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

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

PUBLIC INQUIRY

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0930, WEDNESDAY, 20 NOVEMBER 2024

DAY 29

TRANSCRIPT VERIFICATION

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

Signed	Date	(Chair)
Signed	Date	(Recorder)
Signed	Epiq Australia Pty Ltd	Date	05/12/24	(Transcription)

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MS McMURDO: Yes, COL Streit.

5 COL STREIT: Morning, Ms McMurdo, AVM Harland. Before I request that D137 return to the witness box, I just need to raise one matter that's come to my attention. It's important.

10 There is an order in writing placed on the outside of the door entrance to the witness room, issued by the Deputy Inspector-General of the Australian Defence Force. That order, in effect, prohibits entry into the witness room by persons who are not permitted – that is, authorised – to be in the witness room. Persons authorised are witnesses and their legal representatives, and Counsel Assisting, for example. The administrative instruction was issued for the purposes of these proceedings and distributed to the addresses in the administrative instruction.

15 The instructions issued by the Inquiry Secretariat, GPCAPT Braun, dated 6/11/2024, at paragraphs 15 through to 18 deal with matters concerning witnesses and, in particular, deal with restrictions on entry into the Inquiry witness room, and persons who are authorised to enter, and makes clear that
20 any other persons, including Defence Force members, must not enter the room without express permission from a member of the Inquiry Counsel Assisting Team unless they have been previously authorised, and that any breach of the order will lead to consideration of disciplinary, administrative, or contempt action.

25 The integrity of the Inquiry is important. The witness room is for witnesses. And any other person who enters without authority is at risk of contempt proceedings being brought by me and/or disciplinary or administrative action being considered by the Inspector-General of the
30 ADF.

I make these comments publicly. Matters have been brought to my attention in relation to this particular issue. And I ask that Counsel representing ensure that they alert their clients, if they're not always aware
35 of these matters, and that it be given very serious attention by other organisations that attend these proceedings, whether they be ADF or otherwise, to understand, and that their personnel understand, that if they do not comply with this order, consequences will follow.

40 MS McMURDO: Yes. Well, there's good reasons for the Orders. Witnesses and their support people should be able to have a peaceful time in the witness room. So I'd ask Counsel representing to heed what Counsel Assisting has just said and ensure that anybody that they are associating with who's attending the Inquiry hearings understands that

they are not to enter the witness room without permission, other than of course support people.

5 COL STREIT: And that support person can't enter the witness room without permission from Counsel Assisting.

MS McMURDO: Yes.

10 COL STREIT: Thank you, Madam Chair. I call D137 to the witness box.

<D137, on former affirmation

15 **<EXAMINATION-IN-CHIEF BY COL STREIT, continuing**

MS McMURDO: [REDACTED], as I said yesterday, any time you want a break, just let me know. Thank you.

20 D137: No worries, ma'am.

COL STREIT: Good morning, D137. Feel free to pour yourself a glass of water. Can I ask that Exhibit 102 be returned to the witness, please?

25 D137: Thank you.

COL STREIT: Yesterday we concluded your evidence for the day with questions in and around your understanding of the differences between a Generalist and a Specialist in Aviation and the differences between a Generalist and a Specialist in terms of a pilot in Aviation. And I was asking you some questions about your awareness of a time in recent history where Army recruited members to Aviation as Specialists and that they didn't go through the full training as officers through Duntroon. Remember those questions?

35 D137: I do, yes.

COL STREIT: So just returning to those particular matters. If I can take you to paragraph 53 of your statement? Now, you say there that:

An officer who's a Captain Year 3 will elect to present to the Personnel Capability Management Board for consideration to be streamed as a Generalist or Specialist. An officer who wishes to

be considered for a Troop Command appointment will present at this Board.

5 First, does a Captain Year 3 have to make an election to do one or the other; that is, to be considered as a Troop Command appointment or to be streamed as a Generalist or Specialist?

10 D137: I'm not certain on whether they have to or not. That's something that's outside of my remit. But when you refer to the documents that I've mentioned in paragraph 51, it outlines this process here that I've stated in paragraph 53.

15 COL STREIT: Sure. So becoming a pilot in the ADF, would you agree with me, is a difficult process for an individual to step through where they're required to move through various gates of ongoing assessment? Correct?

D137: Yes, correct.

20 COL STREIT: So you're dealing with a group who has succeeded in becoming members of Aviation Corps in the Army and pilots? You're dealing with a group of high performing and intelligent persons?

25 D137: Correct.

COL STREIT: From that group, when they reach a certain point, it seems, as you sit there today, in Year 3, they can express a desire to be considered for a Troop Command appointment. And if they do that, they'll be presented to a Board?

30 D137: That's right.

35 COL STREIT: And without being troubled by the details of the processes the Board would go through, is it safe to infer that ultimately the Board will select the person it regards is the best candidate to discharge the responsibilities of being a Troop Commander out of a group of high performing individuals?

40 D137: So from my experience with the Board, the Board doesn't necessarily select one individual for Troop Command out of a group. It'll select the suitability of the individuals who express interest about whether they can conduct that role.

COL STREIT: So in the end, does Army Aviation end up with persons, who are pilots, to be Troop Commanders, having the necessary skills to perform that function and be picked up as a Troop Commander? Correct?

5 D137: Correct.

COL STREIT: Those who wish to be Specialists and have the necessary skills to specialise as pilots in Aviation in Army then come in the Specialist stream?

10

D137: Sorry, can you repeat that one?

COL STREIT: So those – I'll start again. The persons who are selected to be Troop Commanders, Army has determined that they have the necessary skills to perform that function as a Troop Commander.

15

D137: That's correct.

COL STREIT: Those who are Specialists – so if I, as a Year 3 pilot, say, "I don't want to be a Troop Commander and I don't want to be a Specialist", what are my options to stay flying? Do I stay as a line pilot, or am I forced to choose between the Command stream and the Specialist stream?

20

D137: So I think people can – if they don't necessarily want to be an Instructor or a Qualified Test Pilot and they just want to remain in the Regiment or in the Squadron and continue to fly, there is a stream within that Specialist stream which is called Regimental Pilot. And so this is a stream where the – when someone gets a sizeable amount of experience and it's beneficial for the organisation to retain them in the Squadron or in the Regiment, there is an option to keep them in those roles. Does that answer the question?

25

30

COL STREIT: It does, thank you.

AVM HARLAND: Just a follow-on from that, do they need to have a secondary qualification such as Test Pilot or Flying Instructor to enter that scheme?

35

D137: So within – and I think it's detailed within the Manual of Army Employment for Aviation Officer, it details a range of qualifications that aren't necessarily, as far as I'm aware, a specific requirement, but it indicates the type of qualifications that would be beneficial for that role, which extends beyond Qualified Flying Instructor or Qualified Test Pilot. Includes a range of different qualifications. And I think typically, by the

40

time that someone gets to that point, usually they will have achieved one of those qualifications.

AVM HARLAND: Thank you.

5

MS McMURDO: Are there a certain number of Regimental Pilot positions available or is it an ad hoc thing that it's left up to, where an individual might want to go down that stream, is talk to Commanding Officers about it, saying, "I don't want to become an instructor or a test pilot. I don't want to enter the general stream". And because they are a good pilot, the Regiment wants to keep them, and therefore appoints them to that position. Does it happen that way on an individual basis? Or are there a certain number of positions in the Regiment for this role?

15 D137: Yes, the first part of your response, ma'am. So there aren't dedicated positions within the Regiment for that stream. It starts as a communication – or a conversation, rather, between the individual and the organisation. And then, should someone meet the requirements and have the interest to pursue that pathway, then they will then present at this same Board to stream in that.

20 MS McMURDO: So it's a way the Regiment could keep experienced pilots who might otherwise be thinking of leaving because they're not interested in becoming an instructor or a test pilot, or going into the general stream?

D137: I think that's fair, ma'am.

MS McMURDO: Thank you.

30

COL STREIT: Could I just clarify one matter, please? At paragraph 55 and 56 you deal with:

35 *Once an officer commences a Troop Command role, they become entitled to an increase in pay as a Captain Year 7.*

You then say at 56:

40 *A Captain cannot receive OA17 unless they have completed a Troop Command appointment.*

Can I just clarify, does – when an officer commences a Troop Command role, you say they become entitled to an increase increment level as a Captain Year 7. Correct?

45

D137: Correct.

COL STREIT: At 56 you say:

5 *A Captain cannot receive that increment level, in effect, unless they
 have completed a Troop Command appointment.*

10 Does that mean they don't get the increment until after they've completed
 the Troop Command appointment, or they get the increment at the start of
 performing the Troop Command appointment?

D137: So this paragraph may have been worded incorrectly by me.

15 COL STREIT: Sure.

D137: However, I would suggest that this is probably a question to ask
Aviation Command, as I'm not an expert at the pay grades.

20 COL STREIT: Sure.

25 D137: My understanding of reading this document is that when someone
 commences a Troop Command appointment, that they become entitled to
 that additional pay grade. However, I would recommend that you ask that
 question of someone who's an expert in it.

COL STREIT: All right. We can do that. And I understand it might be a
little outside your lane, but you've given at least your understanding of the
matter.

30 D137: That's correct.

35 COL STREIT: And there has been some evidence before the Inquiry to
 the effect of Aviation Officers performing command functions and not
 being paid at the level of that command function. Hence my questions to
 you.

D137: Okay.

40 MS McMURDO: Because they weren't year 7 experienced.

D137: Okay.

45 MS McMURDO: So was your experience, when you became a Troop
 Commander – and that was earlier than a Year 7 Captain – were you paid
 as a Troop Commander at that point or not?

D137: So, ma'am, when I was a Troop Commander, it was before this policy.

5 MS McMURDO: This was in, okay.

D137: So when I was a Troop Commander, no, I didn't get any additional pay to complete that role.

10 MS McMURDO: So your interpretation of the documents, the relevant documents, is that if you do the job, you get the pay now. Is that your interpretation?

15 D137: I would have to go back and have another look at this document, but - - -

MS McMURDO: If you're not sure, please say so.

20 D137: I'm unsure, is the answer to that question, ma'am.

MS McMURDO: Thank you.

25 COL STREIT: Could I take you to paragraph 57 and onwards, where you deal with junior aircrew in 6 Aviation Regiment, and how they develop their flying skills and whether you think they're provided with sufficient time in the aircraft to do so. At 58 you say:

30 *I cannot comment on the progression of junior aircrew since MRH-90 was introduced into the Regiment and its cessation of flying operations.*

That's correct? What I've read out is correct?

35 D137: That's correct.

COL STREIT: And that's because you're not an MRH-90 pilot?

D137: That's correct, I'm not.

40 COL STREIT: You were not at 6 Aviation Regiment when it operated the MRH-90?

45 D137: That's right. I left at the end of 2018, and there was a five-year period before I returned.

COL STREIT: You go on to say that you can provide a perspective from your experiences up until you left the Regiment, following Squadron Command of 171 Special Operations Aviation Squadron in December 2018, and then when you returned in December 2023, which is at para 58 of your statement. That's correct, what I've just read out?

D137: That's correct.

COL STREIT: At paragraph 61 you say, noting that the 6th Aviation Regiment is the only operational Regiment operating UH-60M Black Hawk for the next few years, you expect that it's likely that from mid-2025 your unit will begin to receive recently qualified pilots. Is that correct?

D137: That's correct.

COL STREIT: Also, is it your understanding and experience of 6 Aviation Regiment that ordinarily, and historically, pilots posted to 6 Aviation Regiment would first have completed their ab initio training at the Aviation Training Centre? Correct?

D137: Correct.

COL STREIT: They would then experience a posting within, say, 5 Aviation Regiment?

D137: Correct.

COL STREIT: And pick up some more experience; correct?

D137: Correct.

COL STREIT: Then be posted to 6 Aviation Regiment?

D137: Yes, that's correct.

COL STREIT: And that was in relation to MRH-90 – sorry, your experience was in relation to the previous Black Hawk that was operated?

D137: Yes, throughout my experience, which was usually the case between 2009 to 2018. However, when you go through the manual of Army Employment for Aviation Officer, as was specified in paragraph 59, there's a component in there that specifically talks about pilots being selected from either the 1st or the 5th Aviation Regiment, and they should have a minimum Category C Pilot.

COL STREIT: So the upshot of the policy – is the Inquiry on safe ground to infer that the upshot of the historical policy was, pilots received ab initio training at the Aviation Training Centre; they were then posted to 5 Aviation or 1 Aviation Regiment, more experience – or gaining more flying experience, and then after that, posted to – or selected and posted to 6 Aviation Regiment?

D137: That's correct.

COL STREIT: But now the process has changed, has it, in the sense that your expectation is that from mid next year your unit will begin to receive recently qualified pilots out of the Army Aviation Training Centre?

D137: So I think this is a temporal thing due to the circumstances we're in with the introduction in the Service of the new aircraft type. So right now, the only place where someone can generate experience on UH-60M is at the 6th Aviation Regiment. So I expect that at some time next year we'll start to receive new pilots to learn this aircraft type.

COL STREIT: And that will be something, of course, you will need to manage in your unit, I take it, in the context of training them up to conduct Special Operations?

D137: So what it will mean is that when these individuals come into the Regiment, we will focus on the fundamentals associated with Air mobile operations. And then at a point in time, once they have demonstrated the appropriate experience, we can then – and they elect to do so – stream them into Special Operations training. But I don't expect all of these individuals to necessarily go down that pathway.

COL STREIT: Your observation at paragraph 64 of your statement is this:

My observation of the operational experiences and development of our workforce between 2009 and 2018 was that our workforce had more than sufficient time in aircraft to develop their flying skills.

D137: That's correct.

COL STREIT: Sorry, just a moment. Should the Inquiry understand your evidence to be that you're not really in a position to comment about, or give evidence about, operational experiences, development of the MRH-90 workforce at 6 Aviation Regiment, because you didn't fly an MRH-90?

D137: Yes, and I wasn't in the Regiment during that period of time.

D137: I don't know the specific day. I do know that it's something more recent.

5 COL STREIT: Is it something you've requested or is it something your higher command has informed you will occur?

D137: As in Aviation Officers who are non-aircrew filling operations roles?

10 COL STREIT: Correct.

D137: I haven't specifically requested that. This is something that Army Aviation has elected to pursue.

15 COL STREIT: Has it been explained to you by your Chain of Command, whether at 16 Brigade or Headquarters Aviation Command, or indeed Army's Career Management Agency, as to the underlying reasons or principles as to why the Squadron's Operations Officers will not be aircrew but will be non-flying Aviation Corps Officer?

20 D137: So to clarify, there hasn't been a direction stating that Operations Officers within a Regiment need to be non-aircrew.

25 COL STREIT: Sure.

D137: This is just a decision that I've made to support what we're doing next year. I'm sure at some point, I've received a briefing on the intent behind the role; I just can't recall when that was, and the specifics around it.

30 COL STREIT: Did it have something to do – and I'm not suggesting this is the reason – but did it have something to do with attempting to free up time for pilots to fly aircraft, as opposed to fulfilling a Squadron operations role?

35 D137: No, I don't think that's necessarily the case. I think it's about generating capacity in the organisation to do different things. So I don't think the intent behind these positions are to free up Aviation Officers who are aviators from doing these roles; I just think it's a way to generate more capacity in the organisation, to complete all of the things.

40 COL STREIT: Final question on this particular area. The utilisation of a Squadron in 2025 of a Squadron's Operations Officer to be non-flying – that is, not a pilot Aviation Officer – is that an enduring change or is it just

simply context-driven by whatever is happening in 2025, and projected for 2026?

5 D137: I don't anticipate it to be enduring. I think next year that we will assess the merits of it to see how successful it is. I see it as something that will generate capacity for us next year, but I don't anticipate it to be enduring. It will just be an option available to us in the future.

10 COL STREIT: It would, though, would it not, free up a pilot to perform flying duties and maintain their proficiencies, not just recency – sorry, to maintain their proficiency in flying by having somebody else perform the Squadron Operations Officer role?

15 D137: I think what this does, and the reason why I've elected to do this is because we're in the process of transitioning to a new aircraft type. It's about allowing our team to generate the foundational experience on that aircraft type. I think in a mature model, once Aviation Officers who are pilots have generated experience on an aircraft type, that will give them capacity to perform the role of these types of positions, because I think there is a lot of ancillary benefit you get from aviators doing those roles as well.

20 COL STREIT: You indicate at 66(e) that at least your understanding is a Squadron Operations Officer would be – or this year is at Captain Year 4, fourth year Captain?

25 D137: Yes. So both of the Operations Officers for both of the Squadrons were Captain Year 4.

30 AVM HARLAND: Just a couple of questions, if I may? We've heard from other witnesses about the feeling of being capacity-limited and unable to actually manage their own professional development, understanding of the orders, instructions and publications, and do the necessary study to keep themselves up to date. How do you reconcile that with what you're observing; that, you know, this is just really a transitional issue for the Black Hawk? Because from what we've heard in this Inquiry, it's actually not a transitional issue, it's actually something which has been evident for quite some time.

35 D137: So I think, sir, based on my experience in the years from 2009 to 40 '18, I didn't experience the same – or my perspective is not the same as what you're suggesting that you've received in the hearing. I do understand though, that for the team that we have, that right now it's a complicated space because not only are we introducing a new aircraft type, but we are also navigating the various post-accident lines of inquiry, and there will be 45 lessons that we learn from that.

5 And so, with that, we have changes to our Regulations and policy that the team are still in the process of understanding and learning and becoming comfortable with. I think though, in time, people become familiar with those, the policy changes, so there will be less impact to their capacity in a mature state, if that makes sense?

10 AVM HARLAND: Yes, it absolutely does. I guess the point that I'm making is that notwithstanding that, this has been brought up as an enduring issue in terms of the capacity to be able to do all the things that are asked of an individual.

15 One other question I guess I could ask is, in your experience throughout your career, has the administrative and governance overhead in Defence gone up or down over time?

D137: I would say that it's increased, sir, yes, I think.

20 AVM HARLAND: So if you were to reflect on your time when you were a Troop Commander, would you estimate that individuals who are in a Troop Commander job now, or recently, would have more to deal with in terms of administration and governance than you did, back in 2009, say?

25 D137: No, I don't think a Troop Commander necessarily has any additional responsibilities in terms of - - -

AVM HARLAND: I'm not talking about responsibility; I'm just talking about the mechanics of administration and governance in Defence.

30 D137: Possibly, but I'm not a hundred per cent sure.

AVM HARLAND: Okay, thank you.

35 MS McMURDO: And is the current workloads and division between flying and administration also influenced by the fact that you haven't yet got your full complement of the new Black Hawks?

D137: No, ma'am, I don't think it's affecting.

40 MS McMURDO: Won't things become a lot busier as you get your full complement of Black Hawks?

45 D137: I expect that once we have more aircraft and that we've met all of our milestones that we need to demonstrate an operational capability, I expect that will – I think it will get busier, yes.

MS McMURDO: Thank you.

5 AVM HARLAND: Just a follow on from that. As you go through a project and you're introducing an aircraft to Service, would you say that's more structured than when you're normally operating the aircraft and you may be required to pick up short-notice tasking such as Defence aid to the civil community?

10 So I guess what I'm trying to establish here is, during your period of transition to the UH-60M Black Hawk aircraft, is that more structured than you would ordinarily experience as an operating Squadron, just, say, project forward into two years?

15 D137: I think the nature of our role requires us to be reactive, due to, you know, unexpected taskings.

AVM HARLAND: Are you somewhat shielded from that as a result of you doing a transition at the moment to a new aircraft type?

20 D137: At the moment, we are shielded from additional tasking, so that we can focus on the introduction into Service. But I think with introduction to Service for aircraft, there are always challenges that present that are unexpected, and so we've had to navigate unexpected challenges throughout the year.

25 So I think conceptually, you would expect an introduction to Service to be smooth, that you could follow a schedule, but I think naturally things develop that make it a little bit more complicated. So I don't necessarily think that the introduction into Service will be any more/less complicated than when we are providing operational tasking.

AVM HARLAND: So are you likely to get a DACC tasking in the next couple of months?

35 D137: I don't anticipate us getting any. No, I don't anticipate that, sir. But that is probably a question for someone else other than me.

AVM HARLAND: Okay, that's great.

40 MS McMURDO: It might depend on what disasters come along, I suppose.

45 D137: Yes, that's right, ma'am.

5 MS McMURDO: Another question: since you first became a Troop Commander some years ago, have you noticed any difference in the expectations of the Troops being commanded in terms of expecting more support, higher expectations, more willing to question? And therefore, the role of the Troop Commander taking more time to do the pastoral care, the actual communication with the younger members of the Troop?

D137: I haven't noticed that, ma'am, no.

10 MS McMURDO: And you're not aware of it?

D137: No.

15 MS McMURDO: No. Okay, thank you.

COL STREIT: D137, can I take you to page 12, commencing paragraph 76? You deal here with 6 Aviation Regiment's authority to manage its own flying schedule, priority of tasks, and with the scope for 6 Avn Regiment to decline a task requested by the Australian Government due to aircrew fatigue or capability shortfalls.

20 You've been asked some questions by the Inquiry Chair and Deputy Chair in and around these matters. You say, at 78, this:

25 *In an exercise environment, the 6 Aviation Regiment can shape and influence the flying schedule. If there are fatigue or capability shortfalls, then the Regiment has control to adjust or cancel the flying schedule.*

30 That's correct?

D137: Yes, that's correct.

COL STREIT: You then say – this is at 79:

35 *If there are fatigue or capability shortfalls in an operational sense, it is essential that the Regiment, Brigade and Aviation Command communicate this to Government via Headquarters Joint Operations Command.*

40 Is that right?

D137: Yes. So I think if there are fatigue or capability shortfalls, this forms part of the back brief to a higher Commander, and so there's an element of risk that needs to be accepted with that. So what I'm saying here

is that if I felt that there was one of these shortfalls, this would be something that I'd be talking to my higher Commander about, and then I expect that that would be communicated to, ultimately, the Tasking Authority.

5 COL STREIT: I appreciate taskings might necessarily be out of your control, but if a task was received to perform a DACC – Defence Aid to the Civilian Community – response due to some event – floods, storms, those types of things – if you had considered that the Regiment was not in a position due to – for whatever reason – to support that task, I take it you
10 would just feed that back up the Chain of Command.

D137: That's right.

15 AVM HARLAND: Actually, just before we move on there, COL Streit.
Would you be expected to trade-off the generation of your aircrew in terms of their training schedule to meet that Defence Aid to the Civilian Community tasking? Would that be an expectation from higher Command?

20 D137: Sorry, can you rephrase that question?

AVM HARLAND: So if the Defence Aid to the Civilian Community tasking was sent down to 6 Aviation Regiment, you were in the middle of a training evolution – just say a Special Operations Qualification Course –
25 would the expectation be that you would trade that off to meet the Defence Aid to the Civil Community, or would you be permitted to say, “Actually, we're busy at the moment. We're in this training evolution, we don't have the capacity to do it”?

30 D137: I think it would come down to the nature of the task. So we are an organisation that is focused on supporting Australia and the community. And so if there was a task that was nationally significant that we had to achieve and it was at a level that was more important than completing the training evolution, then we would cease the training to complete the
35 task. But if the task was not as important, then we could potentially commence the training and decline the task. I think it's a hypothetical question that depends on the nature of the task, sir.

40 AVM HARLAND: Yes, I understand that, but you'd acknowledge that training of aircrew and generation of capability is nationally significant?

D137: I think so, sir, yes.

45 AVM HARLAND: Yes, okay. Thank you.

COL STREIT: D137, on page 13, just above paragraph 84, you'll see there the subparagraph heading, "Secondary duties".

D137: Yes.

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COL STREIT: Paragraphs 84 through to 112 deals with your evidence in relation to the issue of secondary duties, and your experience in the period 2009 through to the end of 2018. Correct?

10 D137: Correct.

COL STREIT: So when we come to paragraph 113, you're asked there to outline the changes, if any, that 6 Aviation Regiment has made since 28 July 2023 to any requirement for aircrew to fulfil secondary duties, and I wish to go to that part now, acknowledging your evidence earlier deals with aspects of your experience in a period where you weren't at 6 Aviation Regiment.

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D137: Right.

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COL STREIT: So we're talking about matters that have come to your attention upon assuming command now of 6 Aviation Regiment at the start of 2024. And you've set that out commencing at paragraph 114 in terms of the employment specification roles and functions and the primary responsibilities of an Aviation Officer pilot. I don't propose to go through the list, but that's what you've put there. Correct?

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D137: That's right. And that was just to provide context around primary responsibilities so that there wasn't any confusion that they were secondary duties.

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COL STREIT: At paragraph 115 you say:

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The list above is not exhaustive; however, it is important to note that these are primary functions of an Officer (Captain) Aviator (pilot) to alleviate confusion. These are not secondary duties. Not every officer in a Troop will be completing all of the above functions at one time. However, it outlines that the primary function of an officer extends beyond these responsibilities within the cockpit.

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D137: That's correct.

COL STREIT: At 116 you say:

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COL STREIT: And you therefore heard evidence from pilots, including, I take it, D20? If you just look at the pseudonym list?

D137: Yes.

5

COL STREIT: D15?

D137: No, I didn't hear that one.

10 COL STREIT: All right. But do you recall hearing the evidence of other pilots called during that hearing phase?

D137: Yes, one or two of them.

15 COL STREIT: Sure. So did you observe, at least from that evidence, given what those witnesses were saying, that fatigue, fatigue management, and workload were things that you needed to be particularly mindful of within your workforce, having assumed command of 6 Aviation Regiment?

20 D137: Yes. And it was mostly the individuals that are under my command now. So I think I state somewhere in my statement that I was surprised by it, and so that triggered me to act on it.

25 COL STREIT: Yes. And having observed that evidence of witnesses and those – in some of those hearings, you were surprised by that evidence, were you, in the context of evidence they were giving about the issues of fatigue and their workload?

D137: Yes, it was about workload.

30

COL STREIT: And so you realised, did you, by having observed that evidence – or you became aware, by having observed that evidence, of something – given your surprise – of something you had not previously been aware of?

35

D137: Yes, that's correct.

40 COL STREIT: And so, having learnt that, and given your function as the Commanding Officer of 6 Aviation Regiment and its roles and responsibilities, did you quickly set about changing some of your processes that you had in place to ensure you had greater visibility about the workload given to pilots in the Regiment?

45 D137: So what we did was establish what we call working groups with two targeted areas of the workforce. One were our pilots, particularly in

171 and one were our aircrewman in 171. And that was about really understanding – trying to understand those pressures that people may be feeling, and then that would then trigger me and my team to be able to alleviate some of those pressures to allow them to focus on the things they need to focus on.

COL STREIT: So can I take it, having heard the evidence from witnesses in the Inquiry, you considered that evidence – although surprising, you considered the evidence they were giving, from your perspective, was significant and something that you needed to address within your unit going forward?

D137: Yes. And I think I also state somewhere in my statement about the importance of ensuring that the team enjoy coming to work each day, and part of that is not overloading the team. So, I think it's very important that people have a conversation about pressures that they may be feeling. And so, this was a way for me to actually conduct – well, establish that communication.

COL STREIT: Paragraph 109 is – you gave some evidence about this earlier, but you also at paragraph 119 say that:

Operations Officers for both Squadrons will be non-pilot Aviation Officers. And similarly, the Executive Officer for the Special Operations Squadron will also be a non-pilot Aviation Officer.

This process allows you, does it, to maximise the aircrew within a flying Troop for next year?

D137: That's right.

COL STREIT: And that's not an enduring process; that is having the Squadron Operation Officers and Executive Officer for the Special Op Squadron as non-pilot, that's a response to what's happening next year. Is that correct?

D137: That's right.

COL STREIT: But if it works well, it might be something you keep?

D137: That's right. So we'll assess it throughout the year and if it works, then, you know, it may be something that we continue.

COL STREIT: Can I take you to paragraph 120 and the evidence under it. At 120 you were asked to outline your understanding of expectations

and Army Aviation as to whether aircrew or officers are soldiers first or aviators first, and how the expectations impact the ability of aircrew in 6 Aviation Regiment to maintain currency and recency on type.

5 D137: That's right.

COL STREIT: You say – this is at 121:

10 *All officers and soldiers, regardless of rank, are professional offices and soldiers first.*

You set out the relevant manual of Army employment and the principles derived from that manual are set out at (a), (b), (c) and (d).

15 D137: Correct.

COL STREIT: You then say:

20 *Within Army, there are Generalist Pilot Officers and Specialist Pilot Officers. All officers begin as Generalist.*

25 And then you describe – commencing through the rank structure from Lieutenant to Lieutenant Colonel, and a Generalist Pilot is describe as a Lieutenant to a Lieutenant Colonel with complimentary technical skill and/or experience. A specialist pilot is described as a Pilot Captain to Lieutenant Colonel, who have developed deep Aviation skills and knowledge and have been selected from the Generalist stream.

30 D137: That's correct.

COL STREIT: Correct?

D137: Correct.

35 COL STREIT: You then describe at paragraph 123, in about the middle of the paragraph:

40 *It is essential that our workforce have a deep understanding of the planning and execution of military effects so that our combined team can effectively achieve the outcome that we are tasked to achieve. Our officers and soldiers maintain a detailed understanding of common planning and a process and language with the Ground Force that allows them to seamlessly work together.*

45

Seemingly, there are strong professional relationships formed through the all corps training continuum between our aviators and the Ground Force that ultimately reinforces the mutual trust between the teams.

5

That's correct?

D137: That's correct.

10 AVM HARLAND: How would you imagine the New Zealand Defence Force achieves that where the RNZ Air Force fly their MRH-90 in support of Land Forces?

15 D137: Sir, I don't have any experience with the Royal New Zealand Air Force, so it would be inappropriate for me to speculate on the questions.

20 AVM HARLAND: Yes, I guess I'm just reading there that you're sort of saying that by having the Aviation element within Army, it's the only way that you can actually have that conversation between Land Forces and the Aviation element?

25 D137: Yes, so what I'm trying to say in this paragraph is that we're not an organisation that turns up at point A, picks a bunch of people up and flies them to point B with no integration and combined planning with the Force. So if you imagine an airline, the crew pick up passengers, fly them somewhere, and there's no interaction. Our point of difference is that we're an organisation that works very closely with our Ground Force partners to develop a combined plan to achieve mutual effects. So we're working closely together.

30

And so throughout our training, as our officers and soldiers grow, they do, for the most part, the same training that the Ground Force does, and so it develops that mutual trust and that common understanding of planning processes and language, so that we can effectively do this role.

35

AVM HARLAND: Yes, and I can see the advantage of it. So you're saying they do the same training as the Ground Forces and then, in addition to that, they've got their Aviation overhead as well.

40

D137: Well, they're not - - -

45 AVM HARLAND: I'm trying to understand how much an Aviation Officer or aircrewman has on their plate in comparison to everybody else. Because it appears to me, from what you've described, that they are not only a full-up soldier or officer in the Army, but they also have to cope

with the management of their proficiency in Aviation as well, so as an on top of.

5 D137: Sorry it's probably confusing. So they're not concurrent, the training. So there will be points throughout an officer's career where they will conduct promotion courses or certain courses that everyone across the Army does. In the same way that the other Services do their own combined professional development courses.

10 So there are those type of training courses. But they are only few and far between throughout someone's career. So I wouldn't say that there is an increased workload on our officers to balance both of those responsibilities.

15 AVM HARLAND: I'm not sure I follow that. Because, by virtue of the description you've given of "officer" and "soldier" first, to me it sounds like the aviator has a lot more on their plate than the average person. So, for example, if you compared it to infantry, does an aviator have to maintain weapons proficiency, as in for their own personal weapons?

20 D137: Sir, yes. In the same way that the Navy and the Air Force have to maintain weapons proficiency.

AVM HARLAND: Okay.

25 D137: And then they have to maintain the kind of general all corps Army overhead as well. I don't see really a large ongoing Army all corps training burden on our team. So what I'm trying to say here is that when an officer enters a training system, they will go to the Royal Military College and they will do the Generalist training along with all of the other corps within the
30 military, and then they'll stream into their corps.

They will do corps-specific training and then at certain points throughout their career they will have small training courses at different stages to help them progress. In the same way that the other Services do that as well. So
35 I'm not trying to say that an Aviation Officer has the same responsibilities and training overhead as an Infantry Officer in addition to their Aviation responsibilities. There are just small points throughout an officer's career where they will complete small course training.

40 AVM HARLAND: Perhaps I misunderstood. But perhaps that's something to explore with the Army personnel people. Thank you.

MS McMURDO: Just while you were interrupted, I might just ask a
45 minor question that I'm interested in. You mentioned that if you'd received a complaint about too much administration and not enough flying time to

maintain safe flying standards, you'd see that as a risk and you would report that upwards to Command as a risk management to see how that could be managed. Is that so?

5 D137: So I think if there was someone who was experiencing a high workload that was impacting safety, we would certainly attempt to treat that in the Regiment. And if it was something that we couldn't treat then it would be a risk that I would certainly brief higher.

10 MS McMURDO: So if there was a professional development course and someone in that position spoke to somebody more senior in Command at the Regimental course, in conversation brings this up to the Commanding Officer in your Chain of Command and that Commanding Officer then states to you and the officers, the junior officers below, to have a look at
15 means to cut administration, is that a satisfactory response?

D137: I think it would depend on the nature of what someone was saying to me during that – what someone was expressing to me, the nature of it and the severity of it. I think it's important in the first instance to look at – if an
20 individual is expressing that their workload is too high, I think it's important to understand what is consuming their time. What are the different components of their work that they're doing and are there ways that we can – are they focusing on things that are essential and need to occur or are there things in there that are desirable and don't need to occur? And so if we can
25 triage that at the lowest level, that may provide capacity for them to fly.

But I don't know, ma'am. That's a hypothetical question that I – it would depend on the nature of what they're saying.

30 MS McMURDO: Thank you. Yes, thank you. Thanks, COL Streit.

COL STREIT: D137, I take you to paragraph 124 of your statement, page 20, where you say:

35 *The notion should not impact the expectations of flying progression, maintaining flying proficiency in the same way that an Infantry Officer is expected to maintain professional standards with weapons proficiency. Our Aviation –*

40 I take it that is "officers" –

*are expected to maintain a high standard with their professional obligation of flying. Similarly, our Aviation Officers are expected to maintain a high level of tactical application of aviation effects
45 in the same way an Infantry Officer is expected to maintain their*

tactical proficiency.

That's what you've written there.

5 D137: Yes, that's right.

COL STREIT: Just in relation to that, Infantry Officer maintaining professional standard with weapons proficiency, the standard Army rifle is a weapon that Aviation Officers have to maintain a proficiency in. Correct?

10 D137: That's correct.

COL STREIT: And would you just accept from me, it might be an obvious question – point, rather – but just accept from me that flying a helicopter is far more complex than an Infantry Officer maintaining weapons proficiency on a standard ADF small arms?

D137: Yes, that's correct. And, sorry, I may have created the wrong impression with that paragraph. I'm not trying to create a comparison between flying a helicopter and shooting a rifle. What I'm trying to say here is that I don't see maintaining officer responsibilities being mutually exclusive to maintaining proficiency flying. I see them as complimentary. So I'm trying to give a simple analogy in that an officer needs to be able to balance the responsibilities of both, rather than one over the other, if that makes sense?

COL STREIT: Should the Inquiry operate on the basis that although Aviation Officers are expected to maintain a high standard with their professional obligations of flying, as you say in your evidence, the practical reality is, is that in order to maintain those higher standards concerning flying, they have to have first, you know, the opportunity to fly.

D137: That's correct.

35 COL STREIT: And, second, not be taken away to do other duties which then prevents their ability to take up that opportunity to fly.

D137: Yes.

40 COL STREIT: The two concepts of being an officer and soldier first, before being an aviator are not mutually exclusive. Now, the concept of being a soldier and officer first, that is not your concept, is it? That is an Army-wide approach?

45 D137: To the best of my understanding, yes.

COL STREIT: So your evidence is essentially reflecting the organisational position that everyone is an officer or soldier first. Would you agree?

5

D137: That's my understanding, yes.

MS McMURDO: Well, I take it that it's still in the Army's interest that pilots be supported to be able to fly safely?

10

D137: That's correct, ma'am, yes.

COL STREIT: And do you regard it as Force-enhancing given the amount of money Army spends on pilots and the difficulty – I withdraw that. I haven't asked you a question about cost, but do you accept that it would be Force-enhancing for new pilots to develop their skills and obtain a level of proficiency in flying an aircraft before they're troubled by the responsibilities of secondary duties involving – or being a Troop Commander or a Squadron Operations Officer, for example?

15

20

D137: Yes. But I think the system that we have supports that.

COL STREIT: That's as you understand the system today?

25

D137: Yes.

COL STREIT: And that's an important context to your evidence because we're not talking about – your evidence is not about what existed in 2023, 2022 and 2021 at 6 Aviation Regiment, is it?

30

D137: No, because I wasn't there.

COL STREIT: Now, do you have any understanding how Air Force, at a time when an Air Force pilot falls into the window to take up command responsibility?

35

D137: No.

COL STREIT: What about Navy?

40

D137: No.

COL STREIT: At paragraph 127 you say:

45

As we have seen this year, if an officer feels that they are struggling

to balance their responsibilities, then they need to raise it with their Squadron command who can either remove those responsibilities or provide additional resources to redistribute the workload.

5 D137: Yes.

COL STREIT: Without going into the detail, has that happened this year in the sense of a person under your command has reported they're struggling to balance their responsibilities and they've raised it within the Squadron environment?
10

D137: It's happened with one individual this year, yes.

COL STREIT: And I turn now to matters concerning fatigue which is at paragraph 128 of your statement. At paragraph 129 you say:
15

The Regiment is committed to and focused on creating a safe and sustainable work environment that our team are excited to turn up to work each day. We've learnt throughout this year that fatigue is subjective, difficult to characterise, the causation is difficult for individuals, tolerance levels vary for individuals and the effects on an individual differ.
20

Is that correct?
25

D137: Yes. Except the causation is different for individuals, not difficult for individuals.

COL STREIT: I'm sorry, I misread that:
30

the causation is different for individuals, tolerance levels vary for individuals and the effects on an individual differ.

D137: Yes, that's correct. So the way in which fatigue impacts someone is difficult – sorry, different for different people.
35

COL STREIT: And when you say that, "We have learnt throughout this year, those things", is that a reference to learning from evidence that's come out of this Inquiry?
40

D137: No, I think as we mentioned earlier, earlier evidence triggered me to investigate this further.

COL STREIT: Sure.
45

D137: And then throughout this year this has been a process of trying to really understand fatigue and fatigue management and management of tempo better. And so that's what I mean by that statement.

5 COL STREIT: I see. So put another way, evidence that came out of this Inquiry that you observed that caused you to undertake certain actions within your command, the outcomes of those certain actions revealed to you the matters concerning fatigue is set out at paragraph 129?

10 D137: Yes, that's correct.

COL STREIT: At paragraph 130 you set out certain changes or you describe changes that you've brought about this year in your flying schedule; correct?

15 D137: Correct.

COL STREIT: And Regiment Standing Orders outline a maximum duty day, minimum required rest period. And that in March of this year you issued an instruction that has further reduced the maximum duty period and expanded the required rest period for in-barracks operations. Is that right?

D137: That's right.

25 COL STREIT: And are those actions you've taken a direct response in grappling with the issue, or the challenges, that managing fatigue and workload concerning your workforce provide?

D137: Sorry, can you repeat that?

30 COL STREIT: So the things that you have done this year, which you've set out at paragraph 130, are they a response to managing issues of fatigue and workload in your workforce?

35 D137: They are. I also think though from an Army Aviation perspective, work on fatigue management commenced prior to this hearing as well.

COL STREIT: Well, is that a reference to a change in the Defence? There was a change, was there, to the Defence Aviation Safety Regulation concerning fatigue in October 2021? Do you understand that?

40

D137: I'm not familiar with that change, no.

45 COL STREIT: Well, were you aware that last year, in 2023 – just accept from me there was a change in the DASR Regulation in October 2021

concerning fatigue management. And that there was a period of time to allow ADF organisations to subsume that change in the DASR Regulation into relevant commands, instructions and processes, which was done last year.

5

D137: Okay.

COL STREIT: And that culminated, I suggest, in delivery of the Fatigue Management Instruction by Aviation Command in December last year.

10

D137: Yes.

COL STREIT: Are you aware of that instruction?

15

D137: I am, yes. And that's what I was referring to.

COL STREIT: I see. That instruction requires, doesn't it, aircrew to utilise a Fatigue Risk Awareness Tool - - -

20

D137: That's correct.

COL STREIT: - - - prior to mounting duty? And that's part of a standard process now within your command, the use of that tool?

25

D137: That's correct. And we also articulate that in our Special Flying Instruction.

COL STREIT: You set out at paragraph 131 onwards that:

30

If an officer or soldier is beginning to experience fatigue-related stress, then it's important that they first outline the concerns with their immediate Commander. It's essential that we identify potential fatigue hazards early to ensure that the workforce do not experience high levels of fatigue.

35

That's correct?

D137: That's correct.

40

COL STREIT: There's an ability – you say in the body of that paragraph that:

If an individual experiences high fatigue levels, then – report the occurrence via Sentinel.

45

D137: Yes.

COL STREIT: And Sentinel was a tool, an electronic tool, that Defence uses to record workplace health and safety instances. Do you accept that?

5

D137: Yes, I accept that.

COL STREIT: And in terms of somebody in your unit making a Sentinel report or reporting something using Sentinel, do you then get a prompt on your computer system that that's been done and you can drill down into the detail? I'm not suggesting you do, I just was curious?

10

D137: Yes, so we use that tool for a variety of different safety reporting. So I certainly get prompts. I just don't know whether I'm the first person to receive the prompt. But we do have a safety cell that manage each and every safety occurrence.

15

COL STREIT: At paragraph 139 you were asked to describe if, and how so, 6 Aviation Regiment currently monitors, identifies and manages aircrew fatigue. And you set out various matters from paragraph 140 through to 143; correct?

20

D137: Correct.

COL STREIT: At paragraph 144 onwards you deal with when 6 Aviation Regiment started using the Defence Flight Safety Bureau Fatigue Risk Awareness Tool and when it was introduced. And you say at 145 that to the best of your knowledge the use of the FRAT commenced on 15 December 2023 with the release of the instruction you've identified in that paragraph.

25

30

D137: That's correct.

COL STREIT: And you express your understanding as to why the FRAT was introduced. That's set out at paragraph 146; correct?

35

D137: That's correct. That's my assessment of why, yes.

COL STREIT: You say:

40

My understanding as to why this was introduced was to assist our team quantify something that historically has been subjective.

Is that a reference to historically what's been subjective is the assessment by an individual of their level of fatigue? Is that what you're referring to?

45

D137: Yes, that's right.

5 COL STREIT: And so the tool, does it, from your understanding, effectively, require the member to respond to questions and then they either end up in a green light, an amber light or a red light process?

D137: That's correct.

10 COL STREIT: And subject to whichever light they end up in, determines then whether the matter is actively managed by command in a way that might lead to the member not performing the function that they were scheduled to perform, or it being amended, or that function – they're not permitted to perform that function?

15 D137: That's correct. And I think what this also does is it triggers a conversation amongst the individuals and the team about how people are feeling.

20 COL STREIT: Your unit and the operation or the use of the Fatigue Risk Awareness Tool, can you just explain how it is used in your unit, or at least your expectation of how it should be used in the unit.

25 D137: Yes, so we use that for every flight or every sortie that is conducted in the Regiment. It slightly varies based on the nature of the sortie. But if a single aircraft is conducting a sortie, each of the members of the crew will complete the Fatigue Awareness Tool. They will have a conversation together.

30 When the Aircraft Captain then moves into the authorisation process, they will have already collected the results of the Fatigue Risk Awareness Tool across the crew and then they will communicate that with the Authorisation Officer prior to conducting the flight. After that, the crew will move to the aircraft and always, prior to every sortie, the crew will have a quick brief
35 about the sortie ahead. And if, for argument's sake, someone has an amber, that is something that would be discussed as a crew. Or if everyone is green, that will also be notified.

40 If we're doing a formation sortie, during the formation orders, the individual who's briefing the orders will talk through each of the results of all the crews, all the people that are conducting that formation sortie. And once again, it's then discussed during the authorisation process. That's how we apply it in the Regiment.

45 COL STREIT: Can the witness be shown Exhibit 37, please?

D137: Thank you.

5 COL STREIT: So that is the Fatigue Risk Awareness Tool you're giving evidence about; is that right?

D137: That's right.

10 COL STREIT: Very quickly, the tool speaks for itself in terms of the fields and how it might be utilised by an individual in answering the four questions. In relation to your expectations, if a pilot at 6 Aviation Regiment was to record a single red in response to questions, that would then generate, would it, a requirement for them to bring that matter to the attention of a supervisor?

15

D137: That's correct.

20 COL STREIT: Would a single red – and I'm just interested in your perspective, would a single red have the effect of preventing a pilot conducting a sortie?

D137: I think it depends on the nature of the sortie. It also depends on the conversation that we have with the individual who's experiencing the red.

25 COL STREIT: So it would depend – your expectation is it would depend on the nature of the red – well, the question that was red, would it? Sorry, red as in the – would it depend on the nature of the answer to one of the four questions if one question was red and the others were either green or amber? The determination about whether a pilot might fly, would that
30 simply just turn on the discussion or the conversation, the nature of the sortie, the hours flying, the extent to which they're flying the aircraft or somebody else might be?

35 D137: Yes, that's right. So we'd look at what has generated that result, you know, whether it's the amount of hours' sleep prior to or their awareness level. And then it would – we would talk about how they're feeling, some of the mitigation measures they may have completed, and also the nature of the sortie being done, the crew composition, you know, the experience level. Also their awareness, or their Fatigue Risk Awareness
40 Tool results as well.

COL STREIT: Does that mean that, say, somebody who goes red or indicates red on the first question, "At the start of the day, how many hours of sleep have you had in the last 24?", and they go red there, which is less

than six, that, in and of itself, might not result in the pilot being unable to fly; it just might be something that's managed. Is that right?

5 D137: That's right. And it's also – it's dependent on how they're feeling. So they may have received less than six hours, but they may be feeling well and the sortie may be short in nature. However, if it's a long sortie and the conditions are difficult, then that's perhaps not something that we would want to continue with.

10 COL STREIT: If they answered red on the last question, "How are you feeling?", and they answered red on that, "Extremely tired, very difficult to concentrate, completely exhausted and unable to function effectively", I take it that the pilot would not then fly, given the nature of that response?

15 D137: Yes. I'd be surprised if they wanted to continue to fly if they expressed that feeling. And I would not support the flight continuing or going ahead with a result like that.

20 COL STREIT: At paragraph 156 onwards you deal with some certain initiatives that 6 Aviation Regiment has introduced relating to the strategic use of caffeine, food and rest and naps to manage aircrew fatigue. Is that correct?

25 D137: That's correct.

COL STREIT: At 163 you say:

30 *Finally, Command has effectively discouraged the notion of presenteeism. If employees have completed everything that they need to do for the day, then they do not need to remain at work just to be present.*

Could you just explain that concept, "presenteeism"?

35 D137: Yes. So this was a particular comment that came out of our DFSB snapshot survey, where a small proportion of the workforce expressed that they were remaining at work until their supervisor left, but they didn't have – they had completed all their tasks. And so what I'm referring to here is, I don't need people at work to just be present and not contributing to
40 anything. I would prefer that they are reinvesting time with their family, recovering, doing other things rather than just being present. If that makes sense?

COL STREIT: Sure. And is that simply a hang-up or a consequence of perhaps a member just being part of the team, “The boss is still in the room or in the building, I won’t leave till the boss leaves”?

5 D137: I think that could be something that contributes to it, yes.

COL STREIT: Also perhaps, in your experience, could it be a concern arisen from the fact that it’s the boss that writes the individual member’s Performance Appraisal Report, so the member wants to be seen around
10 while the boss is present and doesn’t want to be seen to be sort of skiving off home?

D137: That could be a reason. There could be a variety of other reasons.

15 COL STREIT: Sure. So the way to combat that issue, if indeed it exists, is to do what you’re doing, is it? And that is for Command to actively discourage people from just hanging around because they feel like they have to, if they’ve completed all their tasks?

20 D137: That’s right.

COL STREIT: And you’ve taken active steps to discourage the notion of presenteeism since you assumed command?

25 D137: Yes, that’s right.

COL STREIT: At 162 you say:

30 *The Regiment has not promoted the strategic use of caffeine; however, the vast majority of our aircrew enjoy the consumption of coffee.*

Is that right?

35 D137: That’s correct.

COL STREIT: Perhaps unsurprising in the Army.

40 D137: There are some who don’t, but – so I think we inherently utilise the strategic use of caffeine.

COL STREIT: And speaking of the strategic use of caffeine, if you need a break, please let me know. You’ve been going since 9.30. So would you like a break or you’re okay?
45

D137: I'm happy to continue for now.

COL STREIT: Thank you. Well, if that changes, let the Inquiry Chair know.

5

D137: I'll let you know, sir.

COL STREIT: Now, at paragraph - - -

10 MS McMURDO: I think the point about coffee though is that if you have – you do build a resilience to it. So there are strategic ways to use it.

D137: Okay.

15 MS McMURDO: Yes. So just having more and more coffee doesn't necessarily help, as I understand it. So to develop the strength of the worth of coffee, you're better not having it too often and just having it when you need it, to give you that boost. I think that's what it means, rather than just drinking coffee all the time.

20

D137: I'll - - -

MS McMURDO: Because it won't be as effective that way.

25 D137: No worries, ma'am.

MS McMURDO: Not that I'm an expert. But lived experience. Lived experience.

30 COL STREIT: At paragraph 163 onwards you deal with your evidence concerning DFSB snapshot survey in April and May – between April and May of this year.

D137: That's right.

35

COL STREIT: You say at 165 that:

40 *Broadly, with respect to fatigue, the Regiment had experienced a significant improvement in its fatigue results. As a Regiment our fatigue results are considered comparable to other snapshot respondents. In 2023, the Regiment's results were considered a relative weakness in comparison to other snapshot respondents.*

Correct, what I've read out?

45

5 D137: It is. And what I'm trying to say here is when we did a comparison between our '24 results and our '23 results, in the document there is a table that basically separates into thirds. Bottom third being relative weakness for a variety of things. Middle third being comparative. Top third being a relative strength. And so what I'm saying here is that our results at this time, in '24, collectively across the Regiment, had moved from that relative weakness third into a comparable third.

10 And without going into the details around the metrics in it, due to the sensitivity of the document, we experienced a large improvement with our maintenance workforce. So much so that it's well below the comparative average. And across our aircrew it is broadly aligned with the comparative average. However, what I'm saying is notwithstanding that, this is still something that we are striving to treat and our goal is to go from a comparable into a strength.

15 COL STREIT: So in short compass, the snapshot survey fatigue results for the Regiment in 2024 were much better than what they were in 2023?

20 D137: Yes.

COL STREIT: Can I turn now to question 169? You were asked to:

25 *Outline any processes by which 6 Aviation Regiment collects data from aircrew about their levels of fatigue or psychological distress, and what those processes indicate and what steps 6 Aviation Regiment are taking to address those concerns.*

30 You say that:

The Regiment does not collect any other data from its aircrew about their levels of fatigue.

35 What do you mean by that, "any other data about their levels of fatigue"?

D137: So the only data that we collect is the results from the Fatigue Risk Awareness Tool.

40 COL STREIT: I see.

D137: We don't have wearable devices that collect data.

45 AVM HARLAND: Do you track those trends at all, as in the Fatigue Risk Awareness Tool results?

D137: We haven't been, sir, no. No, but it's certainly something we could look at.

5 AVM HARLAND: Yes. Do you think there would be value in looking at that to see where there are hotspots of fatigue occurrence so, as a Commander, you could address those pre-emptively?

D137: Yes, I think there could be some benefit in that.

10 AVM HARLAND: Okay, thank you.

COL STREIT: At paragraph 171 you say:

15 *All our members who presented at the IGADF Inquiry into the incident on 28 July 2023 have undergone a psychological assessment with a psychologist to ascertain their level of psychological distress.*

Is that correct?

20

D137: That's correct.

COL STREIT: So is that a process that Army brought into existence to assist members?

25

D137: Yes, I think – I don't know whether it was Army or Army Aviation. But it's something that has been provided to all of our members from the Regiment who have presented at the hearing – or at the Inquiry, rather. And I assume that it's been provided for others as well.

30

COL STREIT: When you say "a psychologist", who is that person? Do you know who that person is?

D137: I think it's a team of people rather than one individual.

35

COL STREIT: I see. So is that managed out of your unit or is it managed through the health centre at Holsworthy?

D137: Yes, it's managed through Army Aviation Command, so they facilitated it.

40

COL STREIT: But you don't know who the psychologist or psychologists are?

45 D137: No, I don't.

MS McMURDO: Or the name of the unit or group that conducts it?

D137: No, I don't, ma'am.

5

MS McMURDO: Thank you.

COL STREIT: You go on to say:

10 *Many of our members have indicated high levels of anxiety due to the nature of this Inquiry and how it has been conducted.*

Is that right?

15 D137: That's right. And all I'm trying to say here is – I'm not criticising how the Inquiry has occurred, I'm just saying that – and it's probably natural for something like this – that our team, those who have presented, have had a sense of anxiety for a variety of reasons about presenting. And then after they've presented, it's been a large weight off their shoulders. So
20 throughout the year – we anticipated this throughout the year, and the Regiment has been about supporting our team coming through the Inquiry. We know that people are going to go through peaks and troughs at different points, and it's ensuring that the team are there to support people as they go through low points. So that's what I'm trying to say with that
25 paragraph.

COL STREIT: No, understood.

AVM HARLAND: Sorry, COL Streit.

30

In addition to managing that anxiety – and it's actually very useful for us to get feedback – do you also manage their workload? Acknowledging, that, yes, the management and creation of statements and the like takes time, do you create space for that in their day, so that it allows them to engage as
35 they need to with the Inquiry?

D137: Yes, we do, sir.

40 AVM HARLAND: And you'd see that as, naturally, as a command responsibility?

D137: Yes. So we created space for people to prepare to present; and then also space at the back end, to decompress.

45 AVM HARLAND: Yes.

D137: And, similarly, 16 Brigade and Aviation Command have provided that same support to me, for example. So it's not just unit-specific, it's what I've observed broader than the unit as well.

5

AVM HARLAND: Thanks. That's useful to know, thank you.

MS McMURDO: And you're content with the support that has been given to you by Command?

10

D137: Yes, ma'am. Yes, very content.

MS McMURDO: Thank you.

15

COL STREIT: Following on in that paragraph you say:

20

As a Regiment, we've done our very best to support all our team through this process. I have encouraged the Regiment to continue to check in on members to see how they're going and to be there for them if they are experiencing a low point. Similarly, I have spoken to everyone on our team who's been asked to present at the Inquiry to reinforce to them that the Regiment's available to support them in whatever way necessary.

25

That's correct?

D137: That's correct.

30

COL STREIT: At 172 you say:

I would welcome recommendations that the Inquiry may have on collection of data to support decision-making with respect to fatigue management.

35

D137: That's right.

40

COL STREIT: Do I take it that that's recommendations the Inquiry will make after it has assessed all of the evidence of witnesses coming forward who have expressed issues in relation to fatigue, difficulties in managing fatigue, in the work environment?

D137: That's correct.

MS McMURDO: So the members who have presented at this Inquiry you've said have undergone psychological assessment with a psychologist from Army. Is that optional or has that happened – is that mandatory?

5 D137: I believe it's mandatory, ma'am.

MS McMURDO: Yes, thank you.

10 COL STREIT: Do you know if that assessment is confidential as between the member and the psychologist?

D137: I don't know.

15 COL STREIT: You yourself, without going into any detail, did you undergo, in accordance with this process, an assessment before you came here today?

D137: I did not.

20 COL STREIT: Do you expect, once you've completed this process, that you will undergo – as part of the Army or Aviation Command system, you'll undergo a psychological assessment?

D137: I expect to, yes.

25 COL STREIT: You've set out accommodation types at 6 Aviation Regiment at paragraphs 174 to 179.

D137: That's correct.

30 COL STREIT: You say at 179 that you'll:

35 *Consider adjustments to accommodation pending the outcome of the DFSB investigation into the incident on 28 July 2023, and the recommendations from this IGADF Inquiry.*

Is that right?

D137: That's right.

40 COL STREIT: You set out at paragraph 180 onwards your understanding of ground trials for medication for aircrew. That's a process managed by the Holsworthy Health Centre?

45 D137: That's correct.

COL STREIT: Does your Regiment have an in-house doctor?

5 D137: We don't at the moment. It is my understanding that this is something that we will receive at the beginning of next year. So my understanding is that we will receive a medical team that will be embedded within the Regiment.

10 COL STREIT: You've set out at paragraph 184 onwards to 187, your own experiences managing fatigue in Army Aviation. And that's reflecting on your experience in 6 Aviation Regiment over the past 16 years.

D137: That's correct.

15 COL STREIT: At paragraph 191 you were asked questions about your observation of the evidence of aircrew witnesses, and that's in relation to hearing phases 1 to 3 – and you've given some evidence about that – and you were asked specifically:

20 *Has the evidence you've observed in the Inquiry caused you to take any action within the span of your Command concerning workload and fatigue management? And if yes, then describe what actions you have taken. And then if yes to that question, have you taken any additional actions concerning pilots and aircrew that hold*
25 *command or other unit responsibilities, including Troop Commanders and QFI Standard Officers? And if yes, what steps have you taken?*

30 And then, "(2)", if you've done anything, to summarise the reasons you took those actions. And you set out, don't you, at paragraphs 192 through to 196 those steps you have taken – having observed the evidence in this Inquiry in phases 1 to 3, those steps you have taken, in your span of command, concerning workload and fatigue management? Correct?

35 D137: That's correct.

COL STREIT: Here, at 193, you set out the actions in detail, including the conduct of working groups you've given some evidence about earlier.

40 D137: That's right.

COL STREIT: Scheduling reduced tempo periods to align to the New South Wales school holidays and allowing members to take rec leave and spend time with their families during these periods. Correct?

45

D137: That's correct.

5 COL STREIT: And following periods of high flying rates, establishing days of short leave or absent on duty on Friday or Monday, allowing the workforce to have a long weekend. Correct?

D137: That's correct.

10 COL STREIT: Within the span of your control:

I try to maintain a deliberate and disciplined flying schedule approach to the Black Hawk introduction into Service activities.

15 D137: That's right.

COL STREIT: You also say that you:

20 *closely monitored all aircrew involved in the introduction into Service of the Black Hawk, and anyone who's exhibited or expressed challenges in balancing their management of flying responsibilities, we have actively offered those individuals support.*

D137: That's right.

25 COL STREIT: At 196 you say:

30 *Finally, I, and other members in the Regiment, have continuously promoted the importance for our aircrew to feel empowered to speak up when they are feeling overwhelmed, fatigued, unsure, or if they have an idea how to improve something. This has been actively encouraged across the Regiment.*

D137: That's correct.

35 COL STREIT: Now, turning to matters involving post the crash of Bushman 83, you attended the funeral of WO2 Laycock. Is that correct?

D137: That's correct.

40 COL STREIT: The Regiment held a one-year memorial on Monday, 29 July 2024; is that right?

D137: That's right.

COL STREIT: You represented the Regiment at the one-year memorial in Oakey on 26 July 2024.

D137: That's correct.

5

COL STREIT: You attended the Anzac Day service at Holsworthy on 25 April 2024 conducted by the 2nd Commando Regiment?

D137: Correct.

10

COL STREIT: You say at paragraph 210 that:

15

The names of the four members of Bushman 83 were mentioned during the service. Their sacrifice was acknowledged during the address to the fallen during the service by Special Operations Commander, MAJGEN Paul Kenny. He specifically read out each of their names and he also acknowledged the sacrifice of LCPL Jack Fitzgibbon at the same time.

20

D137: That's correct.

COL STREIT: That's your recollection.

D137: Yes.

25

COL STREIT: You've given some evidence at paragraph 215 in relation to receiving a briefing from BRIG Fern Thompson, the current Commander of 16 Aviation Brigade, and she also briefed aircrew and maintenance personnel on the DFSB Flight Safety Bureau findings, that there was no evidence of technical malfunction by Bushman 83 and the configuration of the aircraft. Is that right? That's the briefing you received?

30

D137: Yes. And that's not a briefing on the report, that was a – I don't know what document it was, whether it was an Executive Summary or as initial findings, but it was just prior to the hearing block in August, and it was a very short briefing that included those things.

35

COL STREIT: You say at 217 you have not been provided any briefings on the Defence Flight Safety Bureau investigation into the cause of the crash of Bushman 83.

40

D137: That's correct.

COL STREIT: D137, that concludes my questions. I understand - - -

45

MS McMURDO: Just before you go onto that.

COL STREIT: Yes.

5 MS McMURDO: Could I just ask one more thing? There was a prospect of the Inquiry going to Holsworthy for a view. Is there anything that you think would be useful for the Inquiry to see at present at Holsworthy that would assist us?

10 D137: I don't have anything specific in mind, ma'am. I know in earlier conversations with your team there were a variety of different rooms and things that were suggested, and I'm happy to facilitate that.

15 MS McMURDO: Do you know though if that's still – in the current, as it was back in July '23? There haven't been changes to the rooms that were being discussed or the rooms that are available that were then available to the aircrew back in July '23? Or have there been changes since?

20 D137: I wasn't present in July '23, so that's hard to say. But we haven't introduced any drastic changes to the layout of the Regiment. The only key change is that, as far as I'm aware, 173 Squadron was located in the main facility. That's now 171 Squadron. So the Squadrons have changed. That's the only major change, as far as I'm aware.

25 MS McMURDO: So you think though that the rooms that were used by 173 in July last year are still largely the same as they were at that time, they're just now being used by 171. Is that the position?

30 D137: I think so, ma'am, yes.

MS McMURDO: Thank you.

35 AVM HARLAND: Just a couple of questions in follow-up, just before we go to cross-examination. Acknowledging the fact that Army are required to, in some cases, deploy to an austere environment, there are a number of steps you could reasonably take to ensure that accommodation is suitable so that aviators can get adequate rest, such as locating the tents in an area that's not – when they're on shift work, that's not going to be affected by the work of other people just going about their normal business.

40 D137: Yes.

45 AVM HARLAND: And use the environment control, as has been applied to the Ops tent and the Life Support Equipment tent. Are they the sort of things that you talk about considering, looking forward in future

when you deploy to an austere environment?

D137: Yes, that's exactly right, sir.

5 AVM HARLAND: Yes. Because I would see that as being something that, so far as is reasonably practical, is achievable as we look forward.

D137: Yes.

10 AVM HARLAND: Also, regarding sleep medications and trials, it appears that it very much rests on the individual and potentially the Medical Officer. Is there any benefit in being a little bit more forward-looking? You talked about malaria if you go into a tropical area, but if you go into an austere environment, or you're going to be operating
15 on the back of your circadian rhythm, you know, from a command point of view, looking forward into that and ensuring that the aircrew who are going to be deploying on that exercise, activity or operation have done their flight trial – their ground trial, so they may have access to medication, should they require it.

20 D137: I think that's probably fair, sir, yes.

AVM HARLAND: Okay great, thank you.

25 MS McMURDO: COL Streit?

COL STREIT: D137, just on something the Inquiry chair asked you. In your statement you have set out, haven't you – and we haven't covered it in detail – but you have set out your evidence in relation to matters
30 concerning the accommodation at 6 Aviation Regiment?

D137: Yes, I have.

COL STREIT: Now, my questions have concluded, but I understand that
35 you wish to say something, and I wish to provide you an opportunity to do so.

D137: Yes, thank you, sir. Look, ma'am, I just wanted to say three
40 things. First, I just want to – I'm in a unique position where I have the privilege to lead an exceptional team. I've been particularly impressed by the way in which my team has navigated the challenges of this year, so I just wanted to formally acknowledge them.

The other thing I want to acknowledge is the service and sacrifice of the
45 four gentlemen that were in Bushman 83. You know, not many Australians

put up their hands for service, and these guys did, without hesitation. So, you know, their legacy is something that we will live up to in the Regiment.

5 And I'd just like to acknowledge also the loss that each of the families have experienced throughout this tragedy. So I offer my sincere condolences to everyone involved.

That's all I wanted to say, sir.

10 COL STREIT: Thank you.

MS McMURDO: Thank you, [REDACTED]. Cross-examination?
COL Gabbedy?

15

<CROSS-EXAMINATION BY COL GABBEDY

20 COL GABBEDY: Thanks, ma'am.

Good morning, [REDACTED]. I'm COL Nigel Gabbedy. I appear for MAJGEN Jobson.

25 D137: Sir.

COL GABBEDY: I just want to take you back over some of the matters that Counsel Assisting has taken you to. In doing my maths, looking at your statement, is it right that you've spent 17 to 18 years of your life in Army Aviation?

30

D137: I think I've – yes, I think that's right, sir, yes, I think the maths is pretty good.

35 COL GABBEDY: At paragraph 25, you talk about the safety culture and promotion of it. Just how important is it to Army Aviation to maintain a safety culture?

D137: It's very important; it's essential, sir.

40 COL GABBEDY: And during your time as an Army aviator, what's been your experience of that culture? Has it stayed constant? Has it improved?

D137: I think we're a learning organisation that is constantly looking at ways to improve and do things better. So my experience is that our safety culture has improved throughout my experience.

5 COL GABBEDY: Thank you. You were asked some questions about the pilot stream, at about paragraphs 50 and 51. Is it my understanding that there's a degree of individual choice involved in that, in that an aviator chooses which path they want to follow?

10 D137: Yes, that's right.

COL GABBEDY: And that if, as an aviator, you are looking for a path that had less extra-Regimental duties, you could choose the Regimental pilot or QFI streams?

15 D137: Yes, but I think the people that we're looking for to pursue those pathways are not necessarily people that want to reduce their duties. So we want someone who wants to be an instructor and teach people, rather than someone who wants to reduce their duties.

20 COL GABBEDY: So it's not like an easy option; it's what your passion is, I suppose?

D137: Exactly.

25 COL GABBEDY: The Troop Commander path is a path towards command?

D137: That's right. So for Troop Commanders, we're looking at for
30 people who are passionate about leading people, yes.

COL GABBEDY: And if you're passionate about leading people, that would be the path for you?

35 D137: Yes.

COL GABBEDY: At paragraph 97 – I'll let you get there – you talk about the requirement – or the sorties required to maintain between two and three hundred hours per year, and you say that it's between approximately three
40 two-hour sorties per five-day week. In your opinion, does that allow sufficient time to deal with extra-Regimental duties?

D137: Yes, it does.

COL GABBEDY: You've also talked about the leave available to your members. As I understand it, is it a shutdown or reduced activity period over the December/January period?

5 D137: It's, yes, an end of year standdown. So there's a sizeable period of time where people are offered the opportunity to take leave.

COL GABBEDY: Do you tend to have a skeleton workforce during that period of time, or is it just a matter of personal choice as to whether you take leave?
10

D137: I'm just sort of thinking through the classification sensitivity issues with that, so I'd probably prefer not to answer.

15 COL GABBEDY: I'll withdraw the question. Thank you for drawing it to my attention. Again, are there periods of reduced tempo during school holidays?

D137: Yes.
20

COL GABBEDY: Are there other times when there are reduced tempo? Are there enforced reduced tempo, or do you have a discretion to put a reduced tempo period into the program?

25 D137: Yes, I have the flexibility to add that in. And it's one of the things that's listed in – one of the measures that we did this year is over the August period, following a higher period of flying, we had a dedicated month of a reduced work hours period to provide the team the ability to rest and recover. It also coincided with the hearing in August, which a lot of our
30 team presented at, so it allowed the Regiment to support our team through that process as well.

COL GABBEDY: So in terms of that, you as a Commander, are empowered, if you are monitoring an increase in fatigue in your workload,
35 or if you are anticipating a period of particular difficulty for them, to modify their duties to effectively manage fatigue?

D137: Yes.

40 COL GABBEDY: As I understand it, on Fridays it's a no-flying day, and members will often be able to leave in advance of normal leaving hours; is that right?

D137: So on Fridays, we don't fly at night. We have been flying on
45 Fridays recently, for a variety of reasons, but we're mindful to finish at a

reasonable time, to allow people to get home. We will try not to fly on Fridays, but we have been recently, yes.

5 COL GABBEDY: I think the other thing you mentioned was that – if I refer to it as a grown-up work environment, if members have done their tasking for the day, they are okay to leave and go home and spend time with their families?

10 D137: Yes, that's the guidance or the direction that I've provided the leadership team with in the Regiment.

COL GABBEDY: Do you find that the combination of those factors has enabled you to effectively manage fatigue within your unit?

15 D137: I think it's certainly contributed to treating fatigue in the unit, yes.

COL GABBEDY: At paragraph 117, you talk about a series of working groups that you conducted with pilots and aircrew.

20 D137: Yes.

COL GABBEDY: Can you recall the issues that came out of those working groups?

25 D137: It was more about – sorry, you're testing kind of my recollection. There was a little bit about understanding the things that are consuming people's time, in terms of workload, so that we could ensure that they were applying their effort in the right places and that there wasn't something discretionary that may appear important, but isn't necessarily important.

30 COL GABBEDY: I'll just stop you there. So that was to help you with workload management, for your subordinates?

35 D137: Yes.

COL GABBEDY: Okay. Sorry.

40 D137: And there was – a couple of the officers expressed a reluctance to want to speak up, particularly if they were experiencing something fatigue-related, or if they were experiencing a high workload, because they were concerned about the effect that it would have on someone else: "So if I don't do this sortie, it would affect the progression of someone else".

And so throughout this year it's been – we've been focused on reinforcing the importance of the team feeling comfortable and empowered to raise issues like this, rather than to not raise it.

5 COL GABBEDY: That's an interesting point. In some of the earlier evidence we've heard, we've talked about safety culture and FACE out, but there's also been some evidence to the effect that members might be reluctant to FACE out if they felt that would affect somebody else's advancement, for example on a training flight. Are you comfortable,
10 following your discussion, that there's been perhaps improvement in people's abilities to speak up about that?

D137: Yes, I'm very comfortable with where we're at. And the Fatigue Risk Awareness Tool has been something that has helped facilitate that confidence that the team have in speaking up.
15

COL GABBEDY: As I understand it from paragraph 18, out of that series of engagements that you had, there was only one member who identified as having workload issues that required remediation or adjustment. Is that right?
20

D137: Yes, there's only been one member this year.

MS McMURDO: You mentioned that you're flying more often on
25 Fridays now, for a number of reasons. Is that partly because that can assist currency, getting enough flying hours up by utilising Friday to fly sometimes?

D137: So, yes, ma'am, the flying that we've been doing on Fridays
30 hasn't necessarily been aligned to a task; it has been an opportunity for us to continue to generate experience in our team.

MS McMURDO: Yes.

D137: So it's been something that everyone enjoys doing and would like
35 to do, rather than something that's directed.

MS McMURDO: Yes. So by having a little bit of flexibility about
40 Friday, it means that you can ensure that the Troops get more flying experience?

D137: That's right, ma'am, yes. And it's also dependent on what has occurred during the rest of the week.

MS McMURDO: Bad weather has stopped flying, and those sorts of issues, yes?

5 D137: Or if we've experienced a higher rate of effort during the week, then I'd be reluctant to fly on the Friday, just to allow the team time to recover.

MS McMURDO: Thank you.

10 COL GABBEDY: At paragraph 131 you again talk about fatigue and the responses to it.

D137: Yes.

15 COL GABBEDY: During your time in command, have you had to report a fatigue incident via Sentinel, or notify the Brigade Commander?

20 D137: No, not with respect to an individual experiencing a higher fatigue level. The only time we've submitted Sentinel reports is when there's been an activity earlier in the year where I stipulated a control over number of hours worked, and there was I think two occasions where we extended that by one hour. So it's within our mandated SI limits, but it was a self-imposed limit that we exceeded, so we reported it in Sentinel for tracking purposes.

25 COL GABBEDY: Thank you. At paragraph 142 you're talking about the FRAT, which is a tool you now use. And COL Streit asked you some questions, theoretical questions, about members popping up with a red, I suppose, result. I just want to know if you have any knowledge of this particular incident. There was some evidence that in a particular sortie a member of your Squadron, D28, whose name will appear on the acronym list, presented with a red result. The evidence was that there was then discussion amongst the aircrew. The member who gave the evidence wasn't aware of what mitigation was applied, but the member then flew the sortie – or D28 flew the sortie.

35 Firstly, do you have any knowledge of that?

40 MS McMURDO: And I think he was the co-pilot, not the pilot, not the Captain.

D137: So D28 was the co-pilot?

MS McMURDO: It seems so.

45 COL GABBEDY: I believe so.

MS McMURDO: It seems so, from what we were told, yes.

5 D137: So I wasn't the Authorisation Officer for that sortie, so I am
unaware of that particular example. Do you know who the Aircraft
Captain - - -

COL GABBEDY: No, that's the only fidelity we have.

10 D137: Okay.

COL GABBEDY: So if you're not aware of it, that's fine. I just
wondered whether you were or not.

15 D137: I'm not aware of that.

AVM HARLAND: Would you have an expectation that you'd been
made aware that one of your aircrew have flown with a red FRAT outcome?

20 D137: I do, sir.

COL GABBEDY: Look, at this stage it's simply the evidence of one
person. We don't know whether that's in fact correct or not.

25 D137: Okay. Thank you for bringing it to my attention.

COL GABBEDY: Now, I just want to take you to your evidence in
relation to deploying to an austere environment, which starts at
paragraph 174. It's the case, is it not, that we train the way we want to
30 fight?

D137: That's correct.

COL GABBEDY: And that it's entirely possible, if not probable, that your
35 Regiment could be deployed into an austere environment?

D137: That's correct.

COL GABBEDY: In those circumstances, I take it you wouldn't want the
40 first occasion your members deployed to tents or to stretchers to be when
they're doing their job for real?

D137: That's correct.

COL GABBEDY: In paragraph 196 you talk again about empowering your aircrew to speak up.

D137: Yes, sir.

5

COL GABBEDY: Has that always been the case during your time in Army Aviation, that aircrew have been empowered to speak up?

D137: Absolutely. My experience, from 2009 to '18, was that that was the norm, that was expected.

10

COL GABBEDY: And is it still the case?

D137: It is, yes.

15

COL GABBEDY: That's something that you obviously reinforce?

D137: Absolutely.

COL GABBEDY: If I could get you to have a look at Annex B? And I appreciate the sensitivity of the document, so I'm going to ask you some questions about it in a way that hopefully doesn't lead myself into error. In paragraph 3, would it be fair to say that you identify a difficulty?

20

D137: Sorry, this was Annex B?

25

COL GABBEDY: It's a one-page part of your statement.

D137: Okay.

30

COL GABBEDY: Is it the "Protected" level?

D137: Yes, sir.

COL GABBEDY: So again, paragraph 3, is it fair to say that you identify a difficulty?

35

D137: Yes.

COL GABBEDY: Is paragraph 4 the remediation you've applied to that difficulty?

40

D137: Yes.

COL GABBEDY: Do you feel that that remediation has been successful in alleviating the difficulty that you experience?

D137: Yes.

5

COL GABBEDY: Thank you. You were asked some questions by the Air Marshal in relation to the integration – the evidence you gave about integration between Aviation and other elements of Army, particularly the Ground Force. I notice from your resume that you spent two years at SASR in 2014-2015. Did you do selection?

10

D137: No, I didn't.

COL GABBEDY: You had two years with the Regiment in what capacity?

15

D137: I probably won't go into the details of the role.

COL GABBEDY: You had two years with the Regiment, we'll leave it at that.

20

D137: Yes.

COL GABBEDY: Did that enable you to develop close links with Ground Force members that you now work with?

25

D137: Yes.

COL GABBEDY: And do other aspects of your service as an Army Officer, as distinct from an Army Aviator, help you to build those linkages?

30

D137: Yes.

COL GABBEDY: Thank you, that's all I have.

35

MS McMURDO: Any other applications to cross-examine? Yes?

<CROSS-EXAMINATION BY LCDR HAY

40

LCDR HAY: Good morning, sir. My name is LCDR Hay. I represent the interest of D19.

45

D137: Okay.

5 LCDR HAY: I just wanted to ask you some questions about some of the evidence that you've given this morning. To begin with, I'll just ask you in a general sense. I won't take you to particular paragraphs of your statement. But please just let me know if you need me to take you to those particular paragraphs.

D137: Sure.

10 LCDR HAY: As I understand your evidence, you indicated that if, as the Commanding Officer, you became aware that one of your pilots was expressing concerns about maintaining their primary duties, their flying duties, with other duties, secondary duties, one of the options available to you would be to manage those other duties. Is that right?

15 D137: Yes, that's right.

LCDR HAY: And could I just ask you for a moment just to consider this hypothetical situation? If one of the pilots expressing concerns about their workload was a Troop Commander, could you, as part of your responsibilities, remove from them the Troop Commander allotment or allocation?

25 D137: Yes, you can.

LCDR HAY: And could you tell the Inquiry this: were that – well, firstly, would that be an extreme step to take?

30 D137: Yes. Well, it wouldn't be my first step. I would want to understand, like I've mentioned earlier in the Inquiry, about what the Troop Commander was apportioning their effort to, to ensure that it was focused in the right areas. And as I've said in my statement, I think it's essential that people in command appointment, especially Troop Command, command both on the ground and in the air. So it is important they balance both responsibilities.

LCDR HAY: Now, again, as I understand your evidence, firstly, in order to understand that they were experiencing difficulties with managing workload, they would need to raise that. Is that right?

40 D137: That's correct.

LCDR HAY: And I think the effect of your evidence is that you would expect that they would use the Chain of Command to raise those issues; is that right?

45

D137: That's right.

5 LCDR HAY: And for a Troop Commander, who would you expect those issues to be raised with in the first instance?

D137: It would be the Squadron Commander.

10 LCDR HAY: Squadron Commander. And then would you expect the Squadron Commander then to effectively take those steps or to manage those issues that you've just identified as being the primary focus?

15 D137: So I would expect the Squadron Commander to inform me of that discussion, and then to inform me on their proposed pathway forward. And then, if I was satisfied with that, then we would proceed, or I could offer perhaps an alternate pathway. And then I would closely monitor it, but I would allow the Squadron Commander to manage it.

20 LCDR HAY: And just picking up on that answer, sir, would the Squadron Commander have the authority to take steps independently of speaking with you? Would they have authority to manage or to reduce the workload of the Troop Commander?

25 D137: So I would have confidence in my team to be able to do that, but then I'd expect to be briefed about it at the first available opportunity.

LCDR HAY: And is that primarily to ensure that you have situational awareness within the Regiment?

30 D137: That's right.

LCDR HAY: Now, would you expect that information to flow the other way, i.e. rather than coming up through the Chain of Command, to come to you down from a Brigade Commander, for instance?

35 D137: Sorry, how do you mean?

40 LCDR HAY: Well, what you've said in your statement – what you've said in your evidence is that you would first and foremost expect the Troop Commander to raise it with the Squadron Commander; is that right?

D137: Yes.

45 LCDR HAY: And then from there, for the information to flow upwards through to you.

D137: That's right.

5 LCDR HAY: What about, have you ever experienced a situation where a
Brigade Commander has informed you of issues within your Regiment?

D137: I have had the Brigade Commander inform me about things in the
Regiment, yes.

10 LCDR HAY: Yes. And has that in the past been as a result of the Brigade
Commander coming into information independently of that Chain of
Command; that is, directly from the concerned member?

15 D137: Yes.

LCDR HAY: Ms McMurdo previously posed a hypothetical to you.
Do you remember that hypothetical, in a general sense?

20 D137: Broadly.

LCDR HAY: So do you remember Ms McMurdo raising with you a
situation where on course a member raises an issue with a senior
Commander, in this case a Brigade Commander, and that information then
flowing back down to the Commanding Officer, in this scenario you? Do
25 you remember that scenario being posed to you?

D137: Yes.

30 LCDR HAY: Can I just ask you to reconsider that scenario slightly for a
moment? Could I ask you to consider a situation where the information
that's passed to you is not specific, it does not identify your unit as being
the source of the issue, but is an issue raised with all Commanding Officers
under the Brigade Officers? So, firstly, do you understand that?

35 D137: Yes.

LCDR HAY: The member involved is not identified, so the person who
had raised the issues is not identified. Do you understand that?

40 D137: Yes.

LCDR HAY: And the Brigade Commander then asks for information
about regulatory and governance overheads within your unit. Do you
understand that?
45

D137: Rephrase that last one again.

5 LCDR HAY: So once again, in a general sense, the Brigade Commander is asking you for information in a more general way about governance and regulatory overheads of your pilots within your Regiment. Do you understand that?

D137: Yes.

10 LCDR HAY: Can I just ask you whether or not – that slight change in the hypothetical, would that change your response to the Brigade Commander, if he was asking for general information rather than specific information?

15 D137: I think that's a very broad – requesting – I think that's a very – it would trigger probably a very broad response. It's difficult to identify a specific issue with something so broad.

20 LCDR HAY: Do you agree with this proposition: it makes it more difficult to identify a particular issue with a particular member or a particular Troop Commander if what you're given is very general information and asks for very general information in return?

D137: Probably, yes.

25 LCDR HAY: Thank you. Now, just coming back to the question of fatigue and fatigue management, do you agree that the IMSAFE and FACE mnemonics are tools designed for the individual to manage their own fatigue levels, identifying what their risks are to themselves?

30 D137: Yes.

LCDR HAY: And the IMSAFE and FACE mnemonics, they have been used for a long period of time. Do you agree?

35 D137: So I'm familiar with FACE. I'm not that familiar with IMSAFE.

LCDR HAY: IMSAFE?

D137: Yes.

40 LCDR HAY: But you have said in your statement and in your evidence that the primary responsibility for managing fatigue rests with the member.

D137: Yes.

45

LCDR HAY: And it's on the member to identify if they consider that they have problems or issues with their fatigue levels at a particular time, particularly in advance of a sortie or a flight.

5 D137: Yes. I think it's – because fatigue can affect people in a variety of
different ways, it makes it very difficult to identify – or can be difficult to
identify an issue if an individual doesn't express it, unless someone's
demonstrating particular signs associated with fatigue. That's when you
could perhaps act without them raising it. But I think it's important that an
10 individual feels empowered to be able to raise issues that they're
experiencing.

LCDR HAY: In your time in Army Aviation, have you felt yourself that
empowerment to raise those issues if and when you're experiencing issues
15 such as fatigue?

D137: Yes.

LCDR HAY: Have you ever heard of any situation, in your time in
20 Army Aviation, where individuals are discouraged from raising those issues
if they felt fatigue was an issue?

D137: No.

25 LCDR HAY: You've also said in your statement – and I don't require you
to go there unless you need to – but you talk about the Regiment being able
to “shape and influencing flying schedules if there are fatigue or capability
shortfalls”. Do you agree with that?

30 D137: Yes.

LCDR HAY: From that, do you mean that the Regiment can effectively
either stop a sortie or can stop a ship from flying in a sortie?

35 D137: Yes.

LCDR HAY: So if, for instance, a pilot on exercise, for example, raised
that they had concerns about their own fatigue levels, could the sortie be
40 managed in such a way that that pilot was not forced to fly?

D137: Yes.

LCDR HAY: And would that ultimately be the preference of the
Regiment, that that pilot would not be forced to fly, if those issues were
45 present?

D137: Yes.

5 LCDR HAY: And would that also be the preference of Army Aviation, for that pilot not to fly, if that was an identified issue?

D137: Yes.

10 LCDR HAY: But, ultimately, you would require – or you would need the member to identify that issue for it to be managed.

D137: Yes.

15 LCDR HAY: Yes, thank you. Those are my questions, thank you.

20 AVM HARLAND: If I could just ask a couple of follow-on questions from those cross-examinations. If an individual – just say we've got two Troop Commanders, as a hypothetical – just off the back of LCDR Hay's hypothetical – two Troop Commanders identical in every other regard other than the fact that one of them brings up the fact that they're fatigued and not coping. And then they worked through that fatigued and not coping thing over a period of months and came back. How would that be reflected in their annual reporting? Would they be reported the same or would there be commentary on the fact that they had a lesser capacity?

25 D137: I don't think there would be any negative – well, I wouldn't expect there to be any negative reporting for that. If anything, it demonstrates that they have been able to manage it. So it's – if I understand your question properly, it demonstrates a level of maturity and judgement in the team, to be able to manage it properly. So it's probably more of a positive.

30 AVM HARLAND: What I'm seeking to establish, are there any negative motivations for people to actually bring up the fact that they're really struggling and not coping – that's really what I'm trying to establish – through the annual reporting system?

D137: Yes. No, not in the Regiment, no.

40 AVM HARLAND: And your opinion: if an individual has raised issues regarding workload and distraction, you know, on a number of occasions to higher Command and nothing gets done, how would you see their motivation to continue to raise that? Would they feel motivated, do you think? If it was you, for example, you've raised it, nothing gets done, would you be motivated to continue raising it?

45

D137: To continue raising it with me?

5 AVM HARLAND: Yes. You are the individual, and you've raised issues to do with workload and distractions and fatigue and capacity to be able to manage everything, on a number of occasions; nothing really gets done. The snapshot surveys keep on coming in, and they keep on having the same themes of fatigue, workload, distraction, nothing gets done. What do you think you're going to do? Are you going to continue to raise it, or are you just going to accept that this is the way we do things around here?

10 D137: So if I put myself in the shoes of the individual, I would probably discuss my concerns with probably people outside the Chain of Command to get their perspective on it. And, you know, if their perspective agreed with mine, then I would seek other avenues to, you know, perhaps raise the concerns. Alternatively, you know, I guess there's a hypothetical about what if people don't agree with my perspective? I'd probably reconsider my perspective and try to understand everyone else's position a little bit more. I don't know if that's a bit of a hypothetical kind of question.

20 AVM HARLAND: It is, yes. That answers my question, thank you.

D137: Yes.

25 MS McMURDO: Any other applications to cross-examine? COL Streit?

<RE-EXAMINATION BY COL STREIT

30 COL STREIT: Thank you. Very briefly, Ms McMurdo. Can the witness please be shown Exhibit 39?

MS McMURDO: Yes.

35 D137: Thank you.

40 COL STREIT: First, D137, the document you have is a copy of the Aviation Fatigue Management Guidebook, version 1, April 2021. Just if you turn to the inside cover; the Contents page is bottom left.

D137: Yes.

COL STREIT: Accept that? Have you seen this publication before?

45 D137: Yes.

COL STREIT: When, do you recall, was the first time you've seen this publication, approximately? This year, or - - -

5 D137: I've certainly seen it this year. I think I saw it last year as well.

COL STREIT: Sure. I'll take you to page 32. Recalling LCDR Hay's hypothetical to you which culminated in the proposition that ultimately the individual is responsible for – ultimately the identification of the issue of fatigue is a responsibility for the member, do you remember that hypothetical?

D137: Yes.

15 COL STREIT: You accepted his proposition, do you remember that?

D137: Yes.

COL STREIT: Can I take you to the top of page 32?

20

D137: Yes.

COL STREIT: You'll see there – and I appreciate you may not have seen this before, so I'm just going to read it out to you and ask you a question. It says:

25

Self-identification of Fatigue Risks

30 *Individuals are not good judges of their own level of fatigue-affected performance. Research has demonstrated that without training, humans are quite poor at determining their actual level of fatigue. However, validated tools such as the Samn-Perelli Scale increase the reliability of self-assessment.*

35 Before me taking you to that paragraph in this publication, had you previously read that?

D137: I have read this document before, but my recollection of reading that paragraph is a bit vague, so I don't recall reading that paragraph.

40

COL STREIT: Although, can I suggest identification of fatigue by a member is a function of the overall system of management of fatigue in a unit, you would accept this is simply part of the overall function?

45 D137: Yes.

5 COL STREIT: There is an inherent risk of just putting all of that responsibility onto an individual, because they're not, according to this publication, good judges of their own level of fatigue. Do you accept that?

D137: Yes, I accept that.

COL STREIT: Nothing further, thank you.

10 MS McMURDO: Thank you very much, [REDACTED].
Appreciate your assistance. You're free to go.

D137: Great, thank you.

15

<WITNESS WITHDREW

MS McMURDO: Yes?

20

COL STREIT: Ms McMurdo, I'll of course be revising the witness list, and we have that capacity to do so, have flexibility in the list. Perhaps we've been going for some time. I might briefly look at the Secretary as to whether lunch – lunch is not available at the moment, but perhaps a short comfort break and then commence the next witness.

25

MS McMURDO: All right then, we'll have a 10-minute break.

COL STREIT: Thank you.

30

HEARING ADJOURNED

35

HEARING RESUMED

MAJ CHAPMAN: Thank you, Ms McMurdo, Air Vice-Marshal. Can I call BRIG Fenwick, please?

40

<BRIG JOHN RICHARD FENWICK, Affirmed

<EXAMINATION-IN-CHIEF BY MAJ CHAPMAN

5

MS McMURDO: Brigadier, if you need a break at any time, just let me know.

10 BRIG FENWICK: Thank you, ma'am.

MS McMURDO: Thank you.

MAJ CHAPMAN: Sir, could you please state your full name?

15

BRIG FENWICK: John Richard Fenwick.

MAJ CHAPMAN: And, sir, can you please confirm, just as a preliminary matter, that you've received each of the following documents prior to today? I'll just go through them. The first is a section 23 Notice requiring your appearance today to give evidence?

20

BRIG FENWICK: Yes, I did.

25 MAJ CHAPMAN: The second is an extract of the Inquiry Directions?

BRIG FENWICK: Yes.

30 MAJ CHAPMAN: Third is a copy of my Appointment as an Assistant IGADF?

BRIG FENWICK: Yes.

35 MAJ CHAPMAN: Fourth is the Frequently Asked Questions Guide for Witnesses in these Inquiries?

BRIG FENWICK: Yes.

40 MAJ CHAPMAN: And the fifth is a Privacy Notice for witnesses giving evidence?

BRIG FENWICK: Yes, I did.

45 MAJ CHAPMAN: Can I mention two other preliminary matters? The first is that you will have there a pseudonym list in front of you. If on

occasion I ask you a question or it elicits a response to a name, you will see there that's the reference to the pseudonyms.

BRIG FENWICK: Okay.

5

MAJ CHAPMAN: The second, sir, is that in relation to security issues and classifications of documents, if I am going to be asking you something which you feel will elicit a response higher than the "Official" level, can you let me know? We might need to go to private hearing.

10

BRIG FENWICK: Yes.

MAJ CHAPMAN: So, sir, have you prepared, for the purposes of this Inquiry, a statement?

15

BRIG FENWICK: Yes.

MAJ CHAPMAN: Can I hand you that document?

20

BRIG FENWICK: Thank you.

MAJ CHAPMAN: And, sir, do you recognise that to be your statement, which is nine pages in length?

25

BRIG FENWICK: Yes, I do.

MAJ CHAPMAN: And it has a number of annexures to it. It's four annexures, I believe.

30

BRIG FENWICK: Yes, that's correct.

MAJ CHAPMAN: Is that your electronic signature which appears on page 9, sir?

35

BRIG FENWICK: That's correct, yes.

MAJ CHAPMAN: Do you wish to make any amendments to the document?

40

BRIG FENWICK: No, thank you.

MAJ CHAPMAN: Chair, can I tender the statement of BRIG John Richard Fenwick, 3 November, and the four annexures?

45

MS McMURDO: The statement of BRIG Fenwick and the four

annexures will be Exhibit 103.

5 **#EXHIBIT 103 - STATEMENT OF BRIG FENWICK
AND ANNEXURES**

10 MAJ CHAPMAN: Sir, just if I may begin briefly with some of your
background, which you address from about paragraph 3? And I'll move
through this as quickly as I can. So you joined the Army through ADFA in
about 1989; is that correct?

BRIG FENWICK: That's correct, yes.

15 MAJ CHAPMAN: And since 2021, you've been inactive, in the Reserve?

BRIG FENWICK: Yes, I'm in the Reserve.

20 MAJ CHAPMAN: And you're currently the Principal at the Centre for
Defence Leadership and Ethics; is that right?

BRIG FENWICK: That's right.

25 MAJ CHAPMAN: Prior to your retirement from full-time service in
2021, your last role was as Director-General Army Aviation; is that right?

BRIG FENWICK: That's correct, yes.

30 MAJ CHAPMAN: And that was a three-year appointment between 2019
and 2021?

BRIG FENWICK: Yes, two and a half or so years.

35 MAJ CHAPMAN: In terms of your flying experience, you qualified as a
helicopter pilot back in 1994?

BRIG FENWICK: Yes.

40 MAJ CHAPMAN: And your Aviation experience since then has
included a wide range of postings and they've been both here and overseas?

BRIG FENWICK: Yes.

MAJ CHAPMAN: Your notable matter you raised in your statement is

that during your command of 1st Aviation Regiment you were involved in introducing the ARH Tiger into Service.

5 BRIG FENWICK: Yes, that's right.

MAJ CHAPMAN: Approximately in what period were you in command of the 1st Aviation Regiment?

10 BRIG FENWICK: From 2009, late-2009, until the end of 2011.

MAJ CHAPMAN: Thank you. At paragraph 5, you note in your statement that you are qualified on seven types of aircraft, and have in excess of 2000 hours.

15 BRIG FENWICK: That's correct, yes.

MAJ CHAPMAN: And 200 of those hours is operational flying, including use of NV devices, including TopOwl; correct?

20 BRIG FENWICK: That's right.

MAJ CHAPMAN: Did any of those seven aircraft include the MRH?

25 BRIG FENWICK: No.

MAJ CHAPMAN: So when you refer to your experience using TopOwl, that's exclusively on the ARH?

30 BRIG FENWICK: It is, as a qualified pilot on that type.

MAJ CHAPMAN: Yes.

35 BRIG FENWICK: But I did have experiential flying in the MRH, as the Director-General.

MAJ CHAPMAN: Thank you. So was that experiential flying, as you describe it, with – as we'll get to – 5.10 as installed in the MRH, as you recall?

40 BRIG FENWICK: As I recall, no, I don't believe it was. The purpose of that experiential flying was new in the role of Director-General, to be able to transfer my understanding of TopOwl, as I was qualified in Tiger, to then how it applied inside the MRH. And I believe it was before 5.10.

MAJ CHAPMAN: Yes, thank you, sir. You referred to some tertiary qualifications that you have, including an MBA from Deakin.

BRIG FENWICK: Yes.

5

MAJ CHAPMAN: A Bachelor of Arts (Information Systems Economics) from UNSW.

BRIG FENWICK: Yes.

10

MAJ CHAPMAN: And you're a graduate of the Australian Defence College.

BRIG FENWICK: Yes.

15

MAJ CHAPMAN: And presently, sir, you're an Adjunct Professor at the Faculty of Business Government and Law at the University of Canberra.

BRIG FENWICK: Yes.

20

MAJ CHAPMAN: I'll move now to discuss your role as Director-General, and you deal with this from paragraph 9. So it's correct to say you were in that role between January 2019 and May 2021?

25

BRIG FENWICK: Yes.

MAJ CHAPMAN: Just to orient the Inquiry, am I right in saying that at that time, the Director-General Army Aviation, if you will, sat at the apex of Army Aviation Command structure?

30

BRIG FENWICK: Yes. So in the sense that the command of the units occurred underneath Commander 16 Brigade. I was not the Commander of the Brigade, nor the units. I actually sat alongside that command chain, as the Principal Adviser to Commander Forces Command, who did command the Brigade and the units. So while I was not quite at the peak in a command chain, I sat to the side and assisted it.

35

MAJ CHAPMAN: You've just mentioned that as DG, you reported to the Commander Forces Command.

40

BRIG FENWICK: That's correct, yes.

MAJ CHAPMAN: And it's your understanding that there's no longer a Director-General Army Aviation, and that role has been subsumed into Commander Aviation Command?

45

BRIG FENWICK: I understand that, yes.

5 MAJ CHAPMAN: That is now a two-star role within Army Aviation, and it's raised as an independent command?

BRIG FENWICK: Yes.

10 MAJ CHAPMAN: And that, sir, was in about May/June 2021, after - - -

BRIG FENWICK: Yes. So I think it's fair to say that the genesis of the creation of the Aviation Command was done by me. So I did all the business case, and sought the agreement through Chief of Services Committee and the like, to get the Aviation Command raised, and then
15 GEN Jobson was selected to be that Commander.

MAJ CHAPMAN: Thank you. Now, at 10 of your statement, sir, you list from (a) to (e), your responsibilities as the DG. So you describe the management of all Army Aviation systems.
20

BRIG FENWICK: Yes.

MAJ CHAPMAN: Which included – and I'll just summarise these and ask you to agree to them. Ensuring the Aviation capability operated in accordance with DASR and Regulations; correct?
25

BRIG FENWICK: Yes.

MAJ CHAPMAN: Ensuring personnel safety dimensions are eliminated or minimised so far as reasonably practical?
30

BRIG FENWICK: Yes.

MAJ CHAPMAN: Managing operational airworthiness aspects of systems acquisitions?
35

BRIG FENWICK: Yes.

MAJ CHAPMAN: Performing the duties of the Hazard Tracking Authority?
40

BRIG FENWICK: Yes.

MAJ CHAPMAN: And performing duties as the accountable manager for Army continuing airworthiness management operations?
45

BRIG FENWICK: Yes, correct.

5 MAJ CHAPMAN: Thank you. And additional to that, you refer at 11 to you performed functions as the Delegate of the Military Air Operator, or the MAO.

BRIG FENWICK: Yes.

10 MAJ CHAPMAN: And at that time, the MAO was Commander Forces Command?

BRIG FENWICK: That's correct.

15 MAJ CHAPMAN: Could you just assist the Inquiry by broadly describing the role of the MAO, if you will?

20 BRIG FENWICK: Yes, certainly. So the delegation for the operation of flying operations, through the Defence system, comes from the CDF to the Chief of Air Force, for the Airworthiness Authority. And then that is effected as a Delegation to Military Air Operators, in each of the Services, so through Air Force, Army and the Navy.

25 For the Army, that single delegation, we have one single Military Air Operator Accountable Manager, unlike Air Force, for example, which has a number of them.

30 That delegation went to, in this case, Commander Forces Command as the Air Operator, so it puts in, parallel to a command chain, a Military Air Operations structure that requires adherence to the DASR.

35 MAJ CHAPMAN: Thank you. As the delegate of the MAO – and you describe this – you were authorised to do a number of things, which you set out. And I'll just summarise a few of these. To make determinations regarding operations, to ensure continuing airworthiness and operational airworthiness?

BRIG FENWICK: Yes.

40 MAJ CHAPMAN: That you represented the Commander Forces Command, the MAO, at Airworthiness Boards?

BRIG FENWICK: Yes.

MAJ CHAPMAN: And just to pause there and invite you just to describe briefly what the purpose of the Airworthiness Boards were, sir, if you would?

5 BRIG FENWICK: Certainly. The Airworthiness Boards is an independent assurance system for the Aviation Authority. So in this case the Chief of Air Force, who held the Aviation Authority. It is his independent mechanism for checking the systems that are around Aviation safety. They are generally focused on aircraft-specific boards, so it's not –
10 while it encompasses the broad range of Aviation systems to check that the systems are working properly, they are generally interrogating a particular aircraft type. So in this case, for example, we would have had an MRH-90 Airworthiness Board.

15 And while it was the Accountable Manager's ability to attend those Airworthiness Boards, he in most cases did, but he didn't necessarily answer all of the questions because, in a number of cases, he was not the Aviation subject-matter expert. That subject matter expert was me.

20 MAJ CHAPMAN: Understood. And a further function that you played was to make recommendations to Commander Forces Command regarding acquisition of aircraft systems?

BRIG FENWICK: That's true, yes.

25 MAJ CHAPMAN: Sign release of all MAO-issued orders, instructions and publications on behalf of the MAO?

BRIG FENWICK: That's correct.

30 MAJ CHAPMAN: At 13 you next refer to Service release of new equipment being conducted under your authority; is that right?

BRIG FENWICK: Yes.

35 MAJ CHAPMAN: So just to jump ahead in the narrative of your evidence, can we take it that your later recommendation to support release of version 5.1 in March 2020 is an example of you exercising that delegated authority?

40 BRIG FENWICK: Yes.

MAJ CHAPMAN: Before I return to the subject of version 5.1 in some detail, I want to address with you, if I may, what you've had to say at 15 to

24 about the issue of fatigue in snapshot surveys. Do you see that in your statement?

BRIG FENWICK: Yes.

5

MAJ CHAPMAN: So at paragraph 15 of your statement, sir, you state that as the person responsible for Army's Aviation systems you issued directions and instructions specifically concerning fatigue, as well as other directions and orders that incorporated considerations of fatigue. Correct?

10

BRIG FENWICK: Yes.

MAJ CHAPMAN: Appreciating that it's now some time ago, do you have a specific recollection sitting here now of the content, or at least the intent, of some of those orders and directions?

15

BRIG FENWICK: Yes.

MAJ CHAPMAN: Could you provide an example?

20

BRIG FENWICK: Sure. The principal method for articulating this was through Standing Instructions for Aviation Operations. And throughout that document, or set of documents and instructions, were a number of references to the need to manage fatigue. I can't recall exactly whether there was one single instruction on fatigue in and of itself but, for example, we were certainly required to articulate duty hours for flying and the like.

25

That requirement came from the Defence Aviation Safety Regulations and we, through the Standing Instructions, provided Army's response on how fatigue management and duty hours would occur. There were also considerations of fatigue in numerous other parts of the Standing Instructions. The example that comes to mind is in the instruction around flight authorisation. Fatigue was a consideration that needed to be considered before a flight authorisation could be given, and there were stipulations around that in the instructions.

30

35

MAJ CHAPMAN: In terms of the legislation governing fatigue management in Aviation, the Inquiry is aware that DASA introduced the DASR Aviation Fatigue Management in October 2021. Now, that was after your tenure as DG?

40

BRIG FENWICK: That's correct.

MAJ CHAPMAN: You left, I think, in May 2021?

45

BRIG FENWICK: I left in May, yes.

5 MAJ CHAPMAN: Yes. However, the Inquiry has received some evidence that Defence is provided with advance notice of when DASRs are going to be introduced, effectively, so you can prepare and plan for the introduction. Is that your experience?

BRIG FENWICK: Yes. Sorry, to elaborate on that, if you like?

10 MAJ CHAPMAN: Yes.

BRIG FENWICK: The context is that through this period Defence was moving from FAA-based Regulations to EASA-based Regulations. And that had to happen relatively quickly. There were a number of Regulation sets that we were given advance notice would change so that we could generate a document that might be an acceptable means of compliance once the Regulation finally changed. So there were a number of these instances over time, particularly around this period, where we got forewarning, we'd start to do the work to try and adhere to the Regulations, so that whence it became effected, we had a Regulation ready to go. I can't quite recall whether we'd worked on fatigue management at that point.

20 MAJ CHAPMAN: So, sir, just in that answer, you referred to going from an FAA Regulation basis to, is it an EASA?

25 BRIG FENWICK: Yes, which is the European system.

MAJ CHAPMAN: So would you mind, just for the transcript, expanding on that? So is that an Aviation - - -

30 BRIG FENWICK: If you're going – I can't remember the EASA acronym, but it is, essentially, the European-based Air Safety Authority system. So the Regulations work slightly differently, and this was done throughout the aviation industry, so the civil industry as well as in Defence, and it was certainly part of the context of much of the Regulation changes we were going through at the time.

35 MAJ CHAPMAN: So you've accepted, I think, in answer to an earlier question that as a general rule you'd receive advance notice provided by DASA so you could prepare – of these Regulations. Do you have a recollection of being made aware of this particular one, so this is DASR Aviation Fatigue Management, that it was forthcoming?

40 BRIG FENWICK: I'm sorry, I don't recall whether it was there at the time.

MAJ CHAPMAN: So I take it then you don't have a recollection of being involved in any preparatory steps in relation to the introduction of that Regulation?

5

BRIG FENWICK: No, I don't recall it.

MAJ CHAPMAN: Can I show you Exhibit 37, which is the - - -

10

BRIG FENWICK: Thank you.

MAJ CHAPMAN: Sir, have you seen that document before?

BRIG FENWICK: I can't recall seeing it. But I note the date at the bottom, but I can't recall seeing it.

15

MAJ CHAPMAN: So accepting that, sir, you see that's the Fatigue Risk Awareness Tool, and it's a publication or it's a tool produced by the DFSB? You agree with that?

20

BRIG FENWICK: Yes.

MAJ CHAPMAN: As you've just noted, you see there at the bottom you have a date of 10 November 2020?

25

BRIG FENWICK: Yes.

MAJ CHAPMAN: So we can take it that this was released during your tenure as DG. Is that right?

30

BRIG FENWICK: That would appear so, yes.

MAJ CHAPMAN: Just to cast your mind back, was this tool, so far as you understand, implemented by you in Army Aviation during your tenure – so far as you can recall?

35

BRIG FENWICK: I'm sorry, I can't recall, but I imagine it must have been.

40

MAJ CHAPMAN: Can I next show you Exhibit 39? Just while it's on the way, that's the Aviation Fatigue Management Guidebook, version 1. Do you see that on the front, sir?

BRIG FENWICK: Yes.

45

MAJ CHAPMAN: Have you seen this guidebook before?

BRIG FENWICK: I don't recall seeing this before.

5 MAJ CHAPMAN: Can I ask you, sir, to go to page 6 of the guidebook.

BRIG FENWICK: Yes.

10 MAJ CHAPMAN: Just before I do that, you accept that this was introduced in April 2021?

BRIG FENWICK: Yes.

15 MAJ CHAPMAN: And this was, again, during your time as DG?

BRIG FENWICK: Yes.

20 MAJ CHAPMAN: At page 6, you see there that the guidebook introduces the Fatigue Management Program, which is set out at chapters 4, 5, 6, 7, 8 and enclosure 1?

BRIG FENWICK: Yes.

25 MAJ CHAPMAN: Can you go, sir, to page 35, please?

BRIG FENWICK: Yes.

30 MAJ CHAPMAN: And at page 35, do you see there that the guidebook replicates – and if you've got Exhibit 37 there as well? It may have been returned.

BRIG FENWICK: Sorry, which one is that?

35 MAJ CHAPMAN: That's the FRAT, the - - -

BRIG FENWICK: Yes.

40 MAJ CHAPMAN: Do you see there that the guidebook replicates Exhibit 37?

BRIG FENWICK: Yes, I can.

45 MAJ CHAPMAN: Sir, having been taken to those references, can you yourself whether you directed any changes being made to the OIPs because of the introduction of this guidebook?

BRIG FENWICK: I can't recall specifically. I do know that through the period – so certainly in the period that I was the DG, I would have done maybe two or three minor amendments of the whole of Standing Instructions for Aviation and at least one, maybe two, major rewrites. And I'm sure that these would have been in there. But I honestly can't recall.

MAJ CHAPMAN: Sure. So you don't have a specific recollection of directing or an amendment to the OIPs in relation to - - -

BRIG FENWICK: Specifically about this.

MAJ CHAPMAN: Yes.

BRIG FENWICK: I don't recall.

MAJ CHAPMAN: Just while you give that answer, I've been assisted by COL Streit with the acronym for EASA, which is the European Union Aviation Safety Agency.

BRIG FENWICK: Thank you. That would make sense.

MAJ CHAPMAN: This may be based on your last answer, sir, but if you don't have a specific recollection, do you have a recollection at all whether your staff sought out any expert advice during your time with respect to – from fatigue specialists?

BRIG FENWICK: Yes. Look, I can broadly recollect that this was a focal area over this period. I think with the knowledge that we had the impending change in the Regulation and the requirements under the fatigue management criteria for DASA, I recall that this was a pretty consistent drum beat of things we were talking about and reviewing. I just cannot recollect from that time the specifics of what we might have been doing.

But fatigue management overall was certainly an issue. This is really talking about acute fatigue at the time of needing to go flying and so on. And we also had concerns about chronic fatigue of people in a number of roles at this time. So I recall fatigue more broadly being a pretty constant drum beat of conversation and were we doing as much as we could.

MAJ CHAPMAN: As part of doing as much as you could, do you have – and I know I'm pressing on a specific recollection.

BRIG FENWICK: That's okay.

MAJ CHAPMAN: But about engaging fatigue specialists to give your Command advice about this guidance.

5 BRIG FENWICK: I can't recall specifically what you're searching for. But, as I say, there was almost across the board, at any point in time, where we were dealing with something of this significance and of this nature, we sought expertise. And no matter what that issue was, we would seek to be as fully informed as possible. So I do recall seeking expert advice in this regard, as I sought it for many other things throughout the time.

10 MAJ CHAPMAN: So if you did seek out the specialist advice, and assuming you didn't do that yourself, who within your team might have done so at your direction or otherwise?

15 BRIG FENWICK: I would expect that I would have done that through the Director of Operational Airworthiness, being COL Lynch.

MAJ CHAPMAN: Thank you.

20 BRIG FENWICK: That would be the normal place I would have gone to.

MAJ CHAPMAN: Just going back to your statement, sir, at 16 you state that:

25 *Fatigue management is both a Command and individual's responsibility.*

BRIG FENWICK: Yes.

30 MAJ CHAPMAN: Can you just elaborate on what you mean by that, please?

BRIG FENWICK: Yes, certainly. So because of its links to the *WHS Act* and the requirements for command responsibilities through the *WHS Act*, we reinforced quite stringently through all of our instructions and so on the responsibility that was important in command. And any activity that required Commanders to engage, it was a – fatigue was one of those instances. But it also, like other things in the *WHS Act*, had an individual responsibility, both the responsibility to operate in accordance with the instructions, as well as monitor self through the process.

MAJ CHAPMAN: Understood. You go on to say that concerns of fatigue were predominantly reported to command chains; is that right?

45 BRIG FENWICK: Yes.

MAJ CHAPMAN: It's in your statement?

BRIG FENWICK: Yes.

5

MAJ CHAPMAN: Does that mean down at the Regiment and Squadron levels? Is that what you're intending to mean by that reference?

BRIG FENWICK: So the – let me just make sure that – if we're referring
10 - - -

MAJ CHAPMAN: We're at 16, sir.

BRIG FENWICK: So, yes, that's where it would most commonly
15 manifest, because it's, again, about the individual facing a fatigue issue, and we would try to deal with those things at the lowest level. It's certainly where they manifest first. So, yes, but throughout the Chain of Command. And as with most systems of this nature, as the sense of the risk is increasing, then higher levels of the Chain of Command become involved
20 in that risk management process.

MAJ CHAPMAN: Understood. Next, at 17 you state that you were also looking for trends and indicators of aggregating risk in addition to the appropriateness of management of acute events. Do you see that?
25

BRIG FENWICK: Yes. So of course there's a command responsibility there as well. But it's where the safety system that sit – and the monitoring of it by a person like myself, who's not in the Chain of Command but is operating around the safety system and has roles within the safety system, can, with some amount of independence, try and look for trends, issues, things that maybe those who are in the command chain can't see.
30

MAJ CHAPMAN: You were doing that in your role as a safety system manager and HTA, I think you refer to it as?
35

BRIG FENWICK: Yes, which is the Hazard Tracking Authority; it's a DASA effected title.

MAJ CHAPMAN: You next refer to, and have reproduced in your statement, CCIRs with respect to fatigue risk; is that right?
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BRIG FENWICK: Yes.

MAJ CHAPMAN: And just to be clear for those listening, a CCIR is a Commander's Critical Information Requirement?
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BRIG FENWICK: That's right, yes.

5 MAJ CHAPMAN: And these are, just to summarise, a range of matters which, if triggered, required you to be alerted, briefed. Is that a fair summary?

10 BRIG FENWICK: Yes. If I could say, CCIRs are not something specific to the Aviation system, they're a military term. And they may have covered a number of issues. So, for example, Commander Forces Command would have had CCIRs to do with incidents in the unit other than Aviation safety-related incidents. But there was a specific set of CCIRs articulated in our safety directive around fatigue management, such that the Commander would be notified.

15 MAJ CHAPMAN: Thank you. And those are the ones you've put in the box on page 5?

20 BRIG FENWICK: That's correct.

MAJ CHAPMAN: At 19, as you've just alluded to, you said:

25 *In addition to your CCIRs, there were Commander Forces Command CCIRs which are also concerned, in part, with fatigue.*

BRIG FENWICK: That's correct.

30 MAJ CHAPMAN: Could I just ask you to go to Annexure B of your statement? And, sir, that, just to orient you, is a MAO Directive 01 of 19, Management of Safety and Operational Airworthiness within the Army Flying Management System.

BRIG FENWICK: Yes.

35 MAJ CHAPMAN: It's dated 7 February 2019; is that correct?

BRIG FENWICK: That's right, yes.

40 MAJ CHAPMAN: And can you see there that the Commander Forces Command CCIRs, they're actually at Annexure A within Annexure A, if that - - -

BRIG FENWICK: Yes, correct.

MAJ CHAPMAN: And at the top of that it says, “2019 Commander’s Critical Information Requirements”, and then sets out on that first page, and a bit into the second one, there the Commander Forces Command CCIRs?

5 BRIG FENWICK: That’s correct, yes.

MAJ CHAPMAN: And on the following page, am I right in thinking that the DGAVN requirements, these are your CCIRs?

10 BRIG FENWICK: That’s right, yes.

MAJ CHAPMAN: Is it fair to say that depending on the nature of the fatigue event that’s being experienced, it may be (1), reported to either you or straight to Commander Forces Command?

15

BRIG FENWICK: That’s correct. In design, it’s meant to be kind of scaling, right? So that there might be a degree of alertness that might be brought to my attention to monitor more closely before necessarily taking it to the next level. But that’s the design concept, yes.

20

MAJ CHAPMAN: And that’s a proposition which is reflected in paragraph 13(a) on page 3 of that annexure. Do you see that? Titled “MAO AM Monitoring”?

25 BRIG FENWICK: Sorry, bear with me. Yes.

MAJ CHAPMAN: I’ll just give you a moment to read that.

30 BRIG FENWICK: Yes. So, the concept there is, as it says, that they will be reported by – not necessarily all those people, you know, for each instance as applicable, it would come to someone’s attention at some point in time. And then it would be appropriately notified at that time.

35 MAJ CHAPMAN: And by referencing these CCRs in your statement all the way up to Commander Forces Command, you are highlighting, I take it, that fatigue, as you’ve mentioned, and fatigue related risk were key considerations for you and your command?

40 BRIG FENWICK: Yes, absolutely. Yes.

MAJ CHAPMAN: And at 21 of your statement – sorry to jump around all these documents – you refer to discussing tempo and fatigue management consistently with Brigade Commanders. Do you see that?

45 BRIG FENWICK: Yes, I do.

MAJ CHAPMAN: “To ensure that it was under appropriate management”. Do you see that?

5 BRIG FENWICK: Yes, I do.

MAJ CHAPMAN: And you say also that you were satisfied that it, that is the tempo and fatigue management were, your term, “the upper most in their minds”?

10

BRIG FENWICK: Yes.

MAJ CHAPMAN: And that was based, was it, on particular forums that you convened or was it based on just interactions with your Commanders. Do you have a recollection of that?

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BRIG FENWICK: Yes. My recollection is that it’s a combination of all of those. So quite deliberately we had scheduled, organised safety meetings to be able to address it specifically and make sure nothing was dropping through gaps. But I also can remember, even just in side-bar conversations with other Commanders, how this was a constant, again, like, drumbeat of conversation.

20

In particular, I can remember then BRIG Jobson who was Commander 16 Brigade at the time pretty consistently concerned about the number of activities. So, tempo was more about how many activities a unit was doing over time. And he quite deliberately, you know, raised concerns with me and Commander Forces Command where he thought it was not in the best interests of safety. So, it was very consistent.

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MAJ CHAPMAN: So, if I’ve just understood your evidence, you said, I think, that there were specific forums where fatigue and fatigue management were raised. Were they forums dealing only with fatigue and fatigue management, or are you talking about safety forums where this was an issue - - -

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BRIG FENWICK: I’m talking about safety forums, more broadly.

MAJ CHAPMAN: Yes.

40

BRIG FENWICK: Of which fatigue was an element.

MAJ CHAPMAN: So just to close that off. You have no recollection of convening a particular safety management – sorry, correction – a fatigue management or fatigue forum per se?

45

BRIG FENWICK: No, I don't recall doing that.

5 MAJ CHAPMAN: Thank you, sir. So next is the move to the topic of snapshot surveys. So you discuss this at paragraph 23 of your statement. And is it the case that snapshot surveys were one of the ways that you looked for transient fatigue levels?

10 BRIG FENWICK: Yes. Across the broad system of mechanisms that we had, yes, snapshot was one of them.

MAJ CHAPMAN: And another we've just been to earlier was CCIRs was another one?

15 BRIG FENWICK: That's correct.

MAJ CHAPMAN: And just to return to the matter briefly of CCIRs. Do you recall, roughly, how many CCIRs were triggered concerning fatigue during your time – these are CCIRs to you?

20 BRIG FENWICK: No, I can't remember.

MAJ CHAPMAN: Do you have any recollection, whether it was none, single, dozens? Just no recollection?

25 BRIG FENWICK: No, it wouldn't be none, that I can recall. But it wasn't lots, no.

MAJ CHAPMAN: So, single digits perhaps?

30 BRIG FENWICK: Yes. I mean they're quite – something has to happen to trigger a CCIR in that regard. Specifically, as they're written there, I can pretty confidently say there would have been more than one, but not dozens and certainly not zero.

35 MAJ CHAPMAN: And is the single one that you can recall, do you have a recollection of what was done in response to that CCIR?

40 BRIG FENWICK: No, I cannot. I cannot remember any specific instance, nor therefore, what was done about that specific instance. But I do think it's fair to say that once something of that nature came to my attention, the first thing I would do was contact, you know, the relevant Chain of Command in that instance to understand it more.

And then even though it may not have triggered the Commander's CCIR, it would've been my practice to, at least, discuss it with him to keep him fully aware.

5 MAJ CHAPMAN: Ms McMurdo, I see the time. I have one more question on this topic.

MS McMURDO: Certainly. I'm happy to sit to 1.15, if that helps.

10 MAJ CHAPMAN: Thank you.

Sir, what about fatigue reports that were filed in Sentinel? First of all, you had visibility of those?

15 BRIG FENWICK: I had the ability to get into Sentinel. It wasn't something that I routinely did. I fundamentally had a staff to do that.

MAJ CHAPMAN: Can you give us a sense of what your staff were telling you in terms of estimates of Sentinel reports during your time?

20

BRIG FENWICK: No.

MAJ CHAPMAN: Just move to FACE checks now. Different topic, and do you understand a FACE check to be – well, first of all, I should establish, have you heard of a FACE check before?

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BRIG FENWICK: Yes, I have.

MAJ CHAPMAN: Thank you, sir. And you're aware that it stands for Fatigue, Attitude, Complacency and External factors?

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BRIG FENWICK: Yes, I do.

MAJ CHAPMAN: And were you aware that aircrew were conducting FACE checks prior to sorties during your time as DG?

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BRIG FENWICK: Yes. I remember the early introduction of FACE checks long before this period as a formalisation of the authorisation process.

40

MAJ CHAPMAN: And similarly, are you familiar with the expression, "FACEing out" as the Inquiry has heard evidence about?

BRIG FENWICK: I can't recall that.

45

MAJ CHAPMAN: It's been conveyed to the Inquiry it's something referring to aircrew, essentially voluntarily removing themselves from a crew for that sortie.

5 BRIG FENWICK: Okay.

MAJ CHAPMAN: And that might occur as it's been explained to the Inquiry for one or more reasons related to the acronym, so Fatigue, Attitude, Complacency, External factors, would you agree with that as a general proposition?
10

BRIG FENWICK: Yes, I do.

MAJ CHAPMAN: And I take it from your earlier answer that you don't recall whether a FACE out, or a FACE out event, triggered one of your CCIRs?
15

BRIG FENWICK: I don't recall that.

MAJ CHAPMAN: First of all, do you have a recollection of whether pilots or aircrew within your command, if they FACE'd out, that would be something that would be reported to you?
20

BRIG FENWICK: So, I'm sorry, I'm just going to be very deliberate with some of the words here. So when I was the DG, I was not in command. So it is possible that the instance that you described as a FACE out, could have happened within a command chain without me becoming aware of it as the DG. But if I can perhaps answer your questions in a slightly different way and put myself back where I was in command, for example, at 1st Aviation Regiment, I would've expected to hear about that when I was in command.
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30

MAJ CHAPMAN: When you were in command. Would you also accept that an individual who is FACEing out by reason of fatigue or a number of these factors, that's potentially an aviation safety issue?
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BRIG FENWICK: Yes, I can agree to that.

MAJ CHAPMAN: Now, it being potentially a Aviation safety issue, would that be something that, as DG, you would expect to come up on your radar in any way?
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BRIG FENWICK: I cannot recall the specifics of whether we were tracking those in that instance. It is possible that we recorded that as an incident, a safety incident in Sentinel which would then – the way that I would see that was when we would then go through a safety meeting that
45

the – I forget the name of the – when we come together twice a year – and go through all reports looking for trends and repeated instances and aggregated risk.

5 So, I guess, specifically to your question, I may have become aware of it through that reporting mechanism, but it would not be normal that that instance would be reported to me as it happened. Does that make sense?

10 MAJ CHAPMAN: It does. And that's because it would ordinarily be reported just within the command stream?

BRIG FENWICK: That's right. Because there may be any number of potentially quite low-level things, like feeling ill, that would require you to make that statement that, "I'm not fit to fly today", and that wouldn't necessarily be something I needed to know about in a system sense.

20 But an accumulation of those things over time, I would expect to have been reported through the safety incident system and therefore I would start to become aware of them in that way.

MAJ CHAPMAN: So do you recall during your time as DG initiating or approving any fatigue-specific surveys or studies for aircrew?

25 BRIG FENWICK: I can't remember any.

MAJ CHAPMAN: So earlier you recall, don't you, giving evidence that you were discussing tempo and fatigue consistently with all Commanders and that you were satisfied that it was uppermost in their minds. Do you agree that your approach was more to – you were looking for trends and indicators for aggregated fatigue risk?

35 BRIG FENWICK: Predominately that was my role, was to look for those things. I think the times that I was also becoming aware of it in discussion with Commanders was because I was a peer and sounding board for a number of those things for the Commanders as well. So, for example, in discussions I had with then BRIG Jobson, you know, we would discuss the things that we were seeing and making sure that we were seeing the same thing and responding appropriately.

40 MAJ CHAPMAN: And when you were looking for these trends and indicators, you would be gathering that information from, among other sources, as you say, discussions with Commanders, but snapshot surveys and the CCIRs and so forth. There's a collection of information.

BRIG FENWICK: That's right. And the OTCRM and, you know, a bunch of tools where we were trying – and we were doing a lot of work, particularly in and around 2020 I think it was, where we had a number of silos, if you like, of where safety occurrences and risks were being reported and we were concerned that aggregated risks weren't necessarily coming to the fore.

So a lot of work was done by COL Lynch's excellent work with advice and support to try and make sure we could see where risks were aggregating based on different things. Not just based on an aircraft type. Not just based on a location. But whether there were other things we should be seeing in the system.

MAJ CHAPMAN: Sir, would you agree with the suggestion that an approach such as that you've described is more – it's a passive approach as opposed to, in a sense, that it's reactive to snapshot surveys, CCIRs, reports that were given to you as they arose?

BRIG FENWICK: No, I don't accept that. It was a mechanism that forced us to be curious and enquiring.

MAJ CHAPMAN: So you don't accept that there was a passive approach. And you would suggest, would you that it was active in the sense that you were actively investigating if the units were experiencing fatigue?

BRIG FENWICK: Yes, I believe we were.

MAJ CHAPMAN: And just looking at paragraph 23 of your statement, you refer to the snapshot surveys and how you would assess results and you'd discuss them with Aviation Organisational psychologists, staff, Brigade Commanders, and the Commander Forces Command. Do you see that?

BRIG FENWICK: Yes, I do.

MAJ CHAPMAN: And can you just go, please, to that guidebook we went to before, Exhibit 39? And go to page 9 of that document and extracted here, sir, you'll see some graphs and – do you have the page?

BRIG FENWICK: Yes.

MAJ CHAPMAN: Yes. And that's taken, as you'll see from the top line, from the 2020 DFSB snapshot surveys, which include measures of fatigue.

BRIG FENWICK: Yes.

MAJ CHAPMAN: And, sir, is this something that you expect you would have seen – well, these are the results that you expect you would have seen while you were DG?

5

BRIG FENWICK: Yes. Although I can't remember them presented quite this way. But, yes, I think that's true.

MAJ CHAPMAN: And you'll see there, sir, that it shows 19.13 per cent – this is at the top one - - -

10

BRIG FENWICK: Yes. Seen.

MAJ CHAPMAN: - - - of aircrew thought that fatigue management system was ineffective. Do you see that?

15

BRIG FENWICK: Yes.

MAJ CHAPMAN: While 15.85 per cent were unsure and 65.03 per cent thought it was effective. Do you see that?

20

BRIG FENWICK: Yes, I do.

MAJ CHAPMAN: So is it the case that we have 1:5 of the aircrew thought it was ineffective at that time? Do you agree with that?

25

BRIG FENWICK: By the statistics there, yes.

MAJ CHAPMAN: By the statistics. And then you see that 21.86 per cent of aircrew thought that scheduling management was ineffective.

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BRIG FENWICK: Yes, that's the - - -

MAJ CHAPMAN: Sorry, in the next one.

35

BRIG FENWICK: Yes.

MAJ CHAPMAN: While 12.57 were unsure and 65.57 per cent thought it was effective. Do you see that?

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BRIG FENWICK: Yes.

MAJ CHAPMAN: So, again, we have about 1:5 aircrew thought scheduling management was ineffective. Do you agree?

45

BRIG FENWICK: Yes.

5 MAJ CHAPMAN: And my question is, sir, if you received this, which you accept that you did, what steps do you recall taking in response to this feedback?

10 BRIG FENWICK: Well, I think the next question I would ask is, just how much of this was actually within the Army safety system? This looks to me like it was probably produced for the whole of Defence Aviation Safety Report, and so it's unclear to me from this just how I would necessarily interpret it as the person responsible for the Army Aviation safety system.

15 MAJ CHAPMAN: Now, it's probably a convenient time; I'd be moving to another topic.

MS McMURDO: Yes, all right.

20 MAJ CHAPMAN: If that suits?

MS McMURDO: We'll have our lunch adjournment now and resume at 2 o'clock. Thank you.

25 **HEARING ADJOURNED**

HEARING RESUMED

30 MS McMURDO: We'll get the witness back.

And again, BRIG Fenwick, if you need a break, please let me know.

35 BRIG FENWICK: Will do, thank you, ma'am.

MS McMURDO: Yes, MAJ Chapman.

MAJ CHAPMAN: Thank you, Ms McMurdo.

40 Sir, I think we left off before the luncheon adjournment discussing the fatigue and fatigue management. I'll just move now to a different topic.

BRIG FENWICK: Sure.

MAJ CHAPMAN: The next topic, I'll be addressing is the version 5.10 symbology which you deal with at paragraph 25 and following of your statement, just so you've got it in front of you.

5 BRIG FENWICK: Mm-hm.

MAJ CHAPMAN: And, sir, you begin your discussion in your statement at 25 and following under the heading, "Context", and you make this statement:

10

It is important to note the context of events surrounding the period of the version 5.10 HMSD symbology upgrade and Service release.

Correct?

15

BRIG FENWICK: (No audible reply).

MAJ CHAPMAN: You then outline at paragraphs 26 to 28 some background matters concerning what I'll describe as the retirement of the Black Hawk at that time.

20

BRIG FENWICK: Yes.

MAJ CHAPMAN: And the pressures that attended the transition from that airframe to the MRH. Do you agree with that?

25

BRIG FENWICK: Yes.

MAJ CHAPMAN: And, sir, at 28 you outline the introduction of the version 5.10 symbology essentially represented an advantage, especially to Special Operations approaches.

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BRIG FENWICK: Yes.

MAJ CHAPMAN: And the advantage that you're describing there, sir – and I'd ask if you would agree – that the upgrade that version 5.10 introduced as the primary feature was a distance to target information, or distance to target symbology.

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40 BRIG FENWICK: Did I call it a primary feature? It was certainly a very - - -

MAJ CHAPMAN: They're my words, sir. It was a - - -

45 BRIG FENWICK: Yes. It was a very important aspect.

MAJ CHAPMAN: Yes.

BRIG FENWICK: Amongst a number of others, yes.

5 MAJ CHAPMAN: But that was – my words – the primary feature as you understood it of the version 5.10 symbology upgrade?

BRIG FENWICK: Certainly around the Special Operations approach at
10 the time. There were other improvements in the symbology; some of which I can remember, some of which I can't.

MAJ CHAPMAN: Sure.

BRIG FENWICK: But overall, as a package, yes, it was – that was an
15 important aspect.

MAJ CHAPMAN: And the advantage of this was – that is, the distance to go symbology – was it mitigated some of the risks associated with those
20 approaches?

BRIG FENWICK: Yes, it was certainly an important aid in those approaches in particular environments.

MAJ CHAPMAN: And without going into detail about that, which may present security issues - - -

BRIG FENWICK: Yes.

MAJ CHAPMAN: - - - would you agree with this description: that it was
30 essentially a capability intended to inform pilots of the distance that the aircraft was relative to a nominated position?

BRIG FENWICK: Yes.

MAJ CHAPMAN: And I want to ask you now a series of questions concerning Service release of version 5.10.

BRIG FENWICK: Okay.

MAJ CHAPMAN: And just to set that evidence in context, would you accept from me the following propositions that I'm just going to read out as
40 a summary of this context. So the first is that version 5.10 refers to a HMSD, helmet-mounted sight display, software upgrade on the TopOwl system?
45

BRIG FENWICK: Yes.

5 MAJ CHAPMAN: That is, an upgrade which we have just been discussing. It also introduced the distance to target symbology?

BRIG FENWICK: Among other things, yes.

10 MAJ CHAPMAN: Among other things.

BRIG FENWICK: Yes.

15 MAJ CHAPMAN: And that this upgrade was, in 2019, the subject of flight testing by Army's Flight Test Organisation, AATES?

BRIG FENWICK: Yes.

20 MAJ CHAPMAN: And that AATES produced a report in June 2019 which – well, first of all, do you accept they produced a report in June 2019?

BRIG FENWICK: Yes.

25 MAJ CHAPMAN: And it essentially assessed that report that the ambiguous attitude when looking off-axis presented an unacceptable risk to flight safety. Do you agree that's what AATES said?

BRIG FENWICK: I agree that's what they said, yes.

30 MAJ CHAPMAN: And that there was a risk that included a risk to CFIT, which is controlled flight into terrain?

BRIG FENWICK: Yes.

35 MAJ CHAPMAN: And that AATES recommended, among other steps, further information be gathered or was required; correct?

BRIG FENWICK: Yes.

40 MAJ CHAPMAN: And that in response to that AATES' assessment, was it at your direction that Standards Branch and not AATES undertake an OPEVAL in around late 2019, early 2020?

BRIG FENWICK: Yes. That's as I recall it, yes.

MAJ CHAPMAN: And I'm happy to take you to the – we'll get to the document - - -

5 BRIG FENWICK: That's okay. And just to be clear, I think I directed it to Standards Branch, but it was a team – so it included many areas of expertise to try and solve this problem.

MAJ CHAPMAN: It was only put on the basis that you were involved in submitting or - - -

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BRIG FENWICK: I certainly initiated it.

MAJ CHAPMAN: Thank you. And that OPEVAL essentially did not agree with AATES' assessment of the risk presented by the ambiguous attitude?

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BRIG FENWICK: Yes. As I recall it, they analysed the result and the way that AATES arrived at that result and were able to conclude, against a different risk measurement methodology, a different answer. But that wasn't where we stopped.

20

MAJ CHAPMAN: Yes. And we're going to go into it further, but just at its high level, that the OPEVAL, I think you agree with this, did not agree with AATES' assessment of the risk?

25

BRIG FENWICK: Yes, I recall that being the case.

MAJ CHAPMAN: And is it also your recollection that while it didn't agree with the OPEVAL and agreed with the risk assessment, the OPEVAL also did not disagree with the identification of the issue that was raised by AATES, the ambiguous symbology?

30

BRIG FENWICK: Yes. So if I can paraphrase to be sure that I'm clear I'm answering you correctly. There was no disagreement about whether the symbology was there or not or available. It was there. And it performed in the way that AATES described it. It's the impact of that that it was different.

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MAJ CHAPMAN: And the OPEVAL report, again, just at a general level, then reassessed that risk, the "Unacceptable risk" to "Undesirable". Is that your recollection?

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BRIG FENWICK: Around that particular piece of the symbology?

MAJ CHAPMAN: Yes, just around the off-axis, to be clear?

45

BRIG FENWICK: Yes.

5 MAJ CHAPMAN: So it's the case that basically we have two competing views, not as to the identification of the issue but as to the risk that was presented by this upgrade. We have, on the one hand, AATES' assessment of the risk as "Unacceptable". And then we have on the other hand the OPEVAL's assessment of it as undesirable. Would you agree with that?

10 BRIG FENWICK: Yes. But I would say that they were coming at it in slightly different ways. So the AATES report very deliberately – and one of the reasons why we have, you know, Flight Test Organisations like this are looking at a very slim part of the problem, and we needed to put that then in the operational context. So while AATES were looking at it in a
15 very technical way, we had to put it in the operational context.

And with that additional context you end up with a slightly different conclusion or view of the same problem.

20 MAJ CHAPMAN: The slightly different assessment of the risk?

BRIG FENWICK: Yes.

25 MAJ CHAPMAN: And for the reasons that you've gone through in detail in your statement, again, at an overview level, the evidence is that you approved Service release of this version?

BRIG FENWICK: Yes, I did.

30 MAJ CHAPMAN: Yes. So just in that context, I want to ask you now a few questions in further detail about Service release. So you were asked to respond – and I'm at paragraph 30 – you were asked to respond to a question concerning a minute that you sent to COL Thomas.

35 BRIG FENWICK: Yes.

MAJ CHAPMAN: And it's Andrew Thomas of the MRH Project Directorate.

40 BRIG FENWICK: Yes.

MAJ CHAPMAN: And you respond at paragraph 30. And can I just – I think it might be in your statement, sir. I'll just pull up the reference.

45 BRIG FENWICK: In terms of the minute, itself?

MAJ CHAPMAN: Yes. The minute's included in your statement. So we're in Exhibit 103.

5 BRIG FENWICK: Yes.

MAJ CHAPMAN: It doesn't appear to be marked as a number. It follows the Directive that we went to earlier, and just let me know when you have that, sir. It's a short - - -

10 BRIG FENWICK: Yes, I've got it.

MAJ CHAPMAN: - - - one-page document. I might wait for the Chair.

15 MS McMURDO: Yes, thank you.

MAJ CHAPMAN: And you have that, sir?

20 BRIG FENWICK: Yes.

MAJ CHAPMAN: And you recognise that as the minute to COL Thomas dated 20 March?

25 BRIG FENWICK: Yes.

MAJ CHAPMAN: And did the MRH Project Directorate sit within Army Aviation at that time?

30 BRIG FENWICK: No. The Project Directorate belonged to the delivery agency, the Capability Statement Group.

MAJ CHAPMAN: So COL Thomas – and I appreciate what you said earlier about your command – was COL Thomas within, if I can put it, a Chain of Command that you were a superior of or - - -

35 BRIG FENWICK: No.

40 MAJ CHAPMAN: No. And the Directorate, the MRH Project Directorate, had the principal responsibility for the introduction and delivery of the platform into Service?

BRIG FENWICK: Yes.

45 MAJ CHAPMAN: And that also included, did it, delivery of the upgrades to the platform, the MRH platform?

BRIG FENWICK: Yes.

5 MAJ CHAPMAN: And in this case, dealing with this subject, it included the software upgrade, version 5.10?

BRIG FENWICK: Yes.

10 MAJ CHAPMAN: And just if you look at that minute – as you know it is a short document – would you agree that the purpose of this minute was for you to request COL Thomas to progress version 5.10 to Service release?

BRIG FENWICK: Yes.

15 MAJ CHAPMAN: And when we're referring to "Service release", in this context, just to be clear, we're talking about you giving approval as DG to version 5.10 being installed in the MRH fleet?

BRIG FENWICK: Yes.

20 MAJ CHAPMAN: And is this document essentially – and you can agree or disagree – does this document essentially represent the final word, if I can put it like that, in terms of the authority for the project office to install version 5.10 in the fleet?

25 BRIG FENWICK: Yes.

30 MAJ CHAPMAN: And, sir, was it your expectation, at this time, having sent this minute to the MRH Project Office, that the upgrade would be installed promptly after this?

35 BRIG FENWICK: I'm not quite sure what you mean by "promptly", but yes, with effect as quickly as it could happen. I can't remember if there were impediments at the time, but - - -

40 MAJ CHAPMAN: Yes. I'll put that another way, sir, just to be clear about that. It was your expectation that there were no other obstacles, in a technical sense, or authorisations required for the upgrade to then be installed in the fleet.

BRIG FENWICK: No, that's right. And perhaps to help clarify. So then COL Thomas, while he was not in a Chain of Command to me, was responsive, effectively, to my authority for configuration change on the aircraft. So my responsibility here for a Service release of this nature was

to make sure that all of the operating systems and support systems were in place such that it was safe to operate.

5 And so the then direction in this sense to COL Thomas is an authority to effect that configuration change, again, through and with the Type Certificate Holder. But it was also a release of funds and contractual arrangements which I had the authority to do with another one of my DG Aviation hats.

10 AVM HARLAND: Who was the Military Type Certificate Holder?

BRIG FENWICK: So at the time I'm fairly sure it was David Marshall, but I'm not 100 per cent sure on that, sir. But it was the SPO. As normal practice, the SPO was the Type Certificate Holder.

15 AVM HARLAND: Okay, thank you.

MS McMURDO: Do you know at the time the AATES report – you received the AATES report which raised the concerns. At that stage, had
20 Army already committed to purchasing this upgrade?

BRIG FENWICK: Not in that sense, ma'am. So it was part of a standard program of software availability. Much of the other changes we wanted in the software we'd actually requested. So we were keen to get
25 this upgrade. It's my recollection that there'd been – while funds were put aside, they weren't committed in that sense. So we hadn't paid for it in that sense.

MS McMURDO: Contracted for it?

30 BRIG FENWICK: Well, we were contracted for the work to do as part of the overall contract, is my recollection, ma'am. So, as I say, it was the routine seeking of improvements to software across the board, whether it be in the helmet-mounted displays or in the aircraft themselves, was a
35 contracted arrangement.

And there would have been elements of the contract that were ongoing. There would've been elements of the contract that were per circumstance. My recollection is, is even into March 2020, once we achieved Service
40 release, there was still an amount of money that needed to be committed and an invoice created and a purchase order effected.

So, in that sense, I don't think it's right to say we had already paid for this once we embarked on the project. The truth is that there was still

commitments and agreements and agreements to be made on behalf of the Commonwealth in this engagement at that point.

5 MS McMURDO: I see. So it was complicated, in other words?

BRIG FENWICK: The contract was a complicated contract, ma'am.

10 MS McMURDO: So you had asked for some of these improvements. So there was argy-bargy between Army and the provider as to what was provided, when and how, and then invoices would be sent and paid and so forth.

BRIG FENWICK: That's right. And there is - - -

15 MS McMURDO: A complicated relationship.

20 BRIG FENWICK: Yes, ma'am. There are certain elements of the contract where invoices would periodically just come for power-by-the-hour type flying arrangements or for particular maintenance items, whatever it might be. Some of those would be routine invoices scheduled over time, in accordance with the contract. Others would have been by occurrence, you know, for particular things to be paid for.

25 And as I recall, the nature of some of these things were that the payment from the Commonwealth wouldn't occur until the actual final Service release, or something of that nature, as a confirmation of the activity being conducted and the Commonwealth's acceptance of the standard of that.

30 MS McMURDO: So you say at paragraph 30 that your recollection is:

It was a routine program provided by Airbus and included the European nations; that is, all user nations would receive the upgraded software.

35 Was it your understanding that the European nations had received this upgraded software at the time you signed the minute putting it into force, and that some had - - -

40 D137: Ma'am, I honestly can't remember.

MS McMURDO: You can't recall?

45 BRIG FENWICK: But I remember in the – there was a group called a “user group of the MRH user nations”.

MS McMURDO: Yes.

BRIG FENWICK: We certainly, through that process, sought
5 understanding from other nations of what they were seeing in the software
upgrade and we incorporated that into our considerations of whether it was
appropriate or not.

MS McMURDO: So you, in considering whether it was appropriate,
10 despite the AATES report, you were taking into account that other
European nations had incorporated the software. Is that right?

BRIG FENWICK: No, ma'am. I'm not sure that they'd incorporated it.
I can't recall.

15 MS McMURDO: You can't recall.

BRIG FENWICK: I know that they were all aware of it and its nature. So
I'm confident to say that, but I can't recall whether it had been
20 operationalised through any of the fleets anywhere else.

MS McMURDO: Following on from that then, I think it probably
follows that you didn't rely on the fact that the European nations – or some
European nations already had it and were happy with it? That didn't enter
25 into your decision-making?

BRIG FENWICK: Not in and of itself, ma'am. It was a worthy test of
whether what we were thinking and seeing was what we thought we were
30 thinking and seeing. So we did not - - -

MS McMURDO: But did you tell me you don't know whether they had
operationalised it or not?

BRIG FENWICK: No, ma'am. So what I'm saying is that they had seen
it and were going through the same process that we were going through, as
35 I can recall. What I mean by "operationalising" is then agreeing to Service
release, or equivalent, in other nations. I can't recall whether that had
happened or not.

MS McMURDO: And if you don't recall whether it had happened, then
40 you're not saying that you're relying on the fact that it had happened to
make your decision?

BRIG FENWICK: Okay. No, you're right.

45 MS McMURDO: Yes. Thank you.

BRIG FENWICK: I was not relying on Service release in other nations to make my decision, no.

5 MS McMURDO: Thank you. Thank you, COL Chapman.

BRIG FENWICK: Sorry.

MAJ CHAPMAN: Just on that - - -

10

BRIG FENWICK: Thank you, sir.

MAJ CHAPMAN: - - - before we go on, on the minute dated 20 March '22, the MRHPD, the one we're talking about, it doesn't have any references there and it's certainly not addressed to the Military Air Operator. So two questions: on what did you rely on to satisfy yourself that the Service release was appropriate; and how would the Military Air Operator know that there was an impending change to the configuration of one of the aircraft?

20

BRIG FENWICK: So to answer your second question first, sir, I had the delegation to make the decision on behalf of the Military Air Operator and then I would have advised him in routine matters on the way through. Much as I did, as I also had the authority delegated by him to change orders, instructions and procedures.

25

Clearly, when some of those orders, instructions and procedures are changed, they change the risk profile the Military Air Operator is accepting. So where I felt that that was in some way changing his risk profile, we had a discussion about that to make sure that I wasn't just unhinging the system in that way.

30

To your first question, this had been a process that had now, at this point, taken nine months and I had been pretty active in the ongoing enquiry of what we were doing and considering to mitigate perceived or real risks in the software. So I'd been on a journey here for quite some time, as I recall it, through a series of events early in 2020 around other decision briefs I'd received, risk management profile presentations I'd received, including by PowerPoint and other mechanisms, as well as I'm relatively sure that immediately prior to this minute we had had a Steering Committee meeting at which the benefits and risks of 5.10 were discussed.

35

40

And so there were a number of points at which I came to the point of concluding that this was the best thing for us to do. And, in fact, I think

that there is a decision brief that articulates my agreement with that prior to this direction to COL Thomas.

5 MAJ CHAPMAN: Okay, thank you. Ms McMurdo, an issue has been raised by learned Counsel for the Commonwealth that she understands that some of Counsel representing don't have a copy of this minute.

MS McMURDO: It's right at the back. It's after Annexure C.

10 LCDR GRACIE: Yes, it's not there.

MS McMURDO: No, you don't have it?

15 LCDR GRACIE: I've been scratching around for the last 40 minutes looking for it. There's only three annexures identified in the statement, Exhibit 103, in the copy I have. So I'd like to make sure that we have the same things.

MS McMURDO: Do we have any photocopy facilities here?

20 MAJ CHAPMAN: No, I'm told not.

MS McMURDO: No. Is there any problem taking photographs of it?

25 MAJ CHAPMAN: Sorry, just a moment.

AVM HARLAND: It's got no classification on it. There's no classification.

30 MS McMURDO: There's no classification on it, I'm told. So it may be possible to take some photos of it and distribute the photos that way.

MAJ CHAPMAN: Apparently, ma'am, it was emailed, I'm told, on 28 October to everyone, so they should at least have access to it.

35 LCDR GRACIE: I'm told that AGS can copy it in about five to 10 minutes.

40 MS McMURDO: All right then. So does that require an adjournment or could we go on with other matters?

LCDR GRACIE: It has been a bit hard to follow, I must say, ma'am. I've been trying to find this document for a while and I've then made some enquiries and no one seems to have it. So it seems important.

45

MAJ CHAPMAN: What we're dealing with is for a few minutes - - -

MS McMURDO: So we'd better – was there any other area we could go on to while the photocopies – get photocopies or - - -

5 LCDR GRACIE: Personally, I'd - - -

MS McMURDO: Could we stand this witness down and start the next witness? I'm just trying to progress matters.

10 MAJ CHAPMAN: I understand.

LCDR GRACIE: From my point of view, I don't mind if we continue while the copy is being made because I haven't been able to follow it for the last 10 minutes anyway.

15 MS McMURDO: Yes.

LCDR GRACIE: So it won't matter. It's such a short document - - -

20 MS McMURDO: I'll give you my copy and the Air Vice-Marshal and I will share a copy if it becomes necessary to look at it, so at least there's one hard copy there for you.

UNIDENTIFIED SPEAKER: I'm told it's a - - -

25 MAJ CHAPMAN: It's a one-page document.

LCDR GRACIE: Is it? This won't take long.

30 MS McMURDO: In the meantime, Ms Musgrove, are your instructors able to do some photocopies?

MS MUSGROVE: I'm instructed that they are. I would just like to – it may be of assistance – slow down to go faster – if we could take perhaps a five-minute adjournment? Everyone can reconcile what they have to what has been tendered and then they can come back when they've got the full brief or – for this witness.

35 MS McMURDO: I give up. I give up. Okay, let me know when you're ready to resume. Thank you.

40

45 <WITNESS WITHDREW

HEARING ADJOURNED

5 **HEARING RESUMED**

MS McMURDO: Yes, MAJ Chapman.

10 MAJ CHAPMAN: Ms McMurdo, I call COL David Anthony Lynch.

MS McMURDO: Yes. So just to clarify then, the former witness's evidence is going to be adjourned to a later time?

15 MAJ CHAPMAN: That's so.

MS McMURDO: Yes, thank you.

MAJ CHAPMAN: Thank you, Ms McMurdo. I should indicate,
20 Ms McMurdo, that SQNLDR Schmitt is taking him through his initial part of the evidence.

MS McMURDO: Yes, okay. Thank you.

25

<COL DAVID ANTHONY LYNCH, Affirmed

<EXAMINATION-IN-CHIEF BY SQNLDR SCHMITT

30

MS McMURDO: Colonel, let me know if at any time you need a break. Just ask.

35 COL LYNCH: No problems, ma'am.

MS McMURDO: Thank you. Yes.

SQNLDR SCHMITT: Sir, could you please state your full name?

40

COL LYNCH: David Anthony Lynch.

SQNLDR SCHMITT: And rank?

45 COL LYNCH: Colonel.

SQNLDR SCHMITT: As part of these proceedings, have you prepared a statement?

5 COL LYNCH: I have.

SQNLDR SCHMITT: Can I show you a document?

COL LYNCH: The first time I've seen it printed, but - - -

10 SQNLDR SCHMITT: So just familiarise yourself with the document please?

COL LYNCH: Sorry, I'm just checking the references.

15 SQNLDR SCHMITT: Take your time.

COL LYNCH: Okay.

20 SQNLDR SCHMITT: Can I just ask you to take up the statement portion as opposed to the annexures. So you agree with me that the statement is 32 pages in length?

COL LYNCH: Agreed.

25 SQNLDR SCHMITT: And on the last page is your signature; is that correct?

COL LYNCH: That is correct.

30 SQNLDR SCHMITT: It's dated 28 October 2024; correct?

COL LYNCH: That is the date that I signed it.

35 SQNLDR SCHMITT: If you can just go back to the first page? There's a date of "30 October" appears?

COL LYNCH: Yes.

40 SQNLDR SCHMITT: So that should read "28 October"; is that correct?

COL LYNCH: That should. That was the date that I intended to sign it.

SQNLDR SCHMITT: Do you have a pen there?

45

COL LYNCH: I do.

SQNLDR SCHMITT: Could you just make that amendment?

5 COL LYNCH: Done.

SQNLDR SCHMITT: Thank you. So those 32 pages, you agree that's your statement?

10 COL LYNCH: Agreed.

SQNLDR SCHMITT: And the 16 annexures in the bundle, those form the annexures to your statement?

15 COL LYNCH: Correct.

SQNLDR SCHMITT: Thank you, that's the evidence-in-chief.

MS McMURDO: Thank you, SQNLDR Schmitt.

20

SQNLDR SCHMITT: Sorry, I should tender that.

MS McMURDO: Yes. Exhibit 104, COL Lynch's statement and annexures.

25

**#EXHIBIT 104 - STATEMENT OF COL LYNCH
AND ANNEXURES**

30

SQNLDR SCHMITT: Thank you, ma'am.

MS McMURDO: Yes, MAJ Chapman.

35

<CROSS-EXAMINATION BY MAJ CHAPMAN

MAJ CHAPMAN: Thank you, Ms McMurdo.

40

Sir, could you please confirm you received each of the following for the purpose of today? I'll just read out a list of material you should have received. First is a section 23 Notice requiring your attendance?

45 COL LYNCH: I have.

MAJ CHAPMAN: Thank you. Second, is an extract of the Inquiry Directions?

5 COL LYNCH: I have.

MAJ CHAPMAN: Third, is a copy of my appointment as an Assistant IGADF?

10 COL LYNCH: I have.

MAJ CHAPMAN: Fourth, is the Frequently Asked Questions Guide for Witnesses at IGADF Hearings?

15 COL LYNCH: I have.

MAJ CHAPMAN: Fifth, is a Privacy Notice for Witnesses Giving Evidence?

20 COL LYNCH: I have.

MAJ CHAPMAN: Thanks for that, sir. And your statement has been now tendered as Exhibit 104. Sir, I'll turn to some introductory remarks that you make at the beginning of your statement, which is at 1 to 4. Though
25 to begin with, I'd like to, if I may, run through your background and I'd just ask you, for the sake of just this summary, to simply agree or disagree with the summary. So you joined the Australian Army in 1988.

COL LYNCH: Correct.

30

MAJ CHAPMAN: Your Aviation career in Army commenced around 1990 with Pilots' Course at Point Cook and further training at Oakey.

COL LYNCH: Correct.

35

MAJ CHAPMAN: You served as a reconnaissance pilot and Troop Commander in a Kiowa.

COL LYNCH: Correct.

40

MAJ CHAPMAN: You next qualified on the Black Hawk and served at 5 Avn between '93 and '95.

COL LYNCH: Correct.

45

MAJ CHAPMAN: You've held various positions as a QFI.

COL LYNCH: Correct.

5 MAJ CHAPMAN: And have been posted to the School of Army Aviation's line instructor.

COL LYNCH: Correct.

10 MAJ CHAPMAN: About 2002 you were part of the team responsible for the introduction into Service of the ARH Tiger.

COL LYNCH: Correct.

15 MAJ CHAPMAN: And in that context, you've spent some time in France in connection with the introduction of the ARH; is that correct?

COL LYNCH: Correct.

20 MAJ CHAPMAN: In 2009 you completed the Australian Command and Staff College?

COL LYNCH: Correct.

25 MAJ CHAPMAN: You've deployed in Afghanistan in 2010 as Commanding Officer of Rotary Wing Group 5.

COL LYNCH: Correct.

30 MAJ CHAPMAN: You've posted to the Directorate of Aviation and Capability Management during the ARH Tiger introduction.

COL LYNCH: Correct.

35 MAJ CHAPMAN: 2013, you returned to France as the Resident Team Leader for ARH Resident Team?

COL LYNCH: ARH and MRH.

40 MAJ CHAPMAN: ARH and MRH – correction. And just briefly, what you referred as the Resident Team is the team in location?

45 COL LYNCH: Yes, it's at the, yes, Airbus factory at Marignane and during 13-14 it transitioned from a focus on acquisition to a focus on sustainment of those two platforms.

MAJ CHAPMAN: Thanks sir. Next, you were CO and chief instructor at the School of Army Aviation between 2017 and 18?

5 COL LYNCH: Yes, in between that there was a Project Manager job with a Chinook, 15-16. And then, correct, 17-18 was the COSAA.

MAJ CHAPMAN: The full description is in your tendered statement?

10 COL LYNCH: Correct.

MAJ CHAPMAN: I'm just attempting a summary. You then posted in as the DOPAW – which is Director of Operational Airworthiness – between '19 and '21?

15 COL LYNCH: Correct.

MAJ CHAPMAN: And we'll return to that specifically in a moment.

20 COL LYNCH: Mm.

MAJ CHAPMAN: And you next served as Commandant to the Australian Aviation Training College between '22 and '23.

25 COL LYNCH: Yes, Training Centre, yes.

MAJ CHAPMAN: Yes, before. And in 2024 transferring to the Reserves, after 35 years of service; correct?

30 COL LYNCH: Correct.

MAJ CHAPMAN: You have, as you outline at paragraph 6, extensive flying instructional hours over your 34 years of flying which relevantly includes 1000 hours using TopOwl and symbology. Correct?

35 COL LYNCH: Not 1000, no.

MAJ CHAPMAN: Sorry.

40 COL LYNCH: I think it was 888 total on Tiger, 83 hours by night.

MAJ CHAPMAN: 184.2 hours instructional role and 83.3 flown by night under NVDs and TopOwl and symbology.

45 COL LYNCH: Correct.

5 MAJ CHAPMAN: Am I right in saying that while you've got vast experience on the ARH Tiger, you do not have that same level of experience flying the MRH?

COL LYNCH: Not the MRH platform, no.

10 MAJ CHAPMAN: So you then set out at paragraph 7 some tertiary qualifications that you have confirmed, and at paragraph 9 you outline your present role as Aviation Coach/Mentor, focussed principally on Aviation coordination and control elements as part of Headquarters 1st Australian Division.

15 COL LYNCH: Correct.

MAJ CHAPMAN: And you note that in your current role you have no responsibility for Aviation concerns or issuing directions, policies or OIP or the like concerning safety.

20 COL LYNCH: Correct.

MAJ CHAPMAN: And at 10, you note that you have no record of having flown with any of the deceased members nor you didn't know any of them personally. Is that correct?

25 COL LYNCH: I'd certainly met at least two of them. I believe I was at LT Max's graduation because I was the Commandant. And I met Dan Lyon when he was on course. But apart from that, that's it.

30 MAJ CHAPMAN: Sir, just with that background, I'd like to turn to discuss the minute to the MRH Project Director, COL Thomas, which you address at paragraph 13 of your statement, which is on – forgive me, page 13 – sorry, paragraph 13, it's 7. So can I just hand you a copy of that document? This already forms part of Exhibit 103 and it's the minute to
35 COL Andrew Thomas from BRIG Fenwick.

COL LYNCH: Thank you.

40 MAJ CHAPMAN: So, sir, do you recognise that to be a minute from BRIG Fenwick to COL Thomas dated 20 March?

COL LYNCH: Yes.

45 MAJ CHAPMAN: Have you seen that document before?

COL LYNCH: I don't specifically recall seeing this document, but it's consistent with a number of other documents.

5 MAJ CHAPMAN: And I'll just give you a moment to read that, sir.

COL LYNCH: Yes.

10 MAJ CHAPMAN: And do you accept that that's a request to COL Thomas at the MRH Project Directorate from BRIG Fenwick to progress into Service version 5.10 into the MRH fleet?

COL LYNCH: Yes.

15 MAJ CHAPMAN: And you helpfully provide at paragraph 13 of your statement some context here relating to the search for new and updated symbology solutions. Do you see that?

COL LYNCH: I do.

20 MAJ CHAPMAN: And you say, in summary, that the search for the new symbology came out of a flight test report dated 5 September 2018. Is that correct?

COL LYNCH: Correct.

25 MAJ CHAPMAN: And is it your understanding that was an AATES report?

COL LYNCH: It was. It is.

30 MAJ CHAPMAN: It is, yes. And that flight test report is titled, as you put it there, "MRH-90 Special Operations Approach"?

COL LYNCH: Correct.

35 MAJ CHAPMAN: And was that, to your understanding, testing conducted as part of Plan Palisade?

40 COL LYNCH: Yes, it was. So that testing was to basically assess the suitability of the MRH and find any issues with regard to utilising the MRH in the Special Operations role that it had not previously been used in. So it was basically to find where the problems were and then resolve them.

MAJ CHAPMAN: Yes, thank you, sir. And you say at 13(a) that the

AATES flight test report was, as you've just said in your evidence, directed to identifying any issues likely to be encountered when the MRH was introduced into that Special Operations role. Correct?

5 COL LYNCH: Correct.

MAJ CHAPMAN: And you've extracted from that report, it appears, and reproduced in your statement a number of observations from that test report - - -

10

COL LYNCH: Yes.

MAJ CHAPMAN: - - - which essentially identify that the distance to target symbology was considered to be highly desirable.

15

COL LYNCH: Mm-hm.

MAJ CHAPMAN: And at paragraphs (h) and (i) of your statement – so we're at the bottom of page 6 now, just to orient you.

20

COL LYNCH: Yes, got it.

MAJ CHAPMAN: The AATES report notes that:

25

Headquarters 16 Aviation Brigade must prohibit conduct of the recommended Special Operations approach at illumination light levels of less than 10 millilux.

Correct?

30

COL LYNCH: That's what it says, yes.

MAJ CHAPMAN: And next, at (v), the second paragraph on page 7, do you see it then says that:

35

Headquarters 16 Aviation Brigade must take quantitative assessments of TopOwl 3 HMSD NVD performance in order to maximise the approved environmental envelope for the role and environment of Special Operations approaches.

40

See that?

COL LYNCH: Yes. Acknowledged, yes.

45 MAJ CHAPMAN: And did you understand these to be essential

requirements?

5 COL LYNCH: Particularly the ones that dealt with visual acuity. So, look, there's a number of design characteristics of the TopOwl helmet and they can have very good Image Intensifier Tubes in them. There are path losses from the time that the image is, you know, generated. So the IIT to projection.

10 So the difference in performance between standard NVD and TopOwl in terms of visual acuity was something kind of known about for a while. But with regard to the quite precise manoeuvres that they were required to execute during an SO approach serials, they basically made the assessment that it was insufficient, which is exactly why one of the lines of activity was new IITs.

15 MAJ CHAPMAN: Yes. And so I have it right when I say that the TopOwl NVD at that point – this is version 3 – had issues, as you say, with visual acuity, and that it was not considered to be at an acceptable standard for SO approaches?

20 COL LYNCH: Correct. There were limitations in certain light levels, or below 10 millilux as indicated.

25 MAJ CHAPMAN: And as a consequence of that, an improved solution was required to be identified?

COL LYNCH: Yes. And that was the priority, yes.

30 MAJ CHAPMAN: And we were talking again of version – is it version 3 or 4 at this point?

COL LYNCH: The symbology you're talking about?

35 MAJ CHAPMAN: Correct.

COL LYNCH: 4.07, yes.

40 MAJ CHAPMAN: And this was altogether a different issue to the version 5.10 ambiguous attitude, which we'll come to?

COL LYNCH: Yes. So symbology and visual acuity are two separate lines of activity. They're currently related in total of an integrated system. So relevant, but they are different.

45 MAJ CHAPMAN: Understood. Just making the point to distinguish

between – we talk about these versions and just to understand they're different how they - - -

5 COL LYNCH: Yes, so 4.07, 5.10 is purely symbology-related. It doesn't relate to IIT generation.

10 MAJ CHAPMAN: And you then address, at paragraph 13(b), at point (i) at the bottom of page 7 and top of page 8, that you're aware that DACM immediately initiated action to procure updated Image Intensifier Tubes?

15 COL LYNCH: Correct.

MAJ CHAPMAN: And this was, as you say, to improve the NVD visual acuity; is that right?

15 COL LYNCH: Correct.

20 MAJ CHAPMAN: And when we're talking about – the Inquiry has heard some evidence about IITs, about Image Intensifier Tubes. IITs, these are physical tubes which give the HMSD a night-vision capability. Is that fair to say?

25 COL LYNCH: Correct. Yes, they are the light amplification device that provides that night-vision capability.

MAJ CHAPMAN: And sometime later, is it your understanding that these new IIT systems were procured and installed?

30 COL LYNCH: Correct, they were.

MAJ CHAPMAN: And they were installed, were they, as a reasonably practicable risk control, as you describe it in underline in page 8?

35 COL LYNCH: Correct.

MAJ CHAPMAN: And that was a control against the acuity difficulties that had been identified by AATES?

40 COL LYNCH: Correct.

MAJ CHAPMAN: And just so we can confirm what we have as the narrative at this point, what we have here is that AATES has identified an issue with acuity on the HMSD; correct?

45 COL LYNCH: Correct.

5 MAJ CHAPMAN: And then the Chain of Command, through your Directorate, and others, are responding to that issue by taking steps to procure higher performing IITs. Do you agree?

COL LYNCH: Correct.

10 MAJ CHAPMAN: Now, just to pause there. As far as you're aware, was the AATES report of December 2018 dealing with these acuity issues subject to any subsequent Operational Evaluation?

COL LYNCH: That specific report and those findings? Not to my knowledge.

15 MAJ CHAPMAN: So, to your knowledge, there was no further testing conducted by Standards in respect of this upgrade prior to Service release of the new IITs. Is that right?

COL LYNCH: Not to my recollection, no.

20 MAJ CHAPMAN: So do you agree, sir, we have here an example where the Chain of Command has accepted an AATES' finding, identified a solution and proceeded to Service release of that solution. Do you agree with that?

25 COL LYNCH: Sorry - - -

MAJ CHAPMAN: I'll break it up.

30 COL LYNCH: Proceeded to Service release? Sorry, in the context of the SO approach?

MAJ CHAPMAN: Yes. In the context of the IITs. Not via 5 point - - -

35 COL LYNCH: Sorry, there's subsequent – you're talking about IITs now. There was testing for IITs.

MAJ CHAPMAN: There was Operational Evaluation testing of IITs?

40 COL LYNCH: Not IITs. There was actual flight testing of IITs and they were evaluated. They were evaluated by DCG.

MAJ CHAPMAN: No, my question - - -

45 COL LYNCH: Sorry, you just keep switching between symbology and

IITs, and I just didn't know what track we were on.

5 MAJ CHAPMAN: My question is slightly a different one. And my question was, was there any testing conducting by Standards Branch in respect of the upgrade of the new IITs prior to Service release?

COL LYNCH: Not to my recollection, no.

10 MAJ CHAPMAN: And my next proposition that I was putting to you was you agree that we have here an example, in the context of the IITs, where the Chain of Command – that is, Army Aviation – has received an AATES report.

15 COL LYNCH: Mm-hm.

MAJ CHAPMAN: There is an acceptance of a need to do something in response to the issue identified by AATES; correct?

20 COL LYNCH: Correct.

MAJ CHAPMAN: And that a solution has been identified?

COL LYNCH: Yes.

25 MAJ CHAPMAN: And it then proceeded to Service release of that solution?

COL LYNCH: Yes, over the course of - - -

30 MAJ CHAPMAN: Over a course of - - -

COL LYNCH: Yes, indeed. And so in that case there's multiple solutions. But, yes, you're right. Yes, in response of that report there were multiple lines of activity that were generated and they were all chased down.

35 MAJ CHAPMAN: And you next say in your statement – and I'm at point 2 on page 9 – that, apart from the IITs, that the AATES recommendations with respect to the HMSD symbology were also acted on?

40 COL LYNCH: Yes, absolutely.

45 MAJ CHAPMAN: And am I right that you refer to a recognition that there was, as you say:

a desire for improvement in the way that information is presented to reduce workload and internal to cockpit scan for information, particularly at night and during high-precision manoeuvres.

5 Do you see that?

COL LYNCH: Yes, correct.

10 MAJ CHAPMAN: And that reflected, did it not, the known risk which you describe of scanning while undertake complex manoeuvres in high stress environments.

15 COL LYNCH: Yes, look, it's not just high stress environments. The movement of the head through multiple planes is a known creator of spatial disorientation – or start point of spatial disorientation. So it's actually a technique that is taught to minimise multiple planar head movements. And, unfortunately, during some of the high-precision manoeuvres, you had to do that if you didn't have access to the information in the symbology. So by putting information upfront in the symbology with easy access, you
20 could actually obviate the need to do multiplanar head movements.

MAJ CHAPMAN: And you say that the AATES recommendation to address the symbology issue was, in your view, prudent?

25 COL LYNCH: Absolutely, yes.

MAJ CHAPMAN: And that a search was commenced for a symbology set which had already been approved by the OEM, Original Equipment
30 Manufacturer, and which had been implemented in the international NH90 fleet.

COL LYNCH: Correct.

35 MAJ CHAPMAN: And you say that version 5.10 was identified; correct?

COL LYNCH: Yes. So that was identified essentially by CASG, that they went to industry and obtained what was there and that was the option that was presented.
40

MAJ CHAPMAN: And it was identified by CASG, as you say, as a solution which had been developed for the German Army for the conduct of missions in DVE conditions in Afghanistan.

45 COL LYNCH: Yes.

MAJ CHAPMAN: As you understand?

5 COL LYNCH: It was an approved modification.

MAJ CHAPMAN: So is it right to describe that it was something of an off-the-shelf solution?

10 COL LYNCH: Absolutely.

MAJ CHAPMAN: That's as opposed to Army commissioning a bespoke symbology set?

15 COL LYNCH: Correct.

MAJ CHAPMAN: Just turn to your discussion of a visit to Germany. And I'm on the bottom of page 9 of your statement. So you there describe that in 2013/14 you visited Airbus Helicopter Deutschland where you had the opportunity to fly hands-on with version 5.10 in a simulator; is that right?

20 COL LYNCH: During the early stages of development. They had a mature set, but they hadn't yet moved to flight testing.

25 MAJ CHAPMAN: It was version 5.10 though?

COL LYNCH: Correct.

30 MAJ CHAPMAN: And referring to your experience there, you say that after 20 minutes of simulated flight the value of the substantive improvements of version 5.10 became clear to you?

COL LYNCH: Absolutely.

35 MAJ CHAPMAN: And when you talk about "substantive improvements" that you noticed, could you just describe, generally, what you can recall about those improvements?

40 COL LYNCH: Yes. So there was quite a few things in there that were far more compelling. And a lot of this was based on our experience in, you know, the generational improvements to the symbology in Tiger. So Tiger started with a heading tape, which is kind of where your heading information is but also your next waypoint caret with distance to run.

45 It was sitting at about 25 degrees above level, and looking up 25 degrees is quite hard. The eyes naturally look down. But looking up is more difficult,

5 so it's more difficult to scan. In Tiger, we moved it down to 18 degrees and that was one of the improvements. So moved the heading tape down, which made the scan for that information much easier. 5.8 did the same. It moved it down about – from memory about five or six degrees, and positioned it in an easier position for scanning.

10 And that was obviously associated with the distance to run information. The thing that I found most compelling, which we didn't have in Tiger, which would've been great, was the instantaneous vertical speed indicator, which, in both Tiger and MRH, was literally a flat line. And if you had a rate of climb that started, it started to grow in the up direction or a rate of descent, it started to – so, essentially, when you were scanning the IVSI, which is part of your normal performance scan, you'd be looking for a movement out of a line. Whereas in the MRH-90 and version 5.10, it became a bar that indicated up and down, which is far more compelling and you've got an instantaneous view of whether you were climbing or descending, which is a significant improvement in situational awareness.

20 There was also some improvements in the power or the first limit indicator, which is your power margin, essentially, indication in there, which they do more precisely set power settings with reference to that. And in general – and we had this for Tiger as well – in fact, the level of declutter management in the centroid of the display, which improved your ability to see the outside world, was significantly addressed. In fact, it was better addressed in 5.10 than it was in Tiger.

30 And they just got rid of a bunch of stuff that was cluttering up the centroid of the display and left that for visually seeing the outside world. Because it's – essentially, you're using it visually. And, I think, MRH – so, 5.10 had like four declutter modes, I think, off – declutter 1, 2 and 4. Tiger only had, like, three. So it had some really good options in there to minimise the outside scene being either obscured by symbology or the symbology not being easily able to, you know, draw information from during a scan.

35 So it became clear that there was – and there was some consistencies in there with regard to attitude information, so horizon bar information. Wherever you looked, you got a horizon which was – you know, I didn't, at the time, believe that was terribly useful, but it wasn't useless. That made sense.

40 So, yes, by and large from all of those things put together, the improvements were fairly – they seemed significant to me. Enough for me to call back to Australia and say we need to come and have a look at this.

45 MAJ CHAPMAN: So this was 5.10 you were testing?

COL LYNCH: Correct.

5 MAJ CHAPMAN: And were you testing it in a simulated platform? Was it in a Tiger simulator or an MRH?

COL LYNCH: No, it was in an MRH simulator. It was in, like, a development sim within the SUZ development facility where they actually write the symbology software code.

10 MAJ CHAPMAN: And you've noted that the distance to target was something which you identified as being beneficial?

COL LYNCH: Yes, well, it was – for me, that was – Tiger always had it and, you know, jumping into an aircraft or looking at symbology that didn't have it, it's like, "Come on, this is going backwards".

MAJ CHAPMAN: So albeit that you were there for a short time – I think your evidence is 20 minutes – did you identify any off-axis ambiguous attitude that was later described by AATES during your - - -

COL LYNCH: Not that I found disconcerting at all. And I think it comes down to how you use this information. So during that iteration, if you're flying visually, the information, you know, particularly in a helmet-mounted sight display system, is essentially performance information. That's what you're interested in.

You're flying visually. You're flying the aircraft with reference to either the ground, an AVRI track or, in formation, other aircraft. So you're not necessarily setting attitudes. You're interested in performance. So the things that are interesting to me: I care about my rate of descent; rate of climb, particularly on a dark night; I care about my actual radar altitude, you know, how high am I above the thing I don't want to hit; and what's my five-second trend, which is my velocity vector, and that's out the front.

35 So, you know, looking at how the IDSI is telling me what's happening right now, how that's going to translate to five seconds and understanding my exact state. And then relying on other things like my DH warning system, which is an audio system to tell me if I've breached a limit. That's how you use the symbology. You don't stare out the front and set attitudes and things like that.

40 There were some other improvements in 5.10 that had, similar to Tiger, arrows. So if you were pitch up or pitch down, exceeded what it thought to be a reasonable limit, you'd get an arrow saying go the other way, so it's

pretty compelling information. But a lot of the time, particularly during visual flight manoeuvres, you'd have it decluttered and that would be off.

5 MAJ CHAPMAN: So understanding the issue that was later identified by AATES – and I'm referring to it as the ambiguous attitude information. You understand that?

COL LYNCH: Mm-hm.

10 MAJ CHAPMAN: Was that something that you did or you did not identify when you went on this flight test in Germany?

15 COL LYNCH: I didn't find it disconcerting at all because, you know, at some point, if you are looking out to the side, I'm not looking for pitch information, I'm looking for something else.

MAJ CHAPMAN: It's a different proposition I'm putting to you, sir. Maybe you may not have found it disconcerting, but did you identify it in your - - -

20

COL LYNCH: Look, it was specifically pointed out because it was a design feature.

25 MAJ CHAPMAN: It was identified.

COL LYNCH: Yes. It was identified because they pointed it out to me that this was as intended.

30 MAJ CHAPMAN: So it's a design feature you were told was intended when you made this visit to Germany?

COL LYNCH: Absolutely.

35 MAJ CHAPMAN: Now, you next say at point 2 on page 10 that following your visit to Germany you recommended that the current MRH-90 test pilot in Army FTO. So is that AATES visit the German facility to also test. Is that correct?

40 COL LYNCH: Yes, I wouldn't call it test. Just experience at that point, because it hadn't entered a test program. But, you know, basically it was an advancement to the configuration of the MRH-90 that we were a part of the international fleet. And it was an opportunity for us in the future, so it was something that the test pilot should be across.

MAJ CHAPMAN: So you're suggesting that the test pilot from AATES comes across to Germany and essentially experiences what you did?

5 COL LYNCH: Yes. I don't know if it was AATES then. I think it might have still been PTAP. But, yes, it was the precursor organisation to AATES.

MAJ CHAPMAN: It was the Flight Test Organisation for Army?

10 COL LYNCH: Correct.

MAJ CHAPMAN: Do you know who that individual was who went?

15 COL LYNCH: Yes.

MAJ CHAPMAN: Can you say the name?

COL LYNCH: Yes. MAJ Peter Scullard.

20 MAJ CHAPMAN: Thank you. And you say that MAJ Scullard took up that offer and visited sometime in 2014. Is that your understanding?

COL LYNCH: From my memory, yes.

25 MAJ CHAPMAN: And that he provided a preliminary assessment of the utility of the new symbology?

COL LYNCH: Yes.

30 MAJ CHAPMAN: And you mentioned that he made – and when you say – sorry, I withdraw that. When you say he made a preliminary assessment of its utility, are you saying that there exists some document which records his preliminary assessment about 5.10?

35 COL LYNCH: Yes. Now, it wasn't necessarily provided to me, but it was created in order to do a post-activity report for his visit.

MAJ CHAPMAN: So if the Inquiry asks Command or you to produce, well, that document, would you be in a position to do so?

40 COL LYNCH: Would I?

MAJ CHAPMAN: Yes.

45 COL LYNCH: I don't know. I'd have to - - -

MAJ CHAPMAN: Your understanding is that such a document exists?

5 COL LYNCH: It exists. Just whether I've still got those emails is another big question.

MAJ CHAPMAN: We'll just pause that request for the moment.

10 COL LYNCH: It's a decade.

MAJ CHAPMAN: Just going on, so you reproduced at the beginning of – and I'm now on page 11 of your statement – a table, which includes the intended design enhancements of 5.10, in the third column.

15 COL LYNCH: Yes. Yes, I have it.

MAJ CHAPMAN: Is that the same table which appears at page 4 of the Operational Evaluation?

20 COL LYNCH: That's an abridged copy, that's the major improvements, whereas the one in the OPEVAL has every single change, including – see that one doesn't have declutter modes?

25 MAJ CHAPMAN: Mm-hm.

COL LYNCH: Discussion about those. So there's a few things that are missing from that table. But that was essentially the big changes, where there are the major movements in terms of change and improvement.

30 MAJ CHAPMAN: Understood. You see there that as part of these intended design enhancements at point 2 it says:

35 *Pitch scale is reference to the pilot's line of sight direction (actual aircraft pitch only available on HMSD centre of display, directly aligned with longitudinal axis, i.e. pilot helmet aligned straight ahead out of the cockpit).*

Do you see that?

40 COL LYNCH: Yes, I can.

MAJ CHAPMAN: So in very simple terms, does this mean that aircraft pitch is only displayed on the HMSD when the pilot's looking directly ahead?
45

COL LYNCH: Correct, yes. And, interestingly, there's also only your velocity vector remains captured on your direction of flight. So the only place where you get velocity vector overlaying your pitch ladder is looking out the front.

5 MAJ CHAPMAN: And it follows that when you're looking off-axis, there's no description in this table about the effect, is there?

COL LYNCH: No, there's not.

10 MAJ CHAPMAN: Again, you don't have any specific – sorry, you do have a recollection, from your German experience, of this issue having been raised directly with you by the manufacturer, was it?

15 COL LYNCH: It wasn't an issue, it was a design feature.

MAJ CHAPMAN: Sorry, a design feature. And who was that by? Was that by Airbus, or who was that by?

20 COL LYNCH: That was by the - - -

MAJ CHAPMAN: (Indistinct) helicopter?

COL LYNCH: I couldn't remember his – I might have his name, but he ran the SUZ lab.

25 MAJ CHAPMAN: This was the S-U-V – sorry - - -

COL LYNCH: S-U-Z, SUZ, yes, sorry.

30 MAJ CHAPMAN: SUZ lab, thank you. In response to an Inquiry's question whether, to your recollection, there was any urgency in connection with the introduction to Service of version 5.10. You respond at paragraph 16, which is on page 10, and you say, in summary, that – and I ask you to agree – test reports have identified a capability need which needed to be addressed. And this is – we've discussed – the distance to target; correct?

35 COL LYNCH: Correct.

40 MAJ CHAPMAN:

That accessing a unique Australian modification would have meant a long wait as everything took five years in NHI.

45 Is that correct?

COL LYNCH: Yes. A general statement, but the reality is we had not contracted for this level of bespoke support. We had contracted for a standard fleet, international fleet, solution. So we would have had to enter into a specific contract for this.

MAJ CHAPMAN: Third, that:

Version 5.10, as we've established, presented to Army a ready solution that had already been developed, tested and approved by a recognised military airworthiness authority, the Germans.

COL LYNCH: Correct.

MAJ CHAPMAN: So by that statement, sir, do you agree that essentially Army Aviation at that time had a choice with respect to this symbology, and it was a choice between commissioning a bespoke Australian solution on the one hand, or selecting an off-the-shelf ready solution that had been approved by the Germans?

COL LYNCH: Well, there were three choices: 4.07, 5.10 or commissioning a bespoke, or doing one in the interim on the path to another.

MAJ CHAPMAN: And as you say, keeping version 4, which – just to clarify, did version 4, to your understanding, have distance to run information?

COL LYNCH: No, it didn't.

MAJ CHAPMAN: It didn't?

COL LYNCH: No.

MAJ CHAPMAN: So there was no – on a version 4 equipped aircraft, there was no ability to understand distance to run.

COL LYNCH: You had to scan inside. But it had – but that was not on the symbology.

MAJ CHAPMAN: Yes. Though distance to run was displayed on the Primary Flight Display, was it?

COL LYNCH: Correct.

MAJ CHAPMAN: It's just the case that it wasn't displayed on the

HMSD.

COL LYNCH: In the symbology, correct.

5 MAJ CHAPMAN: So if you stayed with version 4 and didn't proceed to version 5.10, one could still have conducted these Special Operations approaches using the Primary Flight Display.

COL LYNCH: Correct. And that came out in the OPEVAL.

10

MAJ CHAPMAN: Sir, as we know, Army Aviation opted for the ready solution. Is that right?

COL LYNCH: Correct.

15

MAJ CHAPMAN: And did so on the basis that – do you agree that the capability that it gave would have avoided waiting years for a bespoke solution to be created?

20

COL LYNCH: So I think the opportunity that was created with 5.10 was that it didn't just deal with distance to run, it dealt with a whole lot of other evolutionary changes to the symbology set which overall improved a number of levels or areas of safety with regard to accessing information. So on that basis, yes.

25

MAJ CHAPMAN: But these advantages could have formed part of a bespoke solution; is that right?

COL LYNCH: They could have, yes.

30

MAJ CHAPMAN: But it's your evidence that that bespoke solution would have taken essentially too long, and I think you - - -

35

COL LYNCH: I wouldn't say "too long". It just would have taken five years. So it was still a live option. As far as I was aware at the time, actually going down that pathway was actually an option.

40

MAJ CHAPMAN: If you went down that pathway, do you agree that you could commission a symbology set which did not have the ambiguous attitude issue – removed it?

45

COL LYNCH: Yes, we could have done that. We could have done anything we wanted to. We would have been, you know, basically getting into a specific contract to do whatever we asked.

MAJ CHAPMAN: So can I ask you, are you aware of a solution that was referred to at some point as MOD 4? Bespoke symbology that was being looked at?

5 COL LYNCH: No, sorry, I'm not aware.

MAJ CHAPMAN: So you're not aware that the Inquiry's received some evidence that there was a bespoke symbology set solution being generated referred to as MOD 4? You don't know anything about that?

10

COL LYNCH: No, sorry, not aware.

MAJ CHAPMAN: So just to return to version 5.10, obviously five years you say was an estimate for how long a bespoke symbology set might take if ordered. Was timing an important consideration, to your understanding, with having distance to run installed under Plan Palisade?

15

COL LYNCH: Look, for a distance to run perspective, it was – and as came out in the OPEVAL, the audience was kind of split on the distance to run thing. You know, “Do you need this in 5.10 or would you be happy to scan inside?”, and half and half. Half said, you know, “Actually we'd be happy just to keep scanning inside. Stick with 4.07”. And it became a what is the balance of all these improvements versus, you know, that specific one. So even though the flight test report said, “Hey, distance to run's really important”, once you review the scope of 5.10 and look at the broader systemic improvements in the evolution to the symbology, it became more than just distance to run. That was almost like, “Yes, okay, you get that. But look at what else you get”. And this is an overall safety improvement in terms of how you access information.

20

25

30

MAJ CHAPMAN: And those overall – a combination of all those advantages is to be weighed against the risk.

COL LYNCH: Correct.

35

MAJ CHAPMAN: That identified risk, which AATES identified as “Unacceptable”, against the advantages.

COL LYNCH: Absolutely.

40

MAJ CHAPMAN: And do you agree that – and this is taking version 5.10 up to the point of Service release. Do you agree that at all times up until Service release and possibly even after that, it remained an option for Army to return to the software manufacturer to seek out a software fix for the ambiguous attitude?

45

COL LYNCH: Absolutely.

5 MAJ CHAPMAN: Do you agree with the suggestion that the software solution could have been rectified with such a software fix?

COL LYNCH: Presumably, yes.

10 MAJ CHAPMAN: Are you aware of any steps that were taken following AATES report coming out in June 2019 to anyone going back to the OEM to explore the software fix as an option?

15 COL LYNCH: I'm not aware of that specifically, no. That obviously would have happened within CASG.

MAJ CHAPMAN: So you're not aware of CASG engaging with the OEM on that basis?

20 COL LYNCH: No, not personally aware of it. Normally that communication would be DACM to CASG. I was kind of more involved in current ops, a little bit of future stuff. But mostly, if it was capability-related and there was money to be spent, that was DACM to CASG.

25 MAJ CHAPMAN: So is your evidence that it's possible that could have happened, you're just not aware of it?

COL LYNCH: Correct.

30 MAJ CHAPMAN: Would you expect, in your particular role as DOPAW, to have been engaged in that loop, if I can put it like that?

35 COL LYNCH: So if that was planned, that kind of fits in within an understanding of how long we might have to hold in place certain risk controls within our overall risk management framework. So, yes, I would expect to know that.

40 MAJ CHAPMAN: So your evidence is you're not aware of anyone going back to the OEM about a software fix; is that correct? But do you agree that it's put as a recommendation in the AATES report?

COL LYNCH: That?

45 MAJ CHAPMAN: That the OEM be approached to look at a solution?

COL LYNCH: Yes, there's certainly an alternative. But there's other things in the AATES report that say, "Also, we didn't really understand how the symbology set was working". So you have to read it in context of all the other things that were written in and around that exact statement.

5

MAJ CHAPMAN: I understand. But my point is that having seen the Flight Test Organisation saying, "We recommend that you go back to the OEM to try and seek out a software fix", your understanding is no one in Army Aviation went back to the OEM on that issue?

10

COL LYNCH: So my understanding is I don't know. No one sort of appraised me of that, which that's not necessarily abnormal. But the reality is there's – on the page where that particular thing is written, there's other things around it that are important in context and they should be read together, not isolated.

15

MAJ CHAPMAN: Which is seek out further information, for example?

COL LYNCH: Correct.

20

MAJ CHAPMAN: Which is your reference to the basis on which the OPEVAL was prepared.

COL LYNCH: Correct.

25

MAJ CHAPMAN: We will get to that. And would you accept that the OPEVAL essentially treated the – or essentially reassessed the "Unacceptable" risk assessment to "Undesirable"?

30

COL LYNCH: So it sought to do quite a number of things.

MAJ CHAPMAN: Is that one example of what it did?

COL LYNCH: It sought to address the entire list and say what is the comparative risk treatment across all of those changes, as opposed to isolating just one, which unfortunately was the outcome we got from the AATES report. And all of the other potential improvements which could collectively actually tip the risk equation in a different direction were basically not looked at, and that was problematic. So we didn't have a full picture. I couldn't properly quantify and brief where I believed to be the risk balance-up for decision, which is why the OPEVAL sought to actually address all of that.

35

40

45

The other part of this was because – I personally didn't care whether 4.07 or 5.10 got up – we went to the operational community who were about to

operate this aircraft and potentially this symbology set in that role, use them in the OPEVAL, and said, “What do you want? What is the ultimate improvement? What is the balance? Do you want it or do you no, because actually I don’t mind?”

5

MAJ CHAPMAN: So you’ve got “Unacceptable” going to “Undesirable”, and you agree that the difference in those two supported an assessment of risk by Standards, later in the OPEVAL, of a low risk to personnel?

10

COL LYNCH: Yes.

MAJ CHAPMAN: So you’re agreeing that by virtue of the reassessment from the “Unacceptable” to “Undesirable”, Standards were able to recommend to the Director-General that it’s low risk? The MAO retained low risk, I think are the words.

15

COL LYNCH: Let me just seek out the reference that I’m looking for, because that was in a brief.

20

MAJ CHAPMAN: It’s in – I can take you to your statement, and it’s the brief dated 20 April, and it’s 3(b).

COL LYNCH: I’m looking for the actual reference. There it is, it’s the first one. Sorry, I missed it.

25

MS McMURDO: Can you just - - -

COL LYNCH: It’s the first one, ma’am, number 1.

30

MS McMURDO: Reference number 1?

COL LYNCH: Yes.

35

MS McMURDO: Yes.

COL LYNCH: Which is a brief dated – I think my date’s 20/4/2020. That actually lays out the full sequence of events.

40

MAJ CHAPMAN: It’s the same document we’re talking about.

COL LYNCH: Okay, good.

MAJ CHAPMAN: So just going there to 3(a), and this is on the brief – this is the April brief, which you’ll see from 3(c) recommends Service release.

5 COL LYNCH: Yes.

MAJ CHAPMAN: And just starting at 3(a):

10 *Recommended that you note the unacceptable risk to flight safety determined by the AATES flights assessment was reassessed as undesirable through the OPEVAL process.*

COL LYNCH: Yes, correct. That’s what it says, yes.

15 MAJ CHAPMAN: Next, and my proposition that I was putting to you, you agree that the undesirable – the reassessed “Undesirable” risk then supported the notation at (b) that the MAO retains low risk.

COL LYNCH: Correct.

20

MAJ CHAPMAN: And that’s because if it was left at “Unacceptable” risk, do you accept that there’d be no conceivable basis for the suggestion to the Director-General that the MAO could retain low risk?

25 COL LYNCH: Sorry, can you ask that again?

MAJ CHAPMAN: I’ll try. Would you – if it had not been reassessed as “Undesirable”, and it was left at “Unacceptable”, there would not be – I’m asking you to agree or disagree – a rational basis for a decision brief to suggest that there’d be - - -

30

COL LYNCH: There wouldn’t have been a decision brief and there wouldn’t have been a 3(c), which recommended Service release.

35 MAJ CHAPMAN: Indeed, there’d be – yes. And there’d be no basis on which to assess risk as low either. It would have to be higher.

COL LYNCH: Correct. But it wouldn’t have gone any further.

40 MAJ CHAPMAN: So the ultimate proposition I’m seeking to advance from you is that the “Undesirable” assessment, down from the “Unacceptable”, was directly linked to the low assessment of risk, personnel risk?

45 COL LYNCH: Yes, correct.

MAJ CHAPMAN: I just want to now move to the subject of your role as DOPAW.

5 AVM HARLAND: Can I just ask one question while we're on this document, rather than looping back later? So in that document, the decision brief for DGAVN in paragraph 4, just below the recommendations, the first sentence:

10 *The need for the HUD distance to go symbology was identified by MRHPO as an essential requirement for use in Special Operations approach.*

Is that correct?

15

COL LYNCH: Not per the – my understanding, it was a “highly desirable” in the flight test report. I don't know how we got to “essential requirement”, but - - -

20 AVM HARLAND: Okay. Yes, that - - -

COL LYNCH: But my understanding, sir, was that it was highly desirable, as per the flight test report. That was my point of reference.

25 AVM HARLAND: Good. Yes, because at para 13(b) in your statement, where you've got the cut out of that, it talks about distance cueing for pilot as being “highly desirable”.

COL LYNCH: Yes, I agree.

30

AVM HARLAND: Now, you talked about the weighing up of risk of what was classified as “Unacceptable” by AATES and “Undesirable” by the OPEVAL as weighing up the various risks and operational requirements. Isn't that somewhat misleading to say that it's an essential requirement? Because it actually really, in the eyes of DGAVN, would actually make it look more compelling, that he needs to balance those risks?

35

COL LYNCH: So this brief – on the face of it, sir, absolutely. If this was the only – this conversation had been going on for nine months. This brief was written to try and pull together a lot of information that had been accrued over a nine-month process from the moment of the original report being delivered, and it was intended to give a more fulsome summary of everything that had played out and every result, so that DG was reasonably informed before making a decision. So I accept that that is not a hundred per cent correct.

45

AVM HARLAND: Thank you.

5 MAJ CHAPMAN: Just while we're on this document, and we'll come to
this later but I'll do it now, can you go over the page to page 2 and
paragraph 8, and do you see there, sir, in the – halfway down the paragraph,
in terms of hazard analysis, it's under the heading, it says this:

10 *AATES correctly identified that as the pilot looked further away
from X axis, the roll indication decreased from actual value to zero
and that it could lead to confusion under low cue environments,
possibly unusual attitude leading to a CFIT event.*

15 Do you see that?

COL LYNCH: So you can read that two ways. They correctly identified
that it did that, and then their finding was that.

20 MAJ CHAPMAN: Yes.

COL LYNCH: As opposed to this, therefore that's a fact.

MAJ CHAPMAN: Well, it's a fact, isn't it, that - - -

25 COL LYNCH: It's written there, it's a fact.

MAJ CHAPMAN: No, it's a fact that this decision brief is – it's
suggesting to the decision-maker, the DG, that Standards, or the authors of
this, accept the basis on which AATES came to their "Unacceptable risk to
30 flight safety" conclusion.

COL LYNCH: Yes. So that feature of the roll indication was confirmed.

35 MAJ CHAPMAN: If you could just go to the top of page 13 of your
statement. You say there that – sorry, not page 13. Just one moment. If
you go to the top of page 13, you say that your:

40 *focus, as the DOPAW, was supporting the decision-maker,
DGAVN, with the best risk representation and characterisation
possible to inform a risk-informed decision to proceed.*

Do you see that?

45 COL LYNCH: Okay.

MAJ CHAPMAN: And sir, is this another way of saying that you and your staff had either the primary role or a significant role in assessing the overall risk with respect to the Service release of version 5.10?

5 COL LYNCH: So from a personnel safety perspective, sure. But that's not the only risk dimension, there are others.

MAJ CHAPMAN: Understood.

10 COL LYNCH: From a personal safety perspective, absolutely.

MAJ CHAPMAN: Okay. Though it was not your role, it was the role of the DG to order Service release; correct?

15 COL LYNCH: Yes, correct.

MAJ CHAPMAN: Though that decision, the DG's role, had to have been based on an assessment of risk which is briefed up to him by DOPAW and your team; correct?

20 COL LYNCH: Correct.

MAJ CHAPMAN: And this is reflected in what you have to say at 17, where you refer to your deep involvement in coordinating and guiding risk; correct? At 17.

25 COL LYNCH: Yes, deeply coordinating and guiding assessment of risk, yes.

30 MAJ CHAPMAN: And you go on to say that:

The process was –

these are your words –

35 *made more complicated because of the AATES report dated 14 June 2019.*

Do you see that?

40 COL LYNCH: Is that still on page 13? Yes.

MAJ CHAPMAN: Yes. And you say that because – and I'll ask you to agree or disagree, the AATES report – sorry, you say that:

45

Because the AATES report was clear –

your words –

5 *that there were numerous questions and uncertainties regarding normal system function.*

COL LYNCH: Yes.

10 MAJ CHAPMAN: And that's with 5.10?

COL LYNCH: Correct.

15 MAJ CHAPMAN: And you go on to say that:

Without this understanding or an assessment, I could not represent a properly considered and balanced risk picture to the Accountable Manager for appropriate risk decision.

20 COL LYNCH: Agreed.

MAJ CHAPMAN: Isn't it the case that you did have an assessment about the upgrade and that was the "Unacceptable risk to flight safety" from AATES?

25 COL LYNCH: No. It was completely inadequate, as I've also explained in my statement. There were a number of elements of the consideration that should have been looked at that were absent. So there was insufficient information to consider the impact of some of those other elements of symbology that I laid out before, and whether or not they tipped the balance for HMSD 5.10 or against.

30 But it was focusing on one thing and ignoring all the others, and admitting in the report that there wasn't actually a full understanding of correct system function that was available from the format specification. It basically said, "There's a bunch of unanswered questions, and in fact we've failed to answer most of them and something else needs to happen".

35 MAJ CHAPMAN: So it was your point that further information – in this statement, your point was that further information was required to present the DG with a full picture of risk?

COL LYNCH: Absolutely. Absolutely. It was grossly deficient.

40 MAJ CHAPMAN: And it was for that reason that you set about

gathering that further information in the OPEVAL.

COL LYNCH: Correct.

5 AVM HARLAND: Could I just ask a philosophical question? If a Flight
Test Organisation is charged with looking at a modification on an aircraft
and those modifications have potentially serious safety impacts and they
find something which they consider to be unacceptable, on one way you
could look at it and you could say, “Well, they should finish the testing
10 because there are a whole bunch of other things”, but on the other hand, you
could also reasonably argue that they should inform their senior
management that they’ve actually found something which is profoundly
unacceptable and perhaps we want to reconsider where to go next. Is
that - - -

15 COL LYNCH: So there was a conversation about that straight after the
testing. I think the testing went from 11 to 14 June, or something. And
then there was a conversation, and it wasn’t in a lot of detail; there was a
few other things happening at that time with SO1 T&E, and he mentioned
20 that there were some adverse findings that came out of it. I recall saying
something to, “Just send us the report, mate, and we’ll deal with it when it
gets here”.

25 So there was always discussion between particularly Standards and
AATES. They’re on the same base and largely similar people move in and
out of the organisation. So it was pretty common discussions about but also
good philosophical discussions about what was and was not, and was this
normal function, was it not normal function, and comparing notes. So it
was a collaborative environment, absolutely.

30 So to your point, sir, and your question specifically about should they have
finished the testing: there were other factors that were going on at the time,
some of which surfaced only just before this test activity was undertaken,
and the report was delivered that made that possibly not the best answer.

35 AVM HARLAND: So did they deliver the report without consultation?
You know the discussions and collaboration you talked about, was that
report done without that collaboration?

40 COL LYNCH: So with regard to the findings, because it was a fairly
narrow report and there was not much substance in it, I had a warning call,
if you like, from SO1 T&E that says, “Hey, this is coming and there’s an
‘Unacceptable’ and this is what it is”. We had a conversation about –
because obviously I had a little bit of background in it, I said, “Did you
45 actually know what it was showing you?” He wasn’t that certain. He was

fairly new to the job too. And that's when I said, "Just put it in writing and then we'll talk about it". And that's when the report was delivered and we went on from there.

5 AVM HARLAND: Okay, thank you.

MAJ CHAPMAN: So it's the case, is it, sir, that you had, I think you said, a warning call and that was from SO1 - - -

10 COL LYNCH: SO1 T&E. So whenever there was something that was likely to have an impact in terms of staff effort or briefing up, or anything like that, he's just doing the – polite enough to pick up the phone and say, "Hey, got this happening. It's a fly in the ointment". But for me, it was just, yes, another issue we have to deal with.

15 MAJ CHAPMAN: And your position – I think you've given evidence about this – was that you suggested to him, and LTCOL Reinhardt, that he finish the report as it is?

20 COL LYNCH: Absolutely.

MAJ CHAPMAN: Going back to something that Air Vice-Marshal queried, but is it not – if you didn't agree on the face of it with the report, would you not be, in the first instance, asking the Flight Test Organisation
25 to revisit the finding?

COL LYNCH: So philosophically there's two ways you could go, right. You either seek to influence the finding, or you accept the finding and then address it. And do you know what, if you accept on face value that,
30 generally speaking, people don't make wild claims, sometimes if you focus on saying, "Hey, deliver something formal", they rethink before they do that, and then they change their position or soften their position or re-evaluate the data and come up with something different. In this particular case, they submitted the report as published.

35 So typically I just deal with objective evidence. And I consider that flight test information, it's objective evidence. It's another piece of evidence I have to take into consideration when I'm putting together a full risk picture. Does this fill the picture? In this instance it was part of the picture;
40 it didn't fill the full picture. I need to fill it out because when I'm putting together a full risk picture to inform a decision, I do it as if I'm making the decision. Would I be happy with this information? And I can tell you, I wouldn't have been happy with that flight test report on its own.

MAJ CHAPMAN: Do you have a copy of the AATES report there? I'm not sure it was attached to your - - -

COL LYNCH: It definitely was.

5

MAJ CHAPMAN: It was.

COL LYNCH: Seven.

10 MAJ CHAPMAN: I'm grateful. Do you see, sir, and I'll just pull up the relevant page, that – looking for the recommendations. Well, would you take it from me that there's the recommendation in here by AATES that they require the further information? I think you've given some evidence about that?

15

COL LYNCH: Yes.

MAJ CHAPMAN: It's not the case, is it, that when they say "further information", they don't say anything about, "We require a different organisation to be conducting testing to obtain further information"?

20

COL LYNCH: No, they didn't say that, nor would they.

MAJ CHAPMAN: So why was there no engagement between you and SO1 AATES in terms of AATES possibly conducting the further testing of this system?

25

COL LYNCH: So there was. And when you say "engagement", was it discussed? Absolutely it was discussed. And I've mentioned, certainly in my statement, that on 10 June, just before this activity was executed, and on 19 June the report was sent, I had yet another one of many conversations with the SO1 T&E, who had only recently come into the job, alerting me, as the safety guy, to a lot of concerns he had within his organisation. And some of those concerns now went back to the execution of the SO approach testing.

30

35

I've put an excerpt in my statement, but when you read that excerpt in terms of – I can read it if you want – there are now some serious concerns with not only further overloading that organisation – which we're now trying to actively unload, because they've lost a lot of experience from the move from Brisbane to Oakey – and now they're asking for external investigative support because they don't believe they've got the capacity to do it internally, to investigate some serious issues they've got with their testing program, and their execution of test.

40

45

So, in that context, it was a conversation I had with him to say is giving him more work the best way forward, or should we do something different.

5 MAJ CHAPMAN: And that's where you say at paragraph 17(d), when you say that it was against this backdrop that the HMSD 5.1 report was delivered?

COL LYNCH: Correct.

10 MAJ CHAPMAN: So you're saying – and there's quite a bit of information in your statement about this, about the organisational stresses at AATES at the time, as you understood them.

COL LYNCH: Yes.

15 MAJ CHAPMAN: And you set this out at page 16 to 20 of your statement in detail, including saying the report was, to your mind, technically deficient and incomplete in some respects?

20 COL LYNCH: Yes.

MAJ CHAPMAN: Are you suggesting by these statements taken together, sir, that AATES simply didn't have the capacity to deal with the further testing that was required?

25 COL LYNCH: That was my assessment at the time, and SO1 T&E was not in violent disagreement.

30 MAJ CHAPMAN: As DOPAW, you did not want to – I think you said this – add to their already significant workload?

35 COL LYNCH: Yes. So I didn't task AATES; that was DACM's job to task AATES. So it was a conversation with DACM as to how much work they currently had, and there was still a lot of testing they had on their books, without this additional testing. But we were actively looking for ways of offloading that organisation, to make sure they had the capacity to do the testing they did have within scope of their expertise and experience, which had taken a significant hit at the start of 2019, and it could progress with relatively low risk in the context of some of the investigations we now needed to undertake.

40 MAJ CHAPMAN: So all these considerations you refer to, to your mind, weighed in favour of the further testing and evaluation being conducted by way of an OPEVAL?

45

COL LYNCH: Correct.

MAJ CHAPMAN: As opposed to AATES doing it?

5 COL LYNCH: Correct, yes.

AVM HARLAND: Could I just ask one intervening question there?
Was consideration given to the resource that you used in the OPEVAL, the
experience of the people in the OPEVAL, effectively assigning them under
10 the control of the Flight Test Organisation, AATES, to allow them to have
more capacity?

COL LYNCH: So we had – that was problematic because my main
resource had just come out of being the 10-year Commanding Officer of
15 that flight test capability, and putting him back in there probably wasn't the
best answer. However, the DoSA-FT – the Delegate Safety Authority,
Flight Test – was then the XO, so it was separated from the SO1 T&E, due
to the experiential development required. He was still setting the flight
conditions for the CAT 4 flight test under the OPEVAL.

20 So we were still engaged with AATES, and he was still providing
supervision as DoSA-FT; it was just being executed outside the
organisation that had some issues.

25 AVM HARLAND: Is an OPEVAL operational test and evaluation, by
virtue of how you would define it?

COL LYNCH: It's exactly that, sir, but without the test because we
weren't actually testing, we were just evaluating whether it met an
30 operational need.

AVM HARLAND: But it would be done under the same instructions and
limitations as a T&E?

35 COL LYNCH: Correct, sir, yes.

AVM HARLAND: Okay, thank you.

MAJ CHAPMAN: So next, onto what you've had to say, sir, about the
40 OPEVAL. You said you commissioned the OPEVAL. You say that in
your statement. Do you have a copy of the OPEVAL with you?

COL LYNCH: I do. Just let me find it.

45 MAJ CHAPMAN: I think you said it was 8.

COL LYNCH: 6, I think. Yes, 6.

5 MAJ CHAPMAN: Just to identify it, it's a report dated 29 February 2020 and signed by COL Langley?

COL LYNCH: Correct.

10 MAJ CHAPMAN: And it's a report that you refer to at paragraph (e) of your statement on page 19?

COL LYNCH: Correct.

15 MAJ CHAPMAN: It's a report that you say was commissioned for the purposes of seeking better understanding of AATES' findings, or AATES' assessment of "Unacceptable risk to flight safety"?

COL LYNCH: Mm-hm.

20 MAJ CHAPMAN: I just want to take you to a few aspects of this report, if I can? So paragraph 1 sets out the background and refers to AATES' conclusions that there was an unacceptable ambiguity and attitude, possibly leading to CFIT. Do you see that?

25 COL LYNCH: Yes, that's a reproduction of their words.

MAJ CHAPMAN: Yes, in the background.

COL LYNCH: Yes.

30 MAJ CHAPMAN: Paragraph 3, it notes that:

35 *The Standards Section was tasked to gather more comprehensive information requirements, requested as a recommendation in the AATES report.*

COL LYNCH: Yes.

40 MAJ CHAPMAN: At paragraph 7 and 8, there's a detailed explanation of the attitude ambiguity by reference to pitch and roll conditions. Though I think you said this before, basically the report accepted the issue identified by AATES, that when you're looking off-axis there is an ambiguous attitude issue.

COL LYNCH: I think the contention here is AATES refer to it as an error, a problem; it's a design feature. So we just need to get the language really clear here. It wasn't an accident that it was displaying that way; it was intentional, that was actually how the symbology was designed.

5

MS McMURDO: But that doesn't help it, if it's still a problem, does it?

COL LYNCH: So the problem, ma'am, is, was it functioning as designed, or was there a function that was not as designed?

10

MS McMURDO: No, was it safe? Was it safe? That's the problem, isn't it? That's the problem that AATES was concerned with?

COL LYNCH: Well, so there was uncertainty as to whether it was functioning, from their report, as designed, or whether this was an anomaly. So they didn't know. It's in their report.

15

AVM HARLAND: But, materially, they still found it to be unacceptable from a safety point of view, whether it was designed or not?

20

COL LYNCH: Yes, that was their initial assessment, because I think much like when Navy tested it during the initial First of Class, it represented different, and they weren't expecting it, so it was a bit unexpected. Let me just find that for you, ma'am. So it's in "Conclusions Recommendations 26", of reference number 7, starting – you could probably read all of the sentences, but really starting at sentence number 2.

25

MS McMURDO: Yes, so they identified that it was purposeful.

COL LYNCH: So:

30

[REDACTED]

35

MAJ CHAPMAN: Sorry, sir, there is a document which you see is "For Official Use Only", and he's reading it onto the - - -

40

MS McMURDO: Yes.

MAJ CHAPMAN: The other document – just to be clear, sir, the OPEVAL is unclassified.

45

MS McMURDO: That's right.

MAJ CHAPMAN: Though this document is "For Official Use Only".

5

MS McMURDO: Yes. I mean, we did ask, some hearings ago, if this could be reassessed. It hasn't been reassessed in its classification. Ms Musgrove? If you recall, we asked that of you some time ago, some hearings ago, if it was to be reassessed and we never got a response. I gather it hasn't been reassessed?

10

COL LYNCH: Sorry.

MS MUSGROVE: I don't have any instructions on that. I can take some instructions.

15

MS McMURDO: It would be useful, for asking questions of witnesses like this.

20

MS MUSGROVE: Yes, certainly. My recollection was that it wasn't necessarily a matter for the Commonwealth to reassess; it was the author of the report to reassess. But that's my recollection from a number of months ago.

25

MS McMURDO: The authors of the report have - - -

MS MUSGROVE: I'm sorry - - -

30

MS McMURDO: Sorry, as I recollect it, the authors of the report had assessed it as "Official".

MS MUSGROVE: I'll need to take some instructions, if I may, and - - -

35

MS McMURDO: Yes, I think COL Streit could perhaps clarify exactly what the position was. It seems as though it was one of those things that happened and has been forgotten, but it's now arisen. Yes, COL Streit?

COL STREIT: My understanding of the matter was the author of the report was content to reclassify it for "Official" use.

40

MS McMURDO: Yes.

COL STREIT: We're talking about LTCOL Reinhardt here. It was - - -

45

MS McMURDO: That's right. Before COL Reinhardt gave evidence,

that's what he said, yes.

5 COL STREIT: It was the Commonwealth position at that time, that the "Official: Sensitive" classification be made. The document to which – the AATES report is referred to, and the findings of the AATES report is referred to in another document which is the – just a moment.

COL LYNCH: Is that the – may I speak?

10 COL STREIT: The Operational Evaluation refers to the AATES report. Oddly enough, the Operational Evaluation is at the "Official" level - - -

MS McMURDO: Yes, that's right.

15 COL STREIT: - - - referring to a document that is at an "Official: Sensitive" level.

MS McMURDO: That's right.

20 COL STREIT: This is the matter the Commonwealth was asked to revisit - - -

MS McMURDO: Revisit, yes.

25 COL STREIT: - - - back in August, and perhaps they could revisit it again and clarify their instructions?

MS McMURDO: Yes. So perhaps they could revisit it overnight?

30 MS MUSGROVE: Certainly, it's something that I can raise. I understand that the owner of the document is perhaps Aviation Command rather than Mr Reinhardt, and so that is perhaps where the misunderstanding has come about. But it's certainly obviously arisen, and I'll take some instructions on it overnight.

35 MS McMURDO: Thank you, Ms Musgrove, I appreciate that. So in the meantime, if you could – no not you, Ms Musgrove, no. MAJ Chapman, if you are able to continue your examination by just referring to the paragraphs, without referring to the content? And those of us with access to the documents at this level can follow, perhaps. But if it's too hard, well, then we'll just have to leave it until we go into private session, I suppose.

40 MAJ CHAPMAN: Yes, I think I can deal with the references in the way that you've described, Ms McMurdo. So, sir - - -

45

MS McMURDO: So you'll have to exercise some care here, so you can't actually read slabs of the document out in public at the moment.

5 MAJ CHAPMAN: Okay. Sir, maybe if I go back to your statement on page – so I'll return to page 7 of the OPEVAL report.

COL LYNCH: So we're on page 7 of the OPEVAL, or my statement?

10 MAJ CHAPMAN: Yes, of the OPEVAL.

COL LYNCH: Yes.

15 MAJ CHAPMAN: And I just want to make sure I've got the right reference here. I withdraw the page 7 remark, because it'll involve going into the document too much. Though do you recall one of the outcomes or recommendations was to recommend a requirement to align line-of-sight when making attitude changes, and that that was to be incorporated in the Standardisation Manual?

20 COL LYNCH: That was certainly discussed, yes. There is a contextual component to this too. So if you were – you can set the attitude by, you know, setting the indicator on the pitch ladder, but one of the common ways of setting attitude is by positioning a velocity vector at the angle that you want it, by pitching. And the velocity vector is only available looking out
25 the front, because it is a predictive indicator of direction of travel.

MAJ CHAPMAN: Just going to the OPEVAL, which is unclassified, you have that with you. Going to page 7 of that – this is what I was attempting to find before – you have, down the bottom, (a) to (c), you have
30 a set of measures intended to reduce risk there that's set out:

Emphasis on pitch, scale, animation with respect of line-of-sight of the HMSD.

35 Do you see that?

COL LYNCH: No, sorry. Going to, is it 7?

40 MAJ CHAPMAN: Sorry, page 7.

COL LYNCH: Yes.

45 MAJ CHAPMAN: Down the bottom. Second is a requirement to align line-of-sight when making attitude changes.

COL LYNCH: Yes.

MAJ CHAPMAN: And third is the incorporation of the line-of-sight forward in UA recovery. And the requirement for aligning line-of-sight when making attitude changes was something which was incorporated in, I think you said, the Standardisation Manual?

COL LYNCH: Correct.

MAJ CHAPMAN: If you go over the page to page 8, is that the - the OPEVAL proposed the form of warning, and is that at the top of page 8, a form of warning?

COL LYNCH: Yes, that was proposed. It subsequently changed, but certainly in the report it's proposed.

MAJ CHAPMAN: So is your understanding of what was - or first proposition, is your understanding that the Standardisation Manual was updated in a way broadly consistent with a warning - - -

COL LYNCH: Absolutely.

MAJ CHAPMAN: - - - that is, that attitude changes are only to be made when looking ahead?

COL LYNCH: That is correct.

MAJ CHAPMAN: Right. Is it your understanding that it wasn't limited to UA recovery, and it was just - it encompassed attitude change as well?

COL LYNCH: Well, I can be clear: attitude changes where you are actually referencing the pitch ladder, because it wasn't always available. So, for example, if you're in declutter 1, you didn't have a pitch ladder, so the assumption that there is always a pitch ladder there is an incorrect one; the various DIC ladder modes took it away and you had various horizon indications.

It was very common, certainly when you're flying in formation, that you're not looking at the aircraft pitch; you're looking at your position, the relative position, and adjusting roll and pitch to position yourselves in the formation appropriately, and there is almost no reference. In tactical formation, you're still responsible for terrain clearance yourself, and separation from other aircraft if you're a, you know, dash 2, 3, 4, et cetera. So there's a lot of adjustment that you simply don't refer to the pitch ladder for at all.

5 So I talked before about your horizon line, your velocity vector if you wanted to get a trend indicator, and the basic information, performance information that you would be looking at in formation. It's conceivable – and a lot of people did fly in declutter modes. So, you know, you could look forward and you wouldn't see anything because you're in declutter 1, unless you went to full symbology, then you'd be able to see the pitch ladder.

10 So in that instance, the only UA recovery method is to look at the Primary Flight Display and execute, and that was pretty common teaching, right? If you got into a position where you had to do a UA recovery, it's on the clocks. Forget your symbology, because it's not there as a primary flight aid, it's there as a performance backer. The Primary Flight Display is it. That was common to aircraft in declutter mode, where you - - -

15 AVM HARLAND: Isn't declutter mode where you can remove that ambiguity and still have access to heading and distance to run indicators?

20 COL LYNCH: Yes, you're testing my knowledge of the detail now, sir. I think the distance to run was there, irrespective. It was only the information in the centroid in your pitch ladder that I think decluttered, but I would have to go through declutter mode 1 and 2 in detail. As I said, I wasn't qualified on MRH, so I don't know, sorry.

25 AVM HARLAND: Just a question if I may?

COL LYNCH: Yes, sir.

30 AVM HARLAND: You talked about being in formation and, you know, using your reference, being the other aircraft, but still holding the responsibility to avoid the terrain and avoid the other aircraft.

COL LYNCH: Yes.

35 AVM HARLAND: In that situation, where everything is going well, then I can understand that would be something you're trained for. At a point at which somebody becomes spatially disoriented – and noting the comment that you made in the preamble here, where you said that when you tested the information back in 2012 and you went and had a look at version 5.1,
40 you found the information to be compelling – there were some indications of symbology improvements?

COL LYNCH: Absolutely, yes.

45 AVM HARLAND: So how is it, if you're in formation, you're trying to

5 hold on to a visual reference to the other aircraft, you're in a close formation, you become somewhat disoriented and you have this information which you call compelling in front of you while you're still trying to maintain visual with the other aircraft? To me, that sounds like on one hand the compelling thing is the selling point, but now on the other hand, in this situation, it's actually a significant safety issue.

10 COL LYNCH: So it depends. I mean, I think you're looking at parts of the symbology. So what was compelling? I described the IDSI indication as a more compelling indication – instantaneous, you know, what is the aircraft doing now? Having that velocity vector to view that predictive trend, that's compelling information because it gives you useful performance scan.

15 But whether the pitch ladder was there or not, I don't know whether it was there or not during this particular event. I personally – and, you know, how do people use symbology? Well, everyone is a little bit different. Certainly, a lot of people would dim it right down, but I would always look through it. So there were instances in formation, we'd be flying in
20 formation on another aircraft, with the symbology on full, and I didn't see it because I wasn't looking at it. You still have to have an intentional switch-in to look at the symbology.

25 So the fact that it's there does not necessarily mean it's capturing your attention. Things can happen that do capture your attention, if – and this happened in Tiger as well, and I understand it was an issue in MRH-90 – if the brightness suddenly went full, which happened on a dark night when you had it dimmed right down, that could be a distraction until you dimmed it down again.

30 AVM HARLAND: So was that a feature that you saw on TopOwl?

35 COL LYNCH: It was a feature across both aircraft. It just – in the case of Tiger, there was a HOCAS control where you could just dim it down again, without taking your hands off the controls. In the MRH-90, it wasn't a HOCAS control; it was you had to go into the centre console.

40 So that could be an issue, particularly if your formation aircraft was somewhere in the centroid, and you had a full symbology set, and then it went all bright. You've now, you know, potentially got a situation where there is obscuration and you need to do something to address it. So, you know, there are issues. If you had declutter 1 up, for example, and you had the pitch ladder gone, then you would get brightness, but it was around the fringes and your centroid would, if you had the other formation aircraft in

the centroid, you'd maintain visibility and you'd tune it down in your own time, or get someone to do it for you.

5 AVM HARLAND: Okay. I'm just trying to get straight in my head how you would possibly disregard that situation where you've had a loss of situational awareness. Because I accept that when you have situational awareness, things are very straightforward and you have a very rational, measured way of managing things. But when things go pear-shaped and it becomes a loss of situational awareness situation, disorientation kicks in.
10 There's some potential there to use erroneous information, which is my reading of what the AATES report was really trying to get to.

COL LYNCH: Yes, potentially, sir. I can accept that.

15 AVM HARLAND: Thank you.

MAJ CHAPMAN: And just along those lines, sir, would you agree that the use of symbology is subjective for each pilot?

20 COL LYNCH: Absolutely. I mean, we teach various ways to look at the symbology, what to scan for, what's important at various points in time, particularly over low contrast environments. Certainly early indicators of trend, particularly for descent, et cetera, become fairly important as part of the scan. But how people see symbology and how they interpret symbology,
25 the best way you can infer that is through their performance.

So if they're flying the aircraft precisely and seeing all of those things, you presume that they're scanning the symbology correctly and getting the right information, but actually they could be scanning the PFD.

30 MAJ CHAPMAN: But you would agree that that only emphasises the need for the symbology to be accurate?

COL LYNCH: Absolutely, yes.

35 MAJ CHAPMAN: And not misleading in any way that is avoidable?

COL LYNCH: Agree, yes.

40 MAJ CHAPMAN: Or ambiguous in any way that's avoidable?

COL LYNCH: That would make sense.

MAJ CHAPMAN: And as we've heard earlier in your evidence, one

way of avoiding ambiguity in the symbology is to seek out and achieve a software solution to this particular issue; correct?

5 COL LYNCH: That was one of the possibilities, absolutely.

MS McMURDO: The AATES report identified that this issue that they identified as being unacceptable from a safety perspective could have been purposeful, as indeed you tell us it was, and then they also say – well, there was also concern about whether those developing the symbology, the software, had identified the issue that AATES was concerned with and had dealt with it. Correct?

10 COL LYNCH: I don't think they had any concerns at all. They deliberately designed it that way, ma'am. They had some design decisions to make during the development process - - -

MS McMURDO: What, knowing that there was this safety issue that arose from it?

20 COL LYNCH: I don't think, when they did their testing, they saw it as a safety issue because they fundamentally understood the design, they were involved in the design. They tested it to that design.

MS McMURDO: Well, the OPEVAL continued to identify it as a safety issue, just not as big a safety issue as the AATES; correct?

30 COL LYNCH: The OPEVAL said, "Look, it could probably be better. In fact, given where we've come from, from a pitch information fixed forward, to this, that would seem like the better way to go".

MS McMURDO: All right. Thank you.

35 MAJ CHAPMAN: Back to the inclusion of the warning, briefly. Can we take it you would agree that the inclusion of the warning was a measure taken to mitigate against the risk presented by the symbology?

40 COL LYNCH: Absolutely. It was to basically make sure that everyone operating that system was fully informed of its characteristics and that was also included in a deal package. So there could be no misinterpretation or lack of understanding, as was evident in the conclusion in the AATES report, that we didn't really understand what it was showing us, so if you communicated very accurately what you were looking at and it was relatively straightforward to understand what you were looking at in each instance. So there's a number of times in – certainly introduction of, as an example, TopOwl, where we've had to deal with circumstances and design

features of that helmet that are different, and different to anything we'd done before.

5 I don't know if you've dealt with hyper-stereopsis at all? So hyper-stereopsis, the IITs are mounted out here, which is about double your eye interpupillary distance, which means that the signals coming through your brain as projected make you overestimate how far you're away from something and it creates all sorts of effects when you're close to the ground. So that feature is difficult, but after 10 hours, you train it out. Because people are used to it, they're aware of it, they're expecting it, they know what it is and they adapt for it. And that's a feature of the system.

15 This is another example of that, where as long as you understand what you're looking at, you build your routines into making sure that the information you're getting is the correct information. To the point I made before, pitch information over here that is not accurate if it doesn't include a velocity vector isn't a complete picture. The velocity vector is captured at the front with the aircraft's direction of travel.

20 It is the key piece of information that tells you whether you're going above the horizon or below the horizon and it will overlay on terrain and tell you whether you're going to hit something. If you haven't got that in your scan, it's a useless scan. The only reason you look out there, out to the side – and you might be looking for a formation position, or you're looking out in a turn, for example. But you're not setting attitudes. So any discussion about setting an attitude out here somewhere with reference to a pitch ladder is fantasy, in my opinion.

30 MAJ CHAPMAN: It's also the case, you've just given evidence, isn't it, that you can essentially train out, you're saying, this issue which has arisen out of the pilot's consciousness such that it, in effect, wouldn't be an issue because the training is the control?

35 COL LYNCH: Absolutely. And the one thing that was important is that wherever you looked with 5.10, you saw horizon indication. So you always knew where the horizon was. So it was communicating to you exactly where the horizon was. And that's why there was this oddity, if you want to call it that, compared to what we previously knew, because it basically transitioned from pitch to horizon all the way around. So you basically had horizon awareness always.

MAJ CHAPMAN: In a scenario of spatial disorientation where one's in the grip of confusion and workload, you're suggesting, are you, that

someone in that position could deal with this symbology issue by responding with their training. Is that right?

5 COL LYNCH: So I haven't seen the DFSB report. I don't think you have either. I don't know exactly what happened and in what circumstance they were in. But if I was able to say, based on my experience, one of the biggest concerns is if you are unable to respond to what you perceive to be a spatial disorientation event because you also harbour concerns about other aircraft that are in close proximity to you. So there are some decisions to make in
10 that particular space that are horrible decisions. Because you don't know where other people are, but you also don't know where you are. So if you found yourself in that situation, that's a very difficult place to be.

15 MAJ CHAPMAN: It's a very difficult place to be, but again, it underscores the need for pilots not to be presented with symbology which is compelling in front of them and is not ambiguous in any way that's avoidable. Isn't that right?

20 COL LYNCH: So I don't actually agree with your contention. Because, you know, when I'm talking about key elements of information, and I've mentioned it a few times now, referring to a velocity vector which is telling you where you're going to be in five seconds. It's not available out the side. You're not setting attitudes, particularly when you're in formation, by looking at a pitch ladder; you're setting it with reference to other
25 aircraft. So your roll angle will position you relative to those aircraft, as will your pitch, as will your power setting. You are setting yourself with reference to other things, not setting attitudes sitting out the front or out the side, or anything like that. You are captured with staying in your formation position.

30 Bushman 83 was in number 3, probably five, six, seven rotors away from lead, and responsible for maintaining separation with dash 2. It's not an easy position to fly and it's – you've got a lot to look at. And I can tell you, you wouldn't have been looking much at setting pitch attitudes at that point.

35 MAJ CHAPMAN: Can I now turn, sir, to the topic of the brief to the Director-General, BRIG Fenwick. And this is the brief dated 20 March. I'll just turn up a copy.

40 MS McMURDO: Reference 1, I think it is. AVM Harland has assisted me.

COL LYNCH: Is that 20 March, that's the – I think it's 3.

45 AVM HARLAND: 20 March. Sorry, I thought it was 28.

MAJ CHAPMAN: I apologise, I'll just have to - - -

AVM HARLAND: The one at tab 2 which is 20 March.

5 MAJ CHAPMAN: Could I just have a moment? Sorry for that, sir. Sir, have you seen this document before?

COL LYNCH: I have. I think I provided it.

10 MAJ CHAPMAN: You did, it's at tab 2. And that's the same – do you see the date there is – well, it's undated. Do you accept it's undated on both sides of that document?

15 COL LYNCH: Affirm, and it's been signed on the 20th of the 3rd by DGAVN.

MAJ CHAPMAN: Thank you. So it's 20 March, it's dated up the top?

20 COL LYNCH: Correct.

MS McMURDO: The front of tab 3, yes.

MAJ CHAPMAN: Do you see that's the same day as that minute which we referred to earlier in your evidence to the Project Director, effecting Service release?

25 COL LYNCH: Yes, I do.

MAJ CHAPMAN: Do you see that this was prepared, this decision brief, by other officers and not you, though you've been referred to as - - -

30 COL LYNCH: Consulted.

MAJ CHAPMAN: Yes.

35 COL LYNCH: Yes.

MAJ CHAPMAN: I just want to take you to the other – so if you put that to one side, and I'll take you to the other decision brief.

40 COL LYNCH: Is that the tab 1?

MAJ CHAPMAN: Yes, that's correct. The one in tab 1, this is the one you refer to in your statement; correct?

45

COL LYNCH: I think so, yes. Just in context, this was generated post the first brief, after a conversation with – that happened between the Standards Team and AATES regarding the use of go around mode. So this actually dealt with – at that point I started to feel as though there wasn't a fulsome history of exactly what had transpired in this process. So I undertook to deliver that to DGAVN, but I also informed him in here that we'd removed, at para 12, the go around mode component of that warning from the STANMAN after discussions with AATES.

5

MAJ CHAPMAN: And I just want to explore that a little bit. So you recognise the April brief to be one from LTCOL Norton, and that was the one cleared through you?

10
COL LYNCH: Correct.

MAJ CHAPMAN: And it's dated, or you signed it around 20 April; is that right?

15
COL LYNCH: 20 April, yes.

MAJ CHAPMAN: And it's the brief that was prepared in support of Service release of 5.10 as reflected in the purpose there?

20
COL LYNCH: Yes. So it was a month later, but what it did was, because there'd been some changes, it sought to provide a comprehensive update of exactly what had transpired. Because there had been that change with go around mode, I felt there was a need to inform the DG what had occurred and why.

25

MAJ CHAPMAN: So do you see, and can I take you back to the 20 March brief? So this is the earlier brief.

30
COL LYNCH: Yes.

35

MAJ CHAPMAN: And that, at paragraph 2, says it recommends Service release. I won't go into what it says.

COL LYNCH: Yes.

40

MAJ CHAPMAN: But you also have, a month later, in paragraph 3(c), a Service release recommendation.

COL LYNCH: Yes.

45

MAJ CHAPMAN: So we've got the DG here in these two documents, a month apart, both recommending Service release of 5.10?

COL LYNCH: Yes.

5

MAJ CHAPMAN: And can you just explain whether there's – if there's any functional difference between a recommendation of Service release to the MTCH or recommendation of Service release to the project office? If you can you recall that.

10

COL LYNCH: So it's a direction, so the DG telling the project office to get on with it, basically. And the Military Type Certificate Holder, as the Chief Engineer, to say, "Okay, move to Service release". It's his decision. It was within DGAVN's delegation.

15

MAJ CHAPMAN: So this is what I'm just trying to explore with you, sir. There's two different references to Service release here. One in the April and one in the March. And the one in the March is recommending Service release.

20

COL LYNCH: Yes.

MAJ CHAPMAN: And that corresponds with the direction to COL Thomas at the Project Directorate; correct? And his role, was it to administratively effect Service release? Is that what happened?

25

COL LYNCH: Absolutely. So the Military Type Certificate Holder worked for him. So it's basically providing direction to move to Service release. That configuration was approved. The difference in terminology, I mean, that's on me. Obviously the first brief was done by DACM to approve Service release. I made, erroneously, a recommendation that the recommendation was to go to the MAO-AM, but actually it was within DGAVN's delegation. So he'd already approved it.

30

MAJ CHAPMAN: Yes, that's right. And back to the April decision brief, the AATES report and the OPEVAL are included as references?

35

COL LYNCH: Yes.

MAJ CHAPMAN: And you'll see from paragraph 3 that it first refers to him noting the "Unacceptable" finding.

40

COL LYNCH: Yes.

MAJ CHAPMAN: The reassessment. Second, that the Army MAO will retain low risk.

COL LYNCH: Yes.

5

MAJ CHAPMAN: And, thirdly, recommends Service release of 5.10. And this is, again, in April. So just a few questions about that.

COL LYNCH: Yes.

10

MAJ CHAPMAN: You agree that, from this document, the OPEVAL was intended and did in fact reassess the “Unacceptable risk to flight safety” down to “Undesirable”?

15

COL LYNCH: That was one of the outcomes, yes.

MAJ CHAPMAN: It advised the DG in the April brief that the risk to personnel was low, notwithstanding AATES’ earlier report?

20

COL LYNCH: Agree, yes.

MAJ CHAPMAN: Is it the case that the assessment of risk in this document, the April brief, was low based more or less on the findings of the OPEVAL report?

25

COL LYNCH: Correct.

MAJ CHAPMAN: That, in assessing that risk, in the decision brief, the April one, it did not incorporate in any meaningful way the risk that was assessed by AATES?

30

COL LYNCH: No. Basically, it re-evaluated the risk, answered a bunch of the unanswered questions. So it properly characterised that risk, and that’s the outcome it came out with.

35

MAJ CHAPMAN: So it’s the case that even though, as you, I think, have accepted earlier, the OPEVAL did not materially dispute the AATES identification of the issue; in fact it accepted it, we have here from - - -

40

COL LYNCH: Well, I’ll say it acknowledged it.

MAJ CHAPMAN: Well, I think it goes further than that. I think it agreed with it.

COL LYNCH: No, it basically rewrites what the findings of that report were and uses that as a start point for the evaluation.

5 MAJ CHAPMAN: So we've been to paragraph 8, sir, where I've taken you to the sentence where it says:

AATES correctly identified, essentially, the issue and that it could lead to confusion under low cue environments, and possibly a CFIT event.

10 COL LYNCH: Yes. So I mentioned, when we talked about that before, that they correctly identified the symbology issue. But you can read that sentence two different ways. You read it one way; and I read it the other way, which was, "And they identified that they thought it was a problem",
15 as opposed to, "They identified that there was an anomaly, if you like, according to them, with the way the pitch ladder was represented. And they also then found this".

20 MAJ CHAPMAN: And just to return to your statement – I'm at page 20 now – and you refer to:

The whole exercise –

25 this is the risk assessment exercise –

being about methodically assessing risk by using broad representative audience under an appropriate supervision so I could present a complete risk picture to the DGAVN for his decision.

30 COL LYNCH: Correct.

35 MAJ CHAPMAN: And this is all the risk assessment being presented in support of 5.10, approval of Service release?

COL LYNCH: Yes.

40 MAJ CHAPMAN: And returning to the brief to the DG at paragraph 5, and I'll just summarise that. The report outlines the AATES was requested by the MRH Project Office to conduct Human-Machine Interface assessment prior to Service release?

COL LYNCH: So this is para 5 of the 20 March brief; is that right?

45 MAJ CHAPMAN: No, this is paragraph 5. This is of the April brief.

COL LYNCH: Okay. This is the one that starts, "Navy Incorporated".
Yes.

5 MAJ CHAPMAN: Yes. And the test crews identified particular
characteristics in the display of the symbology concerning misleading
attitude information.

COL LYNCH: Yes.

10

MAJ CHAPMAN: And the report notes that AATES had no information
from the manufacturer regarding system functionality and unsure as to the
cause of the error.

15 COL LYNCH: Yes.

MAJ CHAPMAN: That AATES, in their report, specifically concluded
that ambiguous attitude represented unacceptable risk to flight safety and
the report references the controlled flight into terrain in low cue
20 environments. And at paragraph 6 the report notes to the DG that DACM
directed the further evaluation to expand on the testing by AATES. And
that the OPEVAL reassessed the previous unacceptable to undesirable in
low light and low cue conditions.

25 And the reasons that were advanced, sir, in this brief for the OPEVAL
purporting to reassess and in fact downgrade the AATES "Unacceptable"
findings to "Undesirable" were – and I ask you to agree – that, in the test
crew's experience – this is the OPEVAL test crew's experience – no loss of
situational awareness or unusual attitude or confusion during the
30 OPEVAL. Do you agree?

COL LYNCH: I agree, yes.

MAJ CHAPMAN: And that the experience was that Human-Machine
35 Interface testing was generally enhanced compared to version 4.

COL LYNCH: Yes.

MAJ CHAPMAN: And that the new symbology was found to be an
40 improvement.

COL LYNCH: Yes.

MAJ CHAPMAN: And that it was assessed as being satisfactory against
45 the OPEVAL critical operational requirements, compared with version 4.

COL LYNCH: Yes.

5 MAJ CHAPMAN: And at paragraph 7 of the brief it also makes reference to AATES' response to the OPEVAL report.

COL LYNCH: Yes.

10 MAJ CHAPMAN: And do you have a copy there of the AATES response? It should be tab 4.

COL LYNCH: Yes.

15 MAJ CHAPMAN: So you recognise that as the AATES response from LTCOL Reinhardt?

COL LYNCH: I do.

20 MAJ CHAPMAN: And this was sent around mid-March in 2020, so about two to three weeks following the OPEVAL report?

COL LYNCH: Yes.

25 MAJ CHAPMAN: It was sent to, among others, you, as DOPAW, as well as to the DG?

COL LYNCH: Yes.

30 MAJ CHAPMAN: Do you see there at paragraph – noting the classification – actually, I'll have to approach this in a different way. That the SO1 AATES makes some assessments in paragraph 3, describes some matters in paragraph 3. And I'll just give you some references.

COL LYNCH: Yes.

35 MAJ CHAPMAN: Do you see the conclusion or the opinion expressed by SO1 AATES at paragraph 4 in relation to what had been concluded in the earlier report?

40 COL LYNCH: Yes, "not changed assessment". Is that the one?

MAJ CHAPMAN: Well, it has a security – there's a security issue. But yes, I'm just giving you the reference. That's the one.

45 COL LYNCH: Got it.

5 MAJ CHAPMAN: That's the one. Are you aware of anyone, either from your staff, you, your staff or anyone else, responding to LTCOL Reinhardt about this position, this minute that he's raised?

COL LYNCH: Yes, and it's included as a reference to the subsequent briefs.

10 MAJ CHAPMAN: Sorry, you responding to LTCOL Reinhardt?

COL LYNCH: Did I formally write to him?

MAJ CHAPMAN: Yes.

15 COL LYNCH: Or did I give him a call and speak to him about it? Did I speak to him before he even wrote it? Yes, I spoke to him all the time. There seems to be a perception coming out that we didn't talk and there's some, like, wall between us. We talked all the time.

20 MAJ CHAPMAN: No, I understand that your evidence is that you had communication frequently; it's in your statement.

COL LYNCH: Yes.

25 MAJ CHAPMAN: I don't dispute that. I am merely asking you whether there was a formal piece of correspondence back, as a matter of fact, back to LTCOL Reinhardt about this matter.

30 COL LYNCH: No. And I think the key outcome of this was the – I think they had a comment in there about the go around mode. That was either in this or it was in a subsequent piece of correspondence. No, it was after that. It was a mid-April piece of correspondence, after which we adjusted the STANMAN. So no, no formal response. Because this was sent to DACM, not me. I was an info copy.

35 MAJ CHAPMAN: Do you accept, sir, that the assessment made for a second time by LTCOL Reinhardt, or AATES, in this document directly informed the risk assessment that was being conducted in support of Service release?

40 COL LYNCH: Absolutely. It was included in the brief that they – in fact, I'll check. I'm pretty sure we included that as a reference in the brief. No, I didn't include it as a reference in the brief because it was sent straight to DACM. In fact, it might have been in the "standby".

45

MAJ CHAPMAN: I think you might be referring to paragraph 7(a), but I can't – of the 20 March brief; is that right?

5 COL LYNCH: Standby. Okay, in essence, I think what you're asking is they didn't change their perspective.

MAJ CHAPMAN: No, my question was whether the fact that AATES hadn't changed their perspective was a consideration in your risk assessment.

10 COL LYNCH: Well, they hadn't done anymore testing. So there were a number of questions that we managed to answer from the report, but at that point there was no further testing and they were firm on that finding in that circumstance. So they've articulated that.

15 MAJ CHAPMAN: Do you see there that in paragraph – I withdraw that. At paragraph 9, under the heading "Risk Assessment" – and I'll just turn over - - -

20 COL LYNCH: Is this back to the brief?

MAJ CHAPMAN: Yes, it is. Sorry, I should identify it. The April brief.

25 COL LYNCH: April brief, yes.

MAJ CHAPMAN: Do you have that?

COL LYNCH: I do.

30 MAJ CHAPMAN: It refers to the OPEVAL not identifying any predicted confusion leading to CFIT risk is low.

COL LYNCH: Correct.

35 MAJ CHAPMAN: And when it refers to the OPEVAL not identifying confusion, that was based, was it, on the pilot survey that was attached to the OPEVAL?

40 COL LYNCH: Yes. And an understanding of the correct function of the 5.10 symbology set.

MAJ CHAPMAN: Was that also a matter – the pilot's experience – that informed the assessment of risk from – to "Undesirable" and to low, their experiences?

45

COL LYNCH: Absolutely. Yes.

MAJ CHAPMAN: As far as you're aware, was that testing conducted in formation setting at all?

5

COL LYNCH: I don't know.

MAJ CHAPMAN: Was it conducted in DVE conditions at all?

10 COL LYNCH: It was conducted in conditions as specified by the DoSA-FT. So they controlled the flight conditions limitations. There was testing at night. I couldn't talk to you in exactly the conditions because I don't recall the DoSA-FT's limitations.

15 MAJ CHAPMAN: So you may not be able to recall the last one, whether it was conducted overwater?

20 COL LYNCH: No, I'm not sure that – I don't think the OPEVAL did, but that's why Navy were invited along, because they had done some maritime testing with 5.10 earlier in the year, in March in the maritime environment specifically, for the First of Class Flight Trials. So they already had some information that they fed into that, which is precisely why we requested the Royal Australian Navy support the OPEVAL activity, and they did.

25 MAJ CHAPMAN: Though that AMAFTU – I think you're referring to the AMAFTU testing?

30 COL LYNCH: The AMAFTU testing was the first time they'd done it for the 5.10 in the maritime environment and then they also had a pilot allocated to the OPEVAL.

35 MAJ CHAPMAN: Just while you've mentioned the AMAFTU testing, to the extent the AMAFTU testing has been referred in some of these decision briefs as a matter supporting – as a consideration, I suppose, supporting 5.10, that you'd accept was in a very different context?

COL LYNCH: It was in a maritime context.

40 MAJ CHAPMAN: Yes. Which is not directly comparable to Special Operations context or even remotely, possibly?

COL LYNCH: It is. But that's just as far as I'll go.

45 MAJ CHAPMAN: Yes, I understand.

AVM HARLAND: If I could, MAJ Chapman, just a question about the limitations. So you said there were limitations that were set by the DoSA-FT on the conduct of the - - -

5 COL LYNCH: Yes, flight limitations.

AVM HARLAND: Flight limitations, yes. Which would talk about the environment that the test could be conducted in, et cetera.

10 COL LYNCH: Absolutely, yes, environmental conditions.

AVM HARLAND: So with those limitations – and we’ve heard a previous witness talk about those limitations being quite substantial in terms of, yes, what could and couldn’t be done. When you look at a
15 recommendation for Service release and you’re staffing that up to the authority, would you normally take into account those limitations and consider whether the Service release would have similar limitations that would be subject to further testing to be able to expand the envelope?

20 COL LYNCH: Yes, I know what you’re asking, sir. And the vexing issue here is that when you talk about limitations, and there’s been a lot of discussion on limitations, particularly in the SO approach, a lot of the limitations were focussed on the visual acuity and the performance of the IITs, not the symbology.

25 So if you conflate those issues, it’s an integrated helmet, that’s fair enough. Most of the limitations that they recommend to be applied at the 10 millilux level were actually about visual acuity in the IIT performance, not about symbology at all.

30 AVM HARLAND: We had the new IITs on this one, did we?

COL LYNCH: For the testing, no. The new IITs were – I think they first got integrated in about August/September 2020.

35 AVM HARLAND: Yes. With, yes, the question about formation and overwater, where you may or may not have a good horizon, and you’re in formation, so you’ve effectively got something that you need to presently consider carefully to avoid, you’re saying you’re not sure if that was
40 actually tested during the OPEVAL?

COL LYNCH: As in the maritime component?

45 AVM HARLAND: Yes.

COL LYNCH: I don't think it was in this instance but, you know, the reason why Navy was brought in was because they'd already done some testing.

5 AVM HARLAND: Okay. Because I just look at those environments – formation close, overwater, potential for a bit of degradation, no horizon – it kind of ups the stakes in terms of the risk and - - -

10 COL LYNCH: I recall being keen to explore that, but we were constrained by DoSA-FT. Because we were working in cooperation with AATES on this one, and the DoSA-FT constrained that environment and we respected that and got on with it.

15 AVM HARLAND: So did you consider a limitation which would have said, "Let's not do formation, close formation, and let's not do overwater until we further tested", when you recommended that Service release and then - - -

20 COL LYNCH: So I would have been looking for an outcome from the OPEVAL that brought forward a reason to do that. And I didn't get any reason for that, so no.

25 AVM HARLAND: But you would have been aware of the conditions under, effectively, the test plan?

COL LYNCH: Yes, in general terms, but I didn't go - - -

30 AVM HARLAND: Which would have outlined the way that the test was conducted and the limitations that it would have been operating under?

COL LYNCH: Yes.

AVM HARLAND: Yes, okay. Thank you.

35 MAJ CHAPMAN: Sir, paragraph 10 of the brief, it refers to – and this is the April brief – you see it refers to the full risk analysis being contained in future OTCRM.

40 COL LYNCH: Yes.

MAJ CHAPMAN: And what was the OTCRM?

45 COL LYNCH: Sorry, that's the Operational Technical Combined Risk Matrix. It was essentially an enormous spreadsheet where we had every single risk, with all of the controls relevant to that risk for Army Aviation,

and we reviewed that every six months. That transitioned in 2020 into '21 – the beginning of '21 to AVIART, which is a database which we use to do the same thing.

5 But it essentially goes through the full risk assessment, service tech risk assessment process, articulates all the controls and allows us to audit our controls and where we put them into our regulatory system to control that particular risk, and then as modifications are done and engineering changes go through that eliminate risk that we've been, you know, putting in control
10 measures for, we then remove the limitations per se.

So, yes, OTCRM was the start, that ran for a few years and then we transitioned to a database.

15 MAJ CHAPMAN: So are you aware of whether the full risk analysis was conducted?

COL LYNCH: Yes.

20 MAJ CHAPMAN: And it was included in the OTCRM?

COL LYNCH: Yes.

25 MAJ CHAPMAN: So have you seen a document which reflects the full OTCRM risk analysis with respect to the Service release?

COL LYNCH: Not for, what, four years.

30 MAJ CHAPMAN: But you - - -

COL LYNCH: Yes.

MAJ CHAPMAN: It exists and it is something - - -

35 COL LYNCH: It exists. The consideration was done. And it should be in AVIART right now.

40 MAJ CHAPMAN: And you say at 28, I think, of your statement – I'll just ask you to go over to that, sorry; we're chopping and changing with the documents – “That each of the” – there we go, 28(a).

COL LYNCH: So is this my statement now?

45 MAJ CHAPMAN: Yes, your statement.

That each of the items in the bowtie analysis –

and the bowtie analysis you'll appreciate is attached to the - - -

5 COL LYNCH: A brief.

MAJ CHAPMAN: - - - decision brief.

10 COL LYNCH: Yes.

MAJ CHAPMAN:

That each of the items in the bowtie analysis are subject to the seven-step Risk Management process.

15 And you've referred to that.

COL LYNCH: Yes.

20 MAJ CHAPMAN: And just to confirm as part of the narrative, was AATES, SO1 AATES or AATES, engaged further with respect to the bowtie analysis at all, or involved in that analysis?

25 COL LYNCH: That would have been my Op Worthiness team that went through that and they would have consulted AATES as and if they needed to. I couldn't speak to it specifically. But the analysis was done. It was put into the database and the controls were finalised. In this case the controls were the training outcomes in ADELE, from memory, we can go through. But basically, it would've tracked all of those to conclusion and made sure there was a reference.

30 MAJ CHAPMAN: And you've referred at paragraph 23 on page 23 to something which you've mentioned earlier, that you engaged routinely, at least weekly to fortnightly, with COL Reinhardt?

35 COL LYNCH: Absolutely.

40 MAJ CHAPMAN: Yes, and in respect of all these matters. Sir, just next in narratives, was to your recollection the forthcoming SOQC course to be conducted in May '20 a consideration bearing on the decision to conduct an OPEVAL?

COL LYNCH: No. I don't recall that coming into it at all. It was – no.

MAJ CHAPMAN: So you're not aware of any pressure, essentially, to clear the upgrade to Service release on account of course timings or anything like that?

5 COL LYNCH: No. Look, frankly, because there was a lot of competing circumstances, it took a lot longer to get the OPEVAL done, and I would've liked to have tried to address that fairly quickly.

MAJ CHAPMAN: Yes.

10

COL LYNCH: But we had two active investigations going at the time. And a third one happened in July that pretty much consumed us. Two DFSB investigations happening concurrently and it took a lot of staff effort to manage those, and so the OPEVAL ended up, you know, basically sliding right. So I can tell you there was stuff out there that was way more important than HMSD version 5.10 and we were at capacity just managing with, you know, incident investigations.

15

So this was just – you know, it was done when we could get to it. And so I didn't feel any pressure to do that at all. My pressure was coming from other areas.

20

MAJ CHAPMAN: And if you go to page 26, you say in our response there that:

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Version 5.10 had already been deemed airworthy, was an approved OEM certified modification to the NH90 and had been Service released by recognised Military Air Authority.

30

Do you see that?

COL LYNCH: Yes.

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MAJ CHAPMAN: And by that reference, you're talking about the German Forces which you've referred to earlier.

COL LYNCH: Correct, yes.

40

MAJ CHAPMAN: And are you suggesting, sir, that the fact that the Germans had approved the upgrade was, itself, a further reason why the DG could approve Service release?

COL LYNCH: It was part of the evidence pack.

45

MAJ CHAPMAN: So it was a factor?

COL LYNCH: Absolutely, it's a factor. You've got a recognised – i.e. we recognised them as airworthy. We certainly recognised them for the airworthiness of the aircraft. And if they developed a new rotor blade for us and gave it to us, we wouldn't test that and say, "Is it okay?" We accept them as an OEM and, if it's flight tested, as a recognised Military Airworthiness Authority to certify that aircraft.

So symbology set is no different. It's just another component of an aircraft that was certified and it's now an on-the-shelf item, essentially, to be released by the manufacturer.

MAJ CHAPMAN: But isn't it the case that the German Forces would, or are, or can be operating in a different CRE? So role environment?

COL LYNCH: So of particular note, this modification was developed for the deployments in Northern Afghanistan. Which is, you know, a fairly dusty environment. So it was developed specifically for DVE and they tested it - - -

MAJ CHAPMAN: Sorry, for DVE?

COL LYNCH: Sorry, degraded visual environments.

MAJ CHAPMAN: Yes.

COL LYNCH: So they tested it in German Forces and when they found out they couldn't get sufficient degraded visual environments, then Germany took it to the desert in the US and tested it there as well. So they did a fairly extensive testing component against some pretty different environments to basically assess whether it met their requirements for an enhanced degraded visual environment symbology set.

MS McMURDO: Did you discuss with the German Safety authorities for this, the concerns identified in the AATES report?

COL LYNCH: I did not, ma'am.

MS McMURDO: Did anyone from Australia do that?

COL LYNCH: Yes, there's a number of informal approaches with folks that people were on course with – just informal. And we actually sought, "Are you aware of any issues? Are you aware of any incidents that relate to this?" "Nothing." So they had no experience or any concerns with that symbology, including its use in Afghanistan.

5 MS McMURDO: You were in regular contact with COL Reinhardt, regular discussions, so you knew his response to the OPEVAL was that the issues still remained and the danger was specifically identified by COL Reinhardt as flying in formation, at night, overwater, in formation. Did you consider or did anyone actually do a simulator test of those conditions with the symbology, using the symbology?

10 COL LYNCH: No, ma'am. Not that I'm aware of.

MS McMURDO: Was it considered?

COL LYNCH: To do a simulator activity? No, not that I'm aware of.

15 MS McMURDO: Was there any reason why it wouldn't have been done?

20 COL LYNCH: That's a different contract. It would've probably – I don't know how long that would've taken but it's certainly possible that we could've changed the simulator configuration. At that time – and sorry for airing the dirty laundry – there are quite a number of configuration issues with the flight simulator. The flight simulator was already lagging the fleet by about two software iterations.

25 So we had a pretty significant issue with trying to get the simulator up to reflecting what the internal components of the aircraft are. To then jump in front of that and put a symbology set in in front of a fleet upgrade which had probably broader implications, I didn't look at it. But there was a pressing concern at the time that our simulators were increasingly less
30 representative of our aircraft than we would like.

MS McMURDO: I see.

35 COL LYNCH: So not an easy answer in terms of getting that sorted out. Can I also say, there's – COL Reinhardt was not in a position to change his position, as opposed to sitting firm on the finding. Because there would be no further testing done. Actually, when you look at their response to the OPEVAL report, they pretty much conceded everything and made additional comments in some of the OPEVAL findings but retained that
40 one.

45 So in terms of changing their position, there's a substantial change, as indicated by their response which says, "Yes, that's no longer an issue now. That's no longer an issue there. That's no longer an issue there. That's no longer an issue now". My contention at the time was, "Well, you

should've answered that. Why did I have to answer that? Why did you ask the questions in the first place rather than just provide the answers?" Because I want Flight Test Organisations to provide answers, not ask questions.

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MS McMURDO: But you knew, after he had read the OPEVAL report, through your discussions with him, that he maintained that the pitch information display was unacceptable.

10 COL LYNCH: That was his position, yes.

MS McMURDO: He maintained that. And he particularly identified that:

15 *In low visibility, low cue environments, high workload, the flying pilot will be unable to ignore erroneous compelling information directly in front of them and could become disoriented, leading to impact with the ground, loss of the aircraft and multiple causalities.*

20 COL LYNCH: And I'm pretty sure that's a reframe of the original report.

MS McMURDO: But that's what he maintained with you - - -

25 COL LYNCH: Yes.

MS McMURDO: - - - from your discussions with him?

COL LYNCH: Correct.

30

MS McMURDO: He maintained that view and identified - - -

COL LYNCH: Correct.

35 MS McMURDO: After he read the OPEVAL, he identified that as a major concern.

COL LYNCH: Correct.

40 MS McMURDO: That AATES continued to have.

COL LYNCH: He did, yes.

MS McMURDO: That he continued to have. Yes, thank you.

45

MAJ CHAPMAN: Sir, just coming to the end of the topics, but you just referred before, in an exchange with Ms McMurdo, the issue of the software in the simulator.

5 COL LYNCH: Yes.

MAJ CHAPMAN: And I think you mentioned that there was a gap or there was an issue with having the current software - - -

10 COL LYNCH: Yes, it took a long time for the simulator to match the aircraft. This is not unique to us. This is an issue worldwide, particularly in software-defined aircraft. Because a lot of work needs to be done to rehost the software for the simulator because it doesn't function the same way in a simulator as it does in the aircraft. And there was a lag.

15 MAJ CHAPMAN: What was the lag?

COL LYNCH: I couldn't give you – because it differed depending on the complexity of the software modification to the aircraft – 12 months, maybe more. I couldn't give you an exact figure. It depends on which one you're talking about.

20 MAJ CHAPMAN: So did this, in your experience, have an impact on training pipelines and - - -

25 COL LYNCH: Well, absolutely. It absolutely affected who we trained because what we had to do was, we trained certain sequences in the simulator. You know, obviously the high-risk sequences and where it mattered; i.e. we're talking about things that have been modified in the aircraft, we had to take it into the live aircraft environment to do that.

30 So, from a training perspective, there was an inefficiency in having to go live when perhaps it would've been better to do it elsewhere.

35 MAJ CHAPMAN: And because there was that delay in the software being able to be installed, did that mean that you were unable to test 5.10 in the simulator?

40 COL LYNCH: I'll be honest, I don't think we asked. So I don't recall us asking to test that.

MAJ CHAPMAN: In the same way that you experienced 5.10 in Germany, you could've tested it, you're saying, in the simulator but you didn't ask.

45

COL LYNCH: No.

5 MAJ CHAPMAN: Just two final things. The risk mitigation process in the brief to DGAVN, do you accept that would not have been required if the AATES finding of unacceptable risk had not been made?

10 COL LYNCH: No. Look, I think within any – so I’ll take my experience from Tiger software changes where we upgraded the symbology. You always provided training on the new symbology set and what had changed and what the impact was and typically, at least, gave someone one supervised flight to get used to it.

15 So certainly from the training perspective – and I’ve just been on this one – have come out of SAA, that, you know, don’t underestimate how much you can obviate by doing good training right upfront. So there was an absolute focus on that. So that wouldn’t have changed. And that was actually one of my biggest criticisms of the AATES report, is that it kind of minimised the training impact of this change, and I thought there was a bit more to it than that.

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MAJ CHAPMAN: And what’s your understanding of the training that was developed to treat as a control to 5.10?

25 COL LYNCH: So the ideal training itself, just literally went through and looked at all the various components and went through what the change was, and what the increments were – basically, the full symbology design, all the items in the list. It also looked at how attitude information was represented, how horizon was always accurate. Basically, all of those things that were pulled out as elements of confusion in the AATES report were addressed in the training to say, “This is what it is telling you”. Because that’s often the challenge, right, is to make it clear to people what they’re seeing. And then once they see it, they go, “Okay, got it”.

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MAJ CHAPMAN: This is the ADELE training, isn’t it?

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COL LYNCH: You’ve got it, yes. And then there was a flight with someone who had been either involved in the OPEVAL or basically had already got qualified.

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MAJ CHAPMAN: I just want to ask you a question or two about the ROIC course that you deal with from paragraph 30 of your statement.

COL LYNCH: Yes.

MAJ CHAPMAN: You say at 30 that it's likely that in your first year as a Commandant of the Army Aviation Training School you visited that course in 2022 to greet students. Right?

5 COL LYNCH: Yes.

MAJ CHAPMAN: Though you say in the paragraph that follows that you do not recall any discussion where concerns were raised and not by CAPT Lyon; is that right?

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COL LYNCH: Correct.

MAJ CHAPMAN: And, finally, can I just ask a follow-up question from the one previously? Do you accept that the risk mitigation processes that were put in place were a response to the AATES finding?

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COL LYNCH: I think they were a response to the final environment that existed inclusive of the AATES finding and the OPEVAL. You know, where did we end up? Did we have a proper characterisation and what are the controls, the reasonable controls, that we put in place in that instance?

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MAJ CHAPMAN: Thank you, sir. Those are my questions.

MS McMURDO: Thank you. Now, I take it there's going to be some cross-examination, is there? Could I get some idea of who wants to cross-examine and how long it will take?

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UNIDENTIFIED SPEAKER: (Indistinct).

MS McMURDO: 40 mins, yes. Any other cross-examination from anyone?

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UNIDENTIFIED SPEAKER: Possibly, ma'am.

MS McMURDO: Sure. Yes. How long, roughly? Just to get some idea – the witness has some idea of what he's got to face tomorrow.

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MS MUSGROVE: Perhaps 10 or 15 minutes.

MS McMURDO: Okay, thank you. So it looks as though perhaps another hour or so and – so how does that take our witness list? So then tomorrow we'll go on to MAJ Peter Scullard after that, will we?

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COL STREIT: Yes, Ms McMurdo. The plan for tomorrow: to conclude COL Lynch's evidence, obviously, and then we would move to the next

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witness, MAJ Peter Scullard.

MS McMURDO: Right.

5 COL STREIT: There may be a change in the batting order in the sense, I'll discuss with my colleague, MAJ Chapman, in relation to whether we call BRIG Fern Thompson before LTCOL Langley. That may occur. We are fixed in time for Mr Philip Swadling for 3 pm in the afternoon for evidence via video link.

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MS McMURDO: Yes.

COL STREIT: I don't anticipate his evidence will be very long at all. And then we would move into Friday, where I regard the three witnesses identified there as not being very long, and we would certainly have capacity to hear another witness on the Friday.

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MS McMURDO: So at this stage we are still hopeful of finishing our program?

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COL STREIT: I am. It just would mean witnesses will slide to the right by one in the order that we have at the moment.

MS McMURDO: And at 3 pm tomorrow, wherever we are, we will interpose Mr Swadling.

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COL STREIT: Yes.

MS McMURDO: Okay. Thank you for that, COL Streit. Yes, Ms Musgrove?

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MS MUSGROVE: Thank you, Ms McMurdo. Just to assist the Inquiry in relation to the reclassification issue, I'm instructed that when the issue was raised back in August, my instructing solicitor sent an email to Counsel Assisting noting that to seek instructions about the potential reclassification would require speaking to someone who may be a potentially affected person or a witness before the Inquiry.

35

And we sought Counsel Assisting's position as to whether or not we actually had their permission to do so because we didn't want to be seen to be speaking to witnesses out of turn. I understand we didn't receive a response to that request and that's why it wasn't actioned. But enquiries will be undertaken overnight.

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MS McMURDO: Yes, I assume that we have no objection? Counsel

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Assisting has no objection to that?

5 COL STREIT: None at all. I don't know who the person is, but it wouldn't matter if they're potentially affected. The issue is narrow in relation to reclassification.

MS McMURDO: Yes, that's right.

10 MS MUSGROVE: Thank you for that clarification.

MS McMURDO: Thank you. Ms Musgrove, you might ask them to consider the fact that the AATES report is now classified "Official" and is largely in the public domain and the public interest in this issue.

15 MS MUSGROVE: Can I see - - -

MS McMURDO: Sorry, not the AATES report. Sorry, the OPEVAL is largely in the public domain and is classified "Official", and that there is great public interest in the AATES report.

20 MS MUSGROVE: I note your comments about the public interest. In terms of being in the public domain, may I enquire, are you referring to some parts of it being referred to in Senate Estimates, or in which capacity is it in the public domain - - -

25 MS McMURDO: No. I was talking – that was a slip of the tongue. I mean the OPEVAL report is largely in the public domain simply because of the way it's been raised in this Inquiry, and transcript references, and the fact that it's been discussed quite a lot. And it refers to the AATES report in part. So the public interest in two of the documents would – may support a reclassification to "Official"; the same classification as the OPEVAL.

MS MUSGROVE: Thank you. I hear what you say.

35 MS McMURDO: I've got that right, haven't I? Thank you. All right then, we'll adjourn until tomorrow at 9.30. Thank you.

40 <WITNESS WITHDREW

**PUBLIC INQUIRY ADJOURNED UNTIL
THURSDAY, 21 NOVEMBER 2024 AT 0930**