you?  
30

35 D10: No.

COL STREIT: You were not present at a session in which CAPT Lyon, CAPT Campbell Rogan, and other pilots from 6 Aviation Regiment and 5 Avn participated in a discussion with members of Aviation Command?  
40

D10: No.

COL STREIT: Was the first you learnt of matters discussed in that particular Regimental Officers Intermediate Course discussion between CAPT Lyon and other persons, the first you learnt of it was at the Safety  
45



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Day in 2023 when that member, D129 I think it was, raised a question?

D10: Just the context of the question I've learnt during that Safety Day. The rest of it was during the Inquiry.

5

COL STREIT: I see. You were asked at paragraph 52, so separate to that Regimental Officers Aviation Course, you were asked:

10

*Did CAPT Lyon ever express concerns to you that he was experiencing difficulty in managing his workload as a Troop Commander which impacted his ability to maintain proficiency as an MRH-90 Aircraft Captain and pilot?*

You say that:

15

20

*The discussion concerning command workload was a constant and apparent issue I would have with all of my Command Team. Additionally, this was also an issue I faced as a Troop Commander in the same unit, under the same circumstances. In 2022, Dan was in a Squadron Executive position as the Second in Charge. This position is predominantly focussed on Squadron welfare and administration.*

Is what I've read correct?

25

D10: Correct.

30

COL STREIT: Just for clarity, when you say you would have a discussion with all of your Command Team, insofar as 2022 is concerned, your Command Team was CAPT Lyon, as your XO. That's right?

D10: Correct.

35

COL STREIT: D20 as the Troop Commander?

D10: Correct.

COL STREIT: If you could just have a look at D15's name on the list?

40

D10: Yes.

COL STREIT: Was D15, in 2022, a member of your Command?

45

D10: He was. He was the Tactical Operations Officer.

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COL STREIT: So is that a person that's therefore within your Command Team?

D10: Yes.

5

COL STREIT: Do you include D15 in that aspect of your evidence where you talk about:

10 *The discussion concerning Command workload was a constant and apparent issue I would have with all my Command Team.*

So that included D15?

D10: Yes.

15

COL STREIT: You go on to say at 52(b) – is your response in 52(b) a reference to CAPT Lyon's position as the Squadron Executive Officer?

D10: Yes.

20

COL STREIT: So 52(b) where you say, "Further, it is a position that directly observes the workload of the Squadron Command Team" – that's a reference to CAPT Lyon's position in 2022.

25 D10: Correct.

COL STREIT: You go on and say:

30 *During 2022, I recall conversations happening with him –*  
that's CAPT Lyon?

D10: Yes.

35 COL STREIT:

40 *– surrounding the differences between Aviation and the rest of Army Commanders, including the importance of prioritisation and delegation. I recall noting that a good Commander needs to be able to say "No" and understand their limits. In 2023, when he was first appointed as a Troop Commander and learning the role, I recall having a similar conversation with him surrounding workload and the need to prioritise.*

45 *I offered my perspectives, which he knew and understood, based*

*on working closely together the previous year. My perspective was that Army Aviation Commanders are deliberately placed in a position where you are both the technical expert and Commander.*

5

Is that correct, what I've read?

D10: Correct.

10 COL STREIT: When you say from your perspective Army Aviation Commanders are deliberately placed in a position where you are both the technical expert and the Commander, what do you mean when you say, "technical expert"?

15 D10: So I believe I cover that in my statement. I'm just trying to find it.

AVM HARLAND: It's on page 18, paragraph 52(b) at the bottom, if that helps?

20 D10: Thanks, sir. Sorry, I thought I covered a different aspect of it in the rest of my statement somewhere. I'm sure it will come up. Can you restate your question, sorry?

25 COL STREIT: Sure. I'll just repeat the question. In 52(b), the last sentence, you say:

*My perspective was that Army Aviation Commanders are deliberately placed in a position where you are both the technical expert and Commander.*

30

So what do you mean "technical expert", in that sentence?

35 D10: What I'm referring to, which is in my understanding slightly different between Aviation – sorry, it is the difference between Aviation and other corps within Army – the officer cohort generally are the Command Lead Management role, but for Aviation you've got the Command Lead Manage, and because of the requirements and role of flying, you hold that as well, and that's the technical perspective that I'm referring to.

40

COL STREIT: If it assists you, can you just jump to page 22, paragraph 66(b) and 66(c)? If you just read those paragraphs to yourself?

45 D10: Yes, that's them. That covers it in more detail.

COL STREIT: We might just stay where this evidence is, because it will be easier. So at that paragraph 66(b), page 22, you say:

5                   *In my opinion, the major difference between the majority of*  
                      *Army's Officers and Aviation Officers is based on technical*  
                      *expertise. Generally, within Army the capability output typically*  
10                   *relies on technical expertise and experience held within the*  
                      *soldier workforce that is commanded, led and managed by the*  
                      *officers. For Army Aviation, the technical expertise and*  
                      *experience required to produce the capability output from*  
                      *rotary-wing platforms is shared by the soldiers and officers.*

Is that correct?

15

D10: Correct.

COL STREIT: And by very broad analogy, if you were comparing a  
Troop Commander within 1 Armoured Regiment that might command a  
20 Troop of tanks, the Troop Commander is not driving the tank, are they?

D10: No, not in my experience.

COL STREIT: But they are commanding the driving of that tank  
25 through a soldier, and the driving of other tanks through other soldiers  
within their Troop. Correct?

D10: Correct, and for clarity, it's fighting, so it would include driving,  
navigating and firing of the weapon system.

30

COL STREIT: That's right. But within Army Aviation, you're not just  
commanding the Troop, or the Squadron in your case, but you're also  
flying the asset.

35

D10: Correct.

COL STREIT: You say at 66(c):

40                   *Typically, the officers, who are also senior aircrew, are*  
                      *positioned in Command appointments based on their level of*  
                      *technical expertise and experience, therefore creating a structure*  
                      *where senior aircrewman are in Command roles, expected to*  
                      *fulfil their Command, leadership and management duties the*  
                      *same as their peers across Army, while also relied on to complete*  
45                   *highly technical flying duties. The impacts of operating within*

*the framework on individuals' ability to focus on flying varies, and is dependent on the individual. For me, I found servicing the requirements of working within the framework required a deliberate balance of priorities, which is a learned skill.*

5

Is that correct, what I've read?

D10: Correct.

10 COL STREIT: When you say, "Servicing the requirements of working within the framework required a deliberate balance of priorities, which is a learned skill", when did you feel within yourself that you had reached that point where you'd learnt the skill of balancing priorities in that context?

15 D10: I think you learn the skill as a line pilot when you're learning to operate the airframe, whilst also operating within the context of a Troop, and you practice that skill throughout your career.

20 COL STREIT: If I can put it this way? Did you feel within yourself, if you cast your mind back to January 2022, that when you arrived to take up command of the Squadron that you had reached that point of working within a framework and being able to balance the priorities that were required of you in your role, and flying the aircraft?

25 D10: I think I arrived with the basic understanding and a practised knowledge through my time as a Troop Commander, but every day was a journey of learning for me.

30 COL STREIT: So every day was faced with a new challenge, or maybe the same challenge but a different twist, and that is simply a generative learning process. Correct?

D10: Correct. Yes.

35 COL STREIT: Are you able to say when perhaps you started to feel a bit more comfortable, having had your feet under the desk as the OC, so to speak? From January it would have been you, but when did you start to feel sort of comfortable that you were getting a handle on balancing these competing issues?

40

D10: I'd say roughly it took about six months.

COL STREIT: Six months.

45 D10: Four to six months.

COL STREIT: Sure. Can I just take you back to page 18 now, just to paragraph 53, please? That question asks whether CAPT Lyon ever expressed to you concerns that he held about the impact of excessive workload on members of his trip, and if yes, what actions did you take about those matters. You say:

*I don't recall any significant issues being flagged by him within his Troop. If he raised any concerns, they were always accompanied with solutions, which I would generally assess as appropriate. I do recall Dan, like D20, would always flag their concerns for senior members within the Regiment who were required to support the Unit Standing Mission. These members did not reside within Dan's Troop.*

What I have read is correct?

D10: Correct.

COL STREIT: So the reference to "senior members", so CAPT Lyon and D20 raised their concerns for senior members within the Regiment. What was the concern, can you recall?

D10: Sorry, I'm just quickly reading that. From memory, it was to do with the workload of those individuals.

COL STREIT: So they existed elsewhere in the unit, but because of their skills and qualification, they would be called up on to support Squadron training and operations?

D10: Yes. Sorry, I'm trying to be quite vague, but there was interactions between them as Troop Commanders, and all of the members who held specific qualifications.

COL STREIT: Can I turn now to resources for pilots and aircrew within your Squadron? This particularly relates to - - -

MS McMURDO: Sorry, when you say "senior members within the Regiment", at what level are you talking about?

D10: Ma'am, I'm directly referring to senior flying qualifications within the unit UTAP. I can't exactly remember what that stands for, but they were required to support the unit mission.

MS McMURDO: Okay. Thank you. Yes.

COL STREIT: So the senior members that you identify by description as senior members, is that a reference to D2 or D6, or the Regimental Standards Officer, the Regimental Standards Warrant Officer, or any of those?

MS McMURDO: D19, MAJGEN Jobson?

D10: A mixture of those initial members listed, from a unit flying perspective only.

COL STREIT: Sure.

D10: I can go into more detail in a different forum.

COL STREIT: Well, the Inquiry has received some evidence that D2 and D6 were Qualified Flying Instructors who instructed on a Special Operations Qualification Course in June 2023. Do you recall that course?

D10: Yes.

COL STREIT: Do you recall them being on that course and instructing?

D10: Yes.

COL STREIT: So is that an example of where they're being given a task to support the Squadron progress through a Special Operations Qualification Course?

D10: Yes.

COL STREIT: Now, just very briefly with resources for pilots and aircrewman, the Inquiry has received some evidence that there was at least one outstanding RODUM in relation to obtaining replacement cold weather clothing for aircrewman in the MRH-90, and that RODUM had been longstanding, and so you were asked some questions about that and your evidence was this, you say:

*I understand that the RODUM process is used to address the relevance and suitability of in-service ADF equipment. I do not have any experience handling or processing a RODUM. I understand that the aircrew cold weather gear has been a work in progress for Army Aviation throughout my entire career. I am aware through discussions with other aircrew that there were RODUMS in the system over the years to address this concern. I*

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*am not aware of specifics for any RODUM placed during 2022/2023.*

Is that correct?

5

D10: Correct.

COL STREIT: Just leaping ahead very quickly to the mission on the 28th - - -

10

AVM HARLAND: Could I just ask a question before we do leap ahead there, just regarding the RODUMs? So you say that the aircrew cold weather flying gear has been a problem for your entire career. So what's that, 10, 15 years flying?

15

D10: Correct, sir. Yes.

AVM HARLAND: Do other countries have the same problem? It doesn't seem like an insurmountable problem to me, that would take a decade to fix. So how is it that we end up taking this long to fix the problem?

20

D10: I'm not sure I could answer that one, sir. I could say – sorry, I will say, that I understand the basis for a RODUM is to change the in-service equipment. I've seen an iteration of flying gear released during my time. I understood in '22 and '23 that that iteration was still continuing to find the right gear. I can't comment as to how that compares across different Coalition Forces.

25

AVM HARLAND: Okay. Thanks.

30

D10: Sorry.

MS McMURDO: Do you recall that WO2 Laycock, as a very experienced aircrewman, took a leadership role in advocating for this improved cold weather gear?

35

D10: I don't recall specifically any discussions surrounding Phil dealing with it. It would be my expectation that would fit within the remit for the Standards Warrant Officer.

40

MS McMURDO: Thank you.

COL STREIT: D10, could I just leap forward very briefly in time to 28 July 2023? Do you recall a discussion about whether the doors to the

45



5 MRH-90 should be opened and closed at different phases of flight for the mission, and that ultimately the Inquiry has received some evidence to the effect that WO2 Laycock had expressed a view that the doors should be closed because of the weather and the impact of the cold on aircrewman. Do you remember that? Do you recall that discussion occurring on 28 July?

D10: Yes.

10 COL STREIT: Do you recall whether or not anything was said at that time in relation to that the aircrewman had insufficient cold weather gear to wear to protect them from the cold, which necessitated the closing of the doors?

15 D10: I don't recall the specifics for the cold weather gear in general, but I recall some of the key points from the discussion, which was essentially why - sorry, closing the doors was a key consideration for the longevity of the aircrewman during that night.

20 COL STREIT: When you say "longevity", is that a reference to the fact that they would be able to perform their role longer because they're not going to be - - -

25 MS McMURDO: Frozen.

COL STREIT: Frozen.

MS McMURDO: Wet and cold.

30 COL STREIT: Frozen in the back.

D10: The environmental impact on the aircrewman was going to be lessened. Yes.

35 COL STREIT: They weren't going to get cold, basically. When you say, "environmental impact" - - -

40 D10: Yes, sorry. When I say, "environmental impact", it's worth, for context, noting that wet with - - -

MS McMURDO: Wet and cold.

45 D10: Being wet with strong winds will draw that heat out of you quite quickly, which affects dexterity importantly, which can be a risk to safety. So, from that perspective, yes.

- MS McMURDO: So you were reluctant to do it in one sense because of the limited – to agree to it in one sense because of the limited visibility that happens once the doors are closed?
- 5 D10: Not so much the visibility, ma'am. It's there was some considerable work the aircrewman were going to be doing that night with Troops in and out of the aircraft where dexterity was a requirement.
- 10 MS McMURDO: But once the doors were closed, the visibility for the aircrewman was pretty poor in the MRH, wasn't it?
- 15 D10: From a seated position with the doors closed, it will impact your visibility external to the aircraft. It requires the aircrewman to actually move from their chair to a position in the aircraft where they can see and avoid – sorry, see, and in their role ensure the aircraft avoids any of the hazards that might be surrounding the profile, for example.
- 20 MS McMURDO: To go on harness.
- D10: Correct, ma'am. Yes.
- MS McMURDO: Was there a jump seat in the MRH-90 in the cockpit?
- 25 D10: There was, ma'am, yes.
- MS McMURDO: So bearing in mind that if the doors were closed the aircrewman were going to have more limited visibility, did anyone give consideration to one of them sitting in the front in the jump seat so that they could assist the pilots, because it was in formation, low level, overwater, at night, using night-vision devices? Was that something that was considered?
- 30 D10: For context, ma'am, the jump seat and the use of the jump seat comes with its own considerations. There was also a curtain – I can't go into that. There's a curtain that closes to black out the cabin. Visibility from an aircrewman - - -
- 35 MS McMURDO: Blacks out the cabin from the aircrew in the back?
- 40 D10: Correct, ma'am. Yes.
- MS McMURDO: Yes.
- 45 D10: Or more importantly, blacks out from any of the light in the back

for the pilots because it will reflect off the internal windscreen. But if visibility is a concern from an aircrewman perspective, the expectation is they'll jump on harness to look out the windows that are contained within the door, and if it's a real concern they will open the door.

5

MS McMURDO: So putting one of the aircrew in the jump seat in the front is for other reasons, other safety reasons; never considered to be a safe option, to have an extra pair of eyes looking out in difficult conditions?

10

D10: I would say, ma'am, that the jump seat within the MRH-90 was more of a mission component. Sorry, the purpose was to enable additional mission – sorry, I'm just trying to skirt the boundaries here.

15

MS McMURDO: It was more an emergency for an extra person if needed, if you needed to have an extra person there?

20

D10: Not so much, ma'am. It enables either external forces or the Air Mission Commander to be in the aircraft, being able to operate the systems within the MRH-90 whilst not having to fly. The visibility - - -

MS McMURDO: So it was never used as an extra aircrewman for a pair of eyes for visibility, just to - - -

25

D10: No, ma'am. The seat itself, there are visibility restrictions.

MS McMURDO: It was just – okay. Yes. The reason I've mentioned this is it has been mentioned in passing by another witness as a possibility, so I wondered if that was ever considered, but it wasn't considered.

30

D10: Not to treat the hazard of visibility, ma'am, no. I've sat in that seat numerous times; you actually see less than the pilots do.

35

MS McMURDO: But you'd probably still see more than you would in the back with the doors closed?

D10: Arguable, ma'am.

40

MS McMURDO: You're not sure about that?

D10: I would say not, no.

MS McMURDO: No. Okay. Thank you.

45

COL STREIT: Is the short answer, at least on 28 July 2023, that the

primary driver for the doors to be closed was because of the environmental hazard of the cold, wet and wind on the aircrewman in circumstances where they didn't have sufficient clothing equipment to deal with the hazard?

5

D10: It was a consideration, sir, but I'm yet to see a piece of clothing that would probably treat that. It is, in my opinion, part of the hazard that is involved in any Aviation operation.

10 COL STREIT: Do you know now, as you sit there today, whether or not the RODUM for aircrewman cold weather gear has been actioned?

D10: I'm not aware of the RODUM, sir, no.

15 COL STREIT: At paragraph 55 you were asked:

20 *In terms of sleeping tent resources 2022/23, were air-conditioners available to be utilised in 6 Aviation Regiment aircrew tents as an aid for regulating the temperature to assist aircrew rest/sleep in hot and humid climates?*

25 You say for Exercise TALISMAN SABRE '23 you understood from D13 during the logistical planning briefs given in the intermediate, middle and final planning conferences, that air-con would be available, and the information was briefed as part of the 173 Special Operations Aviation Squadron Exercise TALISMAN SABRE '23 Deployment Orders, and Air Self-Deploy Orders which were given the week prior to deployment, and you identify the annexes in relation to those orders. Is what I've read correct?

30

D10: Correct.

35 COL STREIT: Have you previously deployed on an Aviation exercise and stayed in a tent, and slept where an air-conditioning unit was used?

40

D10: I've previously deployed on an exercise where we've slept in tents. I'm not aware of air-cons that are designed to work with those tents. Sorry, for clarity, the tents we were using were not sourced from within our normal remit. They were Coalition tents.

45

MS McMURDO: And therefore they were able to be air-conditioned?

D10: Yes, ma'am. Yes. They were purposely designed.

MS McMURDO: Yes.

COL STREIT: So the tents you stay in, the Coalition tents, were designed to be air-conditioned?

5 D10: Correct. Yes.

COL STREIT: And you understood from what D13 had told you in the planning briefs prior to the exercise that air-con would be available?

10 D10: Yes.

COL STREIT: Did you understand that to mean air-con available in the sleeping tents, or air-con available in some other tent?

15 D10: All of the – sorry, I was aware that the aircrew tents would have been air-conned, and I believe there was an intent to have more, which would be covered, I believe, in those orders I’ve annexed.

20 COL STREIT: Sure. But, ultimately, the Inquiry has received some evidence that the tents that the aircrew slept in on Exercise TALISMAN SABRE ‘23 were not air-conditioned.

D10: Correct.

25 COL STREIT: That’s correct?

D10: Yes.

30 AVM HARLAND: When did you find that out? Was that on arrival at Proserpine, or at a time beforehand?

D10: After I had arrived, sir, yes.

35 AVM HARLAND: So your expectation on the transit up, and when you arrived, was that it would be – I think they’ve got in the MPC a Base-X with ECU, which I’m assuming is a Base-X with an environmental control unit, or an air-conditioner. That was your expectation?

40 D10: Yes, sir.

AVM HARLAND: And it was only when you arrived that you found out that wasn’t the case?

45 D10: Correct.

AVM HARLAND: Okay. Thanks.

MS McMURDO: So the idea was that the tents would be as comfortable and quiet for sleeping for the aircrew as possible?

5

D10: Yes, ma'am. Yes, I think it was actually intended that it was more than just the aircrew.

10 AVM HARLAND: Did you go through, like, a consideration of what that meant for the unit aircrew, given that you were planning to fly primarily a night wave, which would involve some of the rest period being during the day? So was there a discussion about that, like an immediate risk management, for example?

15 D10: There was a few instances, sir. I think I've got it in my statement somewhere about the process and the immediate risk management that I was conducting for the rest, and ensuring that crews were meeting their requirements, and managing instances where, for example, people were up and about before their time, or before a time you'd expect.

20

AVM HARLAND: Yes. Okay. And perhaps we'll cover that in sequence, COL Streit. Thank you.

25 COL STREIT: Can I just briefly turn to the impact of Defence aid to the civil community, and humanitarian assistance disaster relief tasking for 173 Squadron in 2022/23? I appreciate you've provided additional detail in your "Official: Sensitive" statement, D10, but in the broad, and in relation to what you say at paragraph 56(a) onwards, was the practical reality that your Squadron's involvement in Op FLOOD ASSIST 2022, in  
30 March '22 in Sydney, and then Op FLOOD ASSIST '22, in July '22 in northern New South Wales, and New South Wales flood support in October 2022 in Richmond and other locations you identify, collectively impacted the Squadron's planned activities for 2022? Is that correct?

35 D10: Correct.

COL STREIT: And that had a flow-on effect into 2023. Correct?

40 D10: What do you mean by "flow-on effect"?

COL STREIT: It means that your tasks and training you thought you would have completed in 2022 had to be assessed and achieved in 2023.

45 D10: I would say I disagree. It affected 2022 and the tasks that were to be completed in '22.

COL STREIT: Now, the unit ran a Special Operations Qualification Course in June 2023; is that right?

5 D10: Correct.

COL STREIT: The reason that course was in June 2023 and the people who were on it to be qualified, which included CAPT Lyon and LT Nugent, would they have been on an earlier course – CAPT Lyon in  
10 2022 – but for the impact of the DACC tasks?

D10: No. No, the courses throughout 2022, specifically for SOQC, still ran but were either delayed or run at a different time.

15 COL STREIT: So the most we can say, at least in the public forum, is that the training activities and other things planned for the Squadron in 2022 were impacted as a result of it being tasked with Defence aid to civil and community, and humanitarian assistance disaster relief in 2022?

20 D10: Correct.

COL STREIT: Then as a consequence of that your sub-unit, and the unit generally, had to – the completion of those DACC taskings, had to reassess what could actually be achieved for the balance of the year from a  
25 mission and training perspective?

D10: I would say context is important, sir. It depends on which activity you are talking about, but Annex Y, which dictates what activities were running and when, and importantly, who controlled those activities, will  
30 provide the context as to what the impact was from either of those DACC or HADR tasks. The essence is the same team that were conducting those tasks were the same team planning and conducting all future tasks.

COL STREIT: Let me put it this way. 6 Aviation Regiment's mission is  
35 not the support of humanitarian assistance tasks. Correct?

D10: Not its main mission, no.

COL STREIT: No. And so as a consequence of being given those tasks, the things that had been set up aligning with the main mission could not  
40 be achieved at the time when you're doing those humanitarian tasks. Correct?

D10: I would state that it's a prioritisation discussion, and the element  
45 tasking the unit is also the element that will make the prioritisation

discussion, or will make the decision of prioritisation, and specifically for DACC and HADR it's quite high.

5 COL STREIT: Sure. No, I'm not suggesting at all that DACC tasks or humanitarian assistance to the civilian community are not important. It's just that 6 Aviation Regiment, who has a particular mission, was given the task of doing those things, and I'm suggesting that as a consequence of that, that humanitarian task impacted the unit's yearly training program. Let's put it that way. Would you agree?

10

D10: I would agree, yes.

15 AVM HARLAND: Can I ask regarding at your level, at the Squadron Commander level, noting that in 2022 you've described four events which were probably short notice, is that fair to say?

D10: Correct.

20 AVM HARLAND: That you needed to commit to, adding up to in the order of just short of three weeks. So when you put your annual program together where you've got your major activities, you've got your training activities, all the other things that 6 Aviation Regiment and your Squadron need to do, do you factor in that you're going to get these tasks? So is that like and we're going to get maybe one, two, three, four tasks unknown, about a week duration, and create gaps in the program so you've got some space to shuffle around? Is that part of your planning process, or does this just come in over the top of an already full program?

25 D10: I'll just clarify, sir, that there are times in the program with directed exercises that are directed to the unit. They have no control over – sorry, there is a level of control over those activities, but the unit does not own them, if that makes sense?

30 AVM HARLAND: Yes.

35

D10: The time that the unit does own, it will, it can, and does, try and provide some flexibility, but I believe the question of do we factor it in, it's probably more of a – it significantly sits above where a Regiment would be, in my experience.

40

45 AVM HARLAND: Yes. What I'm trying to really get to here is, like, if you've got all your directed activities that are levied on you by other Commands that you need to do, they're all your "must do" tasks, I think you characterised them earlier in your statement – so you've got all of those. You've also got a unit training requirement, which is how you



build your people so they can be qualified and competent to do the job that they're expected to do.

5 In assembling all of that, is somebody taking into account the fact that you're going to get these short notice tasks for Defence aid to the civil community, or humanitarian assistance and disaster relief? Is that factored into the overall stacking of your plan, or does that just come in over the top and you're expected to deal with it? Because it would seem to me that this is not unexpected. It's almost routinely non-routine that it will happen, that you'll get this tasking.

D10: In this forum, sir, I would say that the unit is always ready for a level of tasking.

15 AVM HARLAND: My question is not whether you're ready, it's whether you plan space so that you don't pressurise your system?

D10: As far as planning deliberately for DACC, not in the program that the unit can control.

20 AVM HARLAND: Yes, I guess I understand that. If a program is full and then DACC comes in over the top, that makes it significantly more complex to review and get back on the rails again after a DACC task than if the program had some gaps in it where you could then just shift things around afterwards. So do you leave provisional space for these taskings in your overall planning for the Squadron, or do you just basically run it as if this isn't going to happen, and then just deal with it when it happens?

30 D10: Sorry, a bit of a complex answer. The discussion on what can move and how it moves within the program for the Regiment, I can go into further detail and provide it through the Annex Y. I would state, to be clear, there are activities that are scheduled for the unit, and they are combined, and joint, and quite large, right to the upper echelons of the organisation. Those activities move at the behest of the owners, which is not the unit.

40 Outside of those activities, in the Squadron or Regimental training timeline there are limitations on how much time we have, and where it is placed. Those activities are deliberately planned against everything else. We do not deliberately plan to have a DACC at any point throughout the year, but we manage the timeline and the tempo based on what we know at the time. If that answers it?

45 AVM HARLAND: It actually does, yes. Thank you. So, effectively, that comes in over the top of your program. You don't program based on

the fact that it will happen, or it will likely happen. You just program as if it's not there, and then you deal with it as it happens.

D10: Correct, sir. That's the prioritisation discussion I referred to.

5

AVM HARLAND: Yes, so you're effectively reactive to DACC. You're not proactive to the idea of building space so you can then adjust the rest of your program around it.

10 D10: I would disagree that we're not proactive. We are proactive in the management of the scheduling for the Regiment within the constraints of what we can actually schedule. I would suggest potentially that is a question that sits outside my remit, particularly as an OC.

15 AVM HARLAND: The reason I'm asking the question is because I'm trying to explore a concern about the capacity of the unit to be able to do all of these taskings, as well as the directed taskings, as well as their unit training taskings which, like I said, gets people qualified and able to do the job safely, and then this comes in over the top. And clearly it's a very  
20 goodwill activity because it's really important, but the question is whether the unit has the capacity to be able to do it because it seems to create some pressures, and issues, and overheads, and then when I put that against the background of everything that comes back in the Snapshot surveys, which is indicating a Squadron which is really struggling under the weight of  
25 tasking, is feeling fatigued, all of these things seem to be really pressurising the Regiment.

D10: I would say, as a general observation, sir, everything that occurs at the Squadron is a prioritisation discussion, whether it's DACC, the  
30 directed mission, or – sorry, the directed task for the unit, or any of the exercises to support that, there are always a couple of plates in the air, which is a deliberate and measured, balanced approach.

AVM HARLAND: Yes, and what you described to me, I think – and  
35 correct me if I'm wrong – is that the trading space you have is your unit training program. It's the bits in between all of those directed tasks, the DACCs and everything else, so that's where your flexibility is. And if DACC rolls in over the top of that, that gets affected. Is that a fair interpretation?  
40

D10: Yes, correct, sir. I would expand it to if DACC overlays on top of anything within the program, I suggest that DACC would always be the priority, and that's well above Squadron and Regiment. That is a Defence  
45 priority, in my understanding.

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AVM HARLAND: Is that a Squadron role?

5 D10: The directed mission of the unit is different. It's a role for Aviation that they can fill, and we happen to be geographically located in an area to best support at short notice, is my understanding.

AVM HARLAND: So if I had a look at the 6 Aviation roles, DACC should be in there because it's part of Aviation total?

10 D10: I would go further to say, sir, that there is 6 Aviation's directed mission, and then there is Army Aviation as a subordinate element of Army in Defence, and within that remit is where we're having the discussion of DACC and HADR, in my understanding.

15 AVM HARLAND: Yes, that's good. That's very helpful. Thank you.

MS McMURDO: Did you have anything more on that topic?

20 COL STREIT: I note the time.

MS McMURDO: Yes, I know, but I just wondered if there is any question you had before we do adjourn?

25 COL STREIT: No, thank you.

MS McMURDO: We'll adjourn now and resume tomorrow at 9 o'clock. Thank you.

30 <WITNESS WITHDREW

**PUBLIC INQUIRY ADJOURNED UNTIL  
THURSDAY, 1 MAY 2025 AT 0900**