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

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

**PUBLIC INQUIRY**

**THE HONOURABLE M McMURDO AC  
 AVM G HARLAND AM CSC DSM**

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

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 COL S THOMPSON, representing BRIG D Thompson  
 LTCOL D HEALEY, representing BRIG J Fenwick  
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 MS K MUSGROVE, representing the Commonwealth**

**1000, TUESDAY, 25 FEBRUARY 2025**

**DAY 33**

**TRANSCRIPT VERIFICATION**

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

<b>Signed</b>	.....	<b>Date</b>	.....	(Chair)
<b>Signed</b>	.....	<b>Date</b>	.....	(Recorder)
<b>Signed</b>	Epiq Australia Pty Ltd	<b>Date</b>	06/03/25	(Transcription)

# **EXHIBIT LIST**

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MS McMURDO: Yes, MAJ Chapman.

MAJ CHAPMAN: Good morning, Ms McMurdo and AVM Harland.  
The first witness today, as indicated by COL Streit yesterday, is Karl  
5 Hamlyn, so I call LTCOL Karl Hamlyn.

**<LTCOL KARL DOUGLAS HAMLYN, Affirmed**

10

**<EXAMINATION-IN-CHIEF BY MAJ CHAPMAN**

MS McMURDO: Let me know if you want a break at any time,  
15 LTCOL Hamlyn. Yes, MAJ Chapman.

MAJ CHAPMAN: Thank you, Chair. Sir, there's a glass of water there  
if you'd like to take it any time. Sir, can you please state your full name?

20 LTCOL HAMLYN: Karl Douglas Hamlyn.

MAJ CHAPMAN: Thank you. And can you just confirm, as a  
preliminary matter, that you received each of the following of these  
documents prior to today: a section 23 Notice allowing you - - -

25

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Sorry, a section 23 Notice in respect of your  
appearance today?

30

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: An extract of the Inquiry Directions?

35 LTCOL HAMLYN: Yes.

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

40 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: A Frequently Asked Questions Guide for Witnesses?

LTCOL HAMLYN: Yes.

45 MAJ CHAPMAN: A Privacy Notice for giving evidence?

LTCOL HAMLYN: Yes.

5 MAJ CHAPMAN: Thank you, sir. Can I just ask you to be mindful of security obligations when giving evidence. If there's something that I may ask or you may answer which you think goes to a classification level, could you just let me know, and it may be necessary to go into a private hearing. Do you understand that?

10 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Thanks. Sir, you've prepared a statement for the purposes of this Inquiry today.

15 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Can I just hand you a document? I'll just give you a moment to look at that. And do you recognise that as your statement which is dated 7 February 2025?

20 LTCOL HAMLYN: Yes, I do.

MAJ CHAPMAN: Thank you. And is it seven pages in length?

25 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And it has two attachments?

30 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And do you wish to make any amendments to the document, sir?

35 LTCOL HAMLYN: No.

MAJ CHAPMAN: Actually, just on that point, can I invite you to go over to paragraph 7, which is on page – it's not numbered, but the second page. And do you see there, at the end of the first sentence, "2106"? Is that supposed to be 2006 or 2016?

40 LTCOL HAMLYN: Correct, that should be 2016.

MAJ CHAPMAN: Thank you. Chair, I tender the statement of Karl Hamlyn dated 7 February 2025 with annexures.

45

MS McMURDO: Exhibit 116.

**#EXHIBIT 116 - STATEMENT OF LTCOL HAMLYN**

5

MAJ CHAPMAN: Sir, if I may, I'd just like to begin with some of what you've had to say about your background and your professional experience, and that you deal with at paragraph 3. I'm just going to, in the interests of time, summarise your appointments and ask you to confirm. So you enlisted in the Regular Army in 1990 as a Specialist Service Officer pilot. Correct?

15  
LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And you served in 5 Aviation Regiment as a Black Hawk pilot, including some time as a Special Operations Captain?

20  
LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And you've served as a Flying Instructor. Correct?

LTCOL HAMLYN: Yes.

25  
MAJ CHAPMAN: A Troop Commander?

LTCOL HAMLYN: Yes, in that Flying Instructor role.

30  
MAJ CHAPMAN: In the Flying Instructor. And held various staff appointments?

LTCOL HAMLYN: Yes.

35  
MAJ CHAPMAN: Thank you. In 2009 you commanded the Rotary Wing Group in Afghanistan; is that right?

LTCOL HAMLYN: Yes, WG 3 and 4, so February to October.

40  
MAJ CHAPMAN: Thank you. And your last flying post, if I can put it, was a Commanding Officer of the Army Helicopter School between 2014 and 2016?

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And between 2018 and 2020 – a time period which is relevant to some questions you’ll be asked – you held the position of Staff Officer Grade 1 Troop Lift Helicopters?

5 LTCOL HAMLYN: Correct. I’ll just explain there that the title changed while I was in the job.

MAJ CHAPMAN: Yes.

10 LTCOL HAMLYN: It was Troop Lift Helicopters. It then became Lift Helicopters because I became responsibility for Chinook as well.

MAJ CHAPMAN: Understood. And following that, you transitioned to part-time of the Reserve Force in July of 2020?

15 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And you’ve accumulated, in terms of flying experience, over 3300 hours on various types, including Black Hawk, Squirrel and Kiowa.

20 LTCOL HAMLYN: Yes.

MS McMURDO: That was July 2022, wasn’t it, that you transferred?

25 LTCOL HAMLYN: Yes.

MS McMURDO: Yes.

30 LTCOL HAMLYN: Yes.

MS McMURDO: Yes, thank you.

MAJ CHAPMAN: And sir, do you have any time – flying time on the MRH-90?

35 LTCOL HAMLYN: No.

MAJ CHAPMAN: And in terms of use of HMSD devices or TopOwl, do you have any time on those?

40 LTCOL HAMLYN: I was not qualified on it. I did some Familiarisation, but not a qualification.

MAJ CHAPMAN: Understood. In terms of your tertiary qualifications, you list those as Bachelor of Engineering.

5 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Master of Engineering in Modelling and Simulation, completed in the United States.

10 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And Masters of Defence Studies from the Australian Command and Staff College.

15 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Thank you. And as at 28 July 2023, you were in your Reserve role, posted to Headquarters Aviation Command as Staff Officer Grade 1 Fixed Wing Project.

20 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And that position reported to the Director of Aviation Capability Management, who at the time was COL Connolly?

25 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Yes?

30 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And with that, by way of background, I'm now going to, if I may, turn to ask you some questions first about a decision brief that you were involved in March 2020. So can I ask the Inquiry Assistant to show the witness Exhibit 104, and it's Annex 2 – I might just check that –  
35 to Exhibit 104, which is COL Lynch's statement. If you could just hold that open, sir. I apologise. It's a bit of an unwieldy document. So do you recognise that to be decision brief addressed to the then Director-General Army Aviation BRIG Fenwick?

40 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And just turning to the signatures page, over the page, on that document. Do you have that?

45 LTCOL HAMLYN: Yes, I do.



- MAJ CHAPMAN: And do you agree that it said that you drafted this document?
- 5 LTCOL HAMLYN: That is correct, I did.
- MAJ CHAPMAN: And below your name it says that it was “cleared” by the Director of Capability Management, COL Connolly; is that right?
- 10 LTCOL HAMLYN: That’s correct, yes.
- MAJ CHAPMAN: And by “cleared” should the Inquiry understand that’s to mean approved, in effect?
- 15 LTCOL HAMLYN: Yes, that’s the normal process. When I drafted it, it would then go to him, he would advise me of any changes he wanted before it was cleared to go higher.
- MAJ CHAPMAN: Yes, thank you. And you’ve stated earlier that  
20 COL Connolly, as Director of Capability Management, was your direct report at the time.
- LTCOL HAMLYN: That’s correct, yes.
- 25 MAJ CHAPMAN: And do you see there, sir, that it’s undated at the second page, just near the signatures? That there doesn’t appear to be a date; is that right?
- LTCOL HAMLYN: Yes, that’s correct.
- 30 MAJ CHAPMAN: And though at the first page – and I’m sorry to ask you to go between the pages – we have an annotation at the top in handwriting “20/3”. Do you see that?
- 35 LTCOL HAMLYN: Yes, I do.
- MAJ CHAPMAN: And do you recognise that as an annotation possibly by BRIG Fenwick?
- 40 LTCOL HAMLYN: That’s correct, that’s where BRIG Fenwick has signed it, that he’s seen it.
- MAJ CHAPMAN: Thank you. And do you agree that, in the absence of  
45 any actual date on the document, the “20/3” would indicate that it’s been acknowledged on, say, 20 March? Is that your recollection?

LTCOL HAMLYN: That's correct, yes.

5 MAJ CHAPMAN: And would the Inquiry be on safe ground to infer that the reference to 20 March – and I'm just trying to develop this date – was 20 March 2020?

LTCOL HAMLYN: 2020? Yes.

10 MAJ CHAPMAN: And by marking that date as 2020, that would be consistent with the target date for service release of 24 April 2020. Do you agree?

LTCOL HAMLYN: Correct, yes.

15 MAJ CHAPMAN: Now, the Inquiry has heard evidence that the significance of that date – i.e. the 24 April 2020 – was to allow for the software to be installed ahead of a Special Operations Qualification Course. Correct?

20 LTCOL HAMLYN: That's correct, yes.

MAJ CHAPMAN: And that SOQC is a – the acronym – and I will avoid acronyms – was in May 2020; is that right?

25 LTCOL HAMLYN: From memory, yes, May 2020. There was a – the 24 April date was to allow the instructors time to have familiarisation on the system before teaching on that course.

30 MAJ CHAPMAN: Indeed. And just in terms of the purpose of this particular decision brief, sir, do you agree that what is being put to BRIG Fenwick is a recommendation that he approve proceeding with introduction of version 5.10?

35 LTCOL HAMLYN: That's correct, yes.

MAJ CHAPMAN: And in the decision brief, you set out the history of testing, including references to the AATES report and the Operational Evaluation; is that right?

40 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And do you agree that boiled down, what you're

conveying to the Director-General here is that the Operational Evaluation had addressed the concerns raised by the Test and Evaluation Section? Do you agree with that?

5 LTCOL HAMLYN: Yes, that's correct.

MAJ CHAPMAN: And on the basis that those issues had been addressed, you were recommending to BRIG Fenwick to himself recommend to the Project Office service release of 5.10. Do you agree?

10

LTCOL HAMLYN: That's correct, yes.

MAJ CHAPMAN: I just want to take you now to some evidence that you give in your statement concerning what's known as MOD 4, and you deal with this at paragraph 6 and 7 of your statement. So you can put that – we might come back to that, sir, so you might just put that to the side. Yes, thank you. And return to your statement at 6 and 7. And you refer – I'll just turn it over myself. You refer at paragraph 6 and 7 – or 6, to engagement you had with your – sorry, I withdraw that. You refer in your statement to engagement by your predecessor, LTCOL Matt Grills, with DSTG to produce a functional specification for a preferred HMSD version known as MOD 4. Do you see that?

15

20

LTCOL HAMLYN: Yes.

25

MAJ CHAPMAN: And you say that you understood from a handover briefing from LTCOL Grills, when you took on your role, that LTCOL Grills had discussed MOD 4 with Airbus Australia and NH Industries?

30

LTCOL HAMLYN: Correct, yes.

MAJ CHAPMAN: And that was your recollection in about 2016.

LTCOL HAMLYN: It was in the period September to December 2016. I actually came back from leave early, so I had an extended period working with Matt Gills before I took over from him.

35

MAJ CHAPMAN: So is the date of 2016 when you recall that you were told by LTCOL Grills that he had engagement with Airbus Australia and NH Industries? Is that right?

40

LTCOL HAMLYN: It would have been in that three-month period; I can't say exactly when.

45

5 MAJ CHAPMAN: Thank you. And just so we understand – and there’s been some evidence about this from other witnesses – but MOD 4 was a symbology set that was being looked at as a bespoke Australian symbology set. Is that a fair description?

LTCOL HAMLYN: Yes, that’s correct.

10 MAJ CHAPMAN: And do you know whether the intent was to include distance to run functionality on MOD 4?

LTCOL HAMLYN: Definitely. That was one of the main features that was wanted that was lacking in the current version that we had.

15 MAJ CHAPMAN: So that was proposed to be incorporated in MOD 4.

LTCOL HAMLYN: Yes.

20 MAJ CHAPMAN: And what’s your understanding, sir, as to why MOD 4 did not ultimately proceed?

LTCOL HAMLYN: It came down to cost, technical, and schedule risk. As I’ve outlined in the evidence there, and trying to get a bespoke system made by the German SUZ – it was called – would have been prohibitively expensive and absolutely no guarantee of when we would get it done. We could not do it ourselves in Australia. We were contractually unable to do that. The contract that Airbus Australia had, although they had a bespoke software capability, they were expressly forbidden from being able to work on that software by our contract, and we had no – even if they had been allowed to, we had no understanding of whether they were technically capable of doing that.

30 So although the answer was not a definite “No” from the Germans, it was a case of it would be many years and a very undefined but very expensive cost before we would get a solution.

35 MAJ CHAPMAN: And we’ll develop some of the aspects of your response in some further questions. And so for all those reasons, no doubt you would say that version 5.10, being an off the shelf – if I can put it like that – product, was chosen over MOD 4?

40 LTCOL HAMLYN: That’s correct, yes.

45 MAJ CHAPMAN: Now, you were asked some questions, which you respond to at paragraph 7, concerning the off-axis symbology issue. Do you see that?

LTCOL HAMLYN: Yes.

5 MAJ CHAPMAN: And you understand, don't you, that to be a reference relating to the symbology issue that was identified by AATES as unacceptable?

LTCOL HAMLYN: Yes.

10 MAJ CHAPMAN: Correct? And at 7(a) you've reproduced some of the question, but you were asked whether there existed at the time a technical means to remediate the off-axis symbology. Do you see that?

LTCOL HAMLYN: Yes.

15 MAJ CHAPMAN: And I'll be going through, sir, here just part of your answer that you gave earlier, but just breaking it down. And in your response to that question – and I summarise – you say that Airbus Australia had a software team that might have had the capability, although  
20 your understanding was that their contract with the OEM, the Original Equipment Manufacturer, prohibited them from doing so. Correct?

LTCOL HAMLYN: That's correct, yes.

25 MAJ CHAPMAN: And further, that only an Airbus subsidiary known as SUZ – and I won't attempt to describe that, but that's the German OEM, software OEM.

LTCOL HAMLYN: Correct, yes.

30 MAJ CHAPMAN: Had the authority to modify the symbology.

LTCOL HAMLYN: That's right, yes.

35 MAJ CHAPMAN: So there were really two challenges that you say in your evidence that were presented to remediation of this issue. The first, you acknowledge that the software organisation in Australia might have been in a position to assist from a technical perspective, but only "might".  
40 And I just want to ask you, sir, on that point, is that your opinion or is that based on actual enquiries that you were aware were made of the software team?

LTCOL HAMLYN: That was based on our assessment that they hadn't  
45 done this style of work previously. So there is an inevitable risk when someone is doing something for the first time.

MAJ CHAPMAN: I understand. But my question is, do you understand there were actual enquiries made of the software team as to whether or not they could produce a fix to the symbology set?

5 LTCOL HAMLYN: That work was done by LTCOL Grills, so I won't speculate on exactly what conversations he had with them, but that's what he advised me during that handover period.

10 MAJ CHAPMAN: So your state of awareness is that it was LTCOL Grills who made enquiries, and that was relayed to you during the handover.

LTCOL HAMLYN: That's correct, yes.

15 MAJ CHAPMAN: And then you next say that even if that was an option – that is, the software people managing to produce a fix – there were other issues, and you name two. Your first was the cost and schedule risk. Correct?

20 LTCOL HAMLYN: Correct, yes.

MAJ CHAPMAN: And the second was the point that SUZ were the only ones who had a contractual authority to modify the software.

25 LTCOL HAMLYN: That's correct, yes.

MAJ CHAPMAN: Now, as you have mentioned, sir, the cost and schedule risks – were costs and schedule risks matters discussed within Army Aviation as reasons not to pursue a possible software fix for the off-axis symbology?

30 LTCOL HAMLYN: I will say yes, in as much as that's what was conveyed to me; the decisions were taken before I came into the job. I think I've included in there the brief that LTCOL Grills made on this issue.

35 MAJ CHAPMAN: Yes.

40 LTCOL HAMLYN: As an annexure.

AVM HARLAND: Just a point for clarification for myself. When we're talking about the off-axis symbology, are we talking about the fact that it was actually displayed and that was unusual in your experience that you

would display off-axis attitude symbology, or are we talking about the fact that it was displayed in error as you looked off-axis?

5 LTCOL HAMLYN: The way that it was always described to me was that it was a deliberate feature of the software. The Germans fully intended it to do that. We've - - -

10 AVM HARLAND: To have the attitude available when you looked off-axis?

LTCOL HAMLYN: Correct.

AVM HARLAND: Or to have it displayed in error?

15 LTCOL HAMLYN: No, to have it displayed, and their reasons for doing it related to using it in degraded visual environment situations where you would be looking off-axis and wanting to know what your pitch attitude was.

20 AVM HARLAND: Were they aware at that time that the implementation of the software meant that the attitude information was displayed in error when you looked off-axis?

25 LTCOL HAMLYN: It was never ever described by the Germans as an error.

AVM HARLAND: What was it described as?

30 LTCOL HAMLYN: An enhancing feature, in their view.

AVM HARLAND: The fact that it displayed incorrect attitude information was an enhancing feature?

35 LTCOL HAMLYN: They did not consider it in any way incorrect information. They, in designing it – I'm talking about the Germans here – in designing it, they understood what their intent was in having that pitching information available when you were looking off-axis. Therefore, they didn't consider it an error.

40 AVM HARLAND: We've heard from other witnesses that when the pilot looks off-axis with the HMSD version 5.1, that the attitude information doesn't reflect what would be displayed on the Primary Flight Display and it would be in error.

5 LTCOL HAMLYN: It would be in error if you were thinking of it as still displaying that pitch attitude information out the front. The intent of the German system when they designed it – I’ll express right here that I believe this was the intent – I’m going back on memory here – was that they were particularly interested in using it, for example, in situations where you were landing the helicopter in dust, and therefore you may be looking out the side because that’s where you have clearer vision of the ground.

10 In that case, the pilot would want to know what his pitch attitude was whilst looking out the side. So he would use that information that would show him, “I’m nose up. I’m nose down”. You want to be maintaining a level pitch as you’re coming to the ground. That was my understanding of the intent when the Germans designed that system.

15 AVM HARLAND: My understanding, again from previous witnesses, is that when the pilot does look off-axis, there is an error in the way that roll is displayed?

20 LTCOL HAMLYN: I believe the real issue came down to how it switched between the two, from when looking to the front to looking to the side, and how the information washed out. It didn’t instantly click from one to another.

25 AVM HARLAND: That’s not my understanding of what previous witnesses said. And my understanding is that there is a – it’s called an ambiguity in various conversations, but it really amounts to an error in the way the attitude is displayed when the pilot is looking off-axis. I guess what I’m trying to establish here is at the time when you were making these considerations in the 2016 to 2017 timeframe, were you aware of that error or are we just talking about the notion of it was unusual to display attitude information off-axis in a helmet-mounted display?

35 LTCOL HAMLYN: The second was exactly how it was described to me by Matt Grills. He said he found it unusual. I think he might have used the term “weird”, or something like that. But it certainly wasn’t described as an error. It was just this was a function that was different to what we were used to in Head-Up Displays.

40 AVM HARLAND: So were you aware that the roll wouldn’t be displayed faithfully, as you would expect, when you looked off-axis?

45 LTCOL HAMLYN: I know that I had conversations with Matt Grills where he described this function to me in that period. To be honest, at the time it was not a big subject of discussion.



AVM HARLAND: So the fact that a flight display displaying attitude for the aircraft displayed incorrect information wasn't an issue?

5 LTCOL HAMLYN: The way that the system was described, the function, was not seen as an issue at that stage, particularly given that the information we had from the Germans was that they had certified the system, and they were happy with it.

10 AVM HARLAND: But you would ordinarily apply your own experience and wisdom to those decisions and wouldn't just accept it on face value?

LTCOL HAMLYN: Well, that's why we run our own testing. Now, by rights, we could have accepted the system into service simply based on the German certification. We don't do that. That's why we have AATES run their own trials.

AVM HARLAND: Okay, thank you.

20 MS McMURDO: So the Germans obviously trained their pilots, or anyone using this, to understand that there was this different symbology. Let's use the neutral term "different symbology". So that would, on the face of it, appear to be wrong, that they would then interpret it correctly to give them the correct pitch when landing in dusty, degraded conditions and looking out the side?

LTCOL HAMLYN: I'm assuming that. I personally didn't have conversations with the Germans about that, although I do have the information that Peter Scullard got from his contacts in the German system, which basically indicated that, yes, they understood what they intended with that system, and they were happy with it.

AVM HARLAND: Were you aware of how the Germans flew? Did they fly in formation, low cue environments, low level, on the HMSD?

35 LTCOL HAMLYN: They could.

AVM HARLAND: Do you know if they did?

40 LTCOL HAMLYN: In any Troop lift helicopter situation, yes, you'll be flying sometimes in formation. I think their main concern, as their statement said, was that they were looking at the environment in Afghanistan. Now, the environment in Afghanistan, the biggest risk was always dust landings. There, effectively you're operating individually.

Even if you've come in as a formation, you have to land individually in dust.

AVM HARLAND: Okay, thank you.

5

MS McMURDO: Not so much overwater flying in Afghanistan.

LTCOL HAMLYN: No. That said, there are some circumstances which are very similar. Operating over flat desert in no moon conditions is not that much different to operating over the ocean. And so in Afghanistan it's flat desert.

10

MS McMURDO: Yes, of course. Yes, MAJ Chapman.

15

MAJ CHAPMAN: Thank you, sir. Just to go back to the issue of costs and schedule risks that you refer to in your statement, and in regards to the question were costs and schedule risk matters that were discussed, to your knowledge, within Army Aviation as a reason not to pursue the symbology?

20

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: When you mention that cost and schedule risk, is that, I take it, information that you got on the handover from COL Grills or is that from your own experience?

25

LTCOL HAMLYN: No, that was from the handover from COL Grills.

MAJ CHAPMAN: In terms of the cost risks, what exactly were the costs risk that you had in mind, that, simply put, it would just be prohibitively expensive, I think was your word?

30

LTCOL HAMLYN: That's correct. And it was also our experience at that stage with the MRH project that very frequently cost overruns over what we would be initially advised would happen. So we didn't have a lot of confidence in initial cost figures we were being given. We were seeing them constantly expanding.

35

MAJ CHAPMAN: But the issue of costs, sir, we're talking about costs to possibly resolve what was recognised as a significant safety issue. Do you agree with that?

40

LTCOL HAMLYN: Are you referring to the safety issue of the existing version of HMSD that we had, the 4.0?

45

MAJ CHAPMAN: I'm talking about the costs that would be associated with producing a fix to resolve the ambiguous attitude issue.

5 LTCOL HAMLYN: That was subsequent because at the time, no, it wasn't seen as an issue. But the same was absolutely true of – just as we had wanted to look at doing a bespoke solution, or likewise doing anything to crack open the software of 5.10 to change it, exactly the same problems arose: there would be significant cost and significant schedule delay. In fact, we could not get an answer from the OEM as to when  
10 potentially they could get around to doing that.

MAJ CHAPMAN: But in circumstances where you're contemplating producing a fix to a safety issue, do you agree that costs ought not to have been a consideration? Do you agree with that or not?  
15

LTCOL HAMLYN: It would have absolutely been an issue if it had been considered a safety issue. Sorry, can I just clarify, again, are we talking before or after the AATES testing?

20 MAJ CHAPMAN: We're talking about after the AATES testing.

LTCOL HAMLYN: After the AATES testing, yes, absolutely it would be an issue, and that was one of the things that was again looked at, "Could we get modifications to the 5.10 software to remove that feature?"  
25 The answer was the same, "There would be significant cost and significant delay".

MAJ CHAPMAN: Was there any scope to increase the funding or, if it's made to increase the funding, to deal with the costs associated with producing a fix?  
30

LTCOL HAMLYN: I'm not in a position to answer that. I mean, at this stage there was still project funding available. I can't comment on exactly where we were at at that stage in terms of what funding was available or whether additional would have been required. That is something CASG would have to answer.  
35

MAJ CHAPMAN: But it is something which is possibly open to pursuing if it wasn't available.  
40

LTCOL HAMLYN: It was done in other cases, yes. Additional funding was sought where it was required. That was, as I say, a part of CASG's role.

45 MAJ CHAPMAN: In terms of the second part which is schedule risk,

we've talked about the schedule risk is having this installed for the forthcoming SOQC, is that right, the Special Operations Qual Course on 2020?

5 LTCOL HAMLYN: No, much more broadly than that. We're talking a schedule risk of years. I just want to emphasise at this point that not having the distance to go function was seen as a very significant risk. Therefore, the notion that we would make do without that for several more years was seen as quite unacceptable to some of the key decision-makers.

10

MAJ CHAPMAN: Now, in terms of - - -

MS McMURDO: Could I just ask a question? Did Germany have a commercial interest if you purchase the 5.10? Did they get some commercial benefit out of that? Did they get some money out of it, seeing as they developed the software?

15

LTCOL HAMLYN: From my understanding of how the project worked, yes. I'm not an expert on how the commercial arrangements worked, but I do know that, where a partner nation was responsible for developing a particular upgrade for the aircraft, they could benefit from that and get royalties. There were cases where there were things that Australia developed where we were able to get royalties as a result of other nations adopting that.

20

25

So I'm not fully familiar with the contractual arrangements, but certainly that was how it seemed to work with MRH or NH90 as an overall system.

MS McMURDO: Thank you.

30

MAJ CHAPMAN: Now, in terms of what we've been discussing about being prohibitively expensive to seek a software solution, that was in the context of dealing with the onshore or the non-SUZ body to create the Software Support Team. Is that right?

35

LTCOL HAMLYN: That's in the context of getting the software done by SUZ, the German organisation.

MAJ CHAPMAN: And is it the same answer as if you were seeking to have the software fix produced by the Software Support Team, which I understand to be different to SUZ in your statement?

40

LTCOL HAMLYN: I don't know if it ever got to the stage of serious

costings being discussed because the contractual issue simply made it impossible. But again, those discussions would have occurred before my time, so I can't really answer that.

5 MAJ CHAPMAN: And is it your understanding that was COL Grills who has made an enquiry of SUZ on behalf of the Commonwealth to explore the feasibility of this software solution?

LTCOL HAMLYN: Yes.

10

MAJ CHAPMAN: Is that right?

LTCOL HAMLYN: Correct, yes.

15 MAJ CHAPMAN: And you address this point further at 7(b), where you say that:

*Having released 5.10 relatively recently, SUZ would not be producing another version for several years.*

20

Correct?

LTCOL HAMLYN: That was certainly our understanding. I mean, SUZ was responsible for software development for a lot of systems in the aircraft. So the schedule, of when they would be looking at another one, we did not know at that point. There was certainly none planned that we were aware of.

25

MAJ CHAPMAN: And, in that context, you say that:

30

*The upgrade should be understood as part of software cycles which in effect did not respond to individual requests in that way.*

LTCOL HAMLYN: It very rarely did, and certainly not from a non-core partner nation like Australia. The Germans and the French may have had more influence to be able to get things that they wanted quicker, being core nations of the NH community. Partner nations like Australia? No, we did not have the influence to be able to say, you know, "We want this raised much higher up the priority scale".

35

40

MAJ CHAPMAN: When you say that though, is the high point of your understanding that COL Grills actually made an enquiry about this with SUZ?

45 LTCOL HAMLYN: That was my understanding from the handover I got.

5 MAJ CHAPMAN: And you say, as you've given some evidence at the end of 7(b), that there was every chance that the SUZ would reject the idea of switching off off-axis attitude display because the Germans were happy with it.

10 LTCOL HAMLYN: Well, that was the way any development in the aircraft happened. There would be meetings of all the partner nations where all their various requirements would be discussed. Now, some would be accepted, some would be rejected. If we were arguing to remove a particular feature, but other nations were saying "No, we like it, we want to keep it", then a decision would be made one way or the other. In this case it would say that the German's influence on this would count higher than Australia's.

15 MAJ CHAPMAN: You're identifying a risk with proceeding in that way, but you don't know as a fact that they had rejected that idea, only that they may reject it if you asked for it?

20 LTCOL HAMLYN: Exactly. It was a risk that if we went down the path of trying to get a change to 5.10, there was a risk that, no, our change would not be accepted.

25 MAJ CHAPMAN: So you don't understand - - -

LTCOL HAMLYN: We couldn't know that until it happened.

30 MAJ CHAPMAN: Understand. It's not your evidence that you understand COL Grills asked for it and it was rejected, just that there was the prospect that it would be rejected if asked for.

LTCOL HAMLYN: Correct.

35 MAJ CHAPMAN: And you've attached to your statement, in fairness, correspondence to the effect that the Germans were satisfied with the performance of 5.10.

LTCOL HAMLYN: Correct, yes.

40 MAJ CHAPMAN: And that's - I'll just identify that as an email from COL Norton which you were - to you dated 24 June 2019. And I won't read it all, though it includes statements to the effect that the Germans didn't have an issue with it.

45 MS McMURDO: That's the email that's attached to the statement at B.

MAJ CHAPMAN: Correct. Yes, Chair.

MS McMURDO: Thank you.

5

MAJ CHAPMAN: B.

Now, are you aware that the off-axis attitude display was able to be switched off in the Tiger?

10

LTCOL HAMLYN: Yes. I'm not particularly familiar with the Tiger system, but I believe LTCOL Reinhardt described that, yes, the Tiger you could switch that off.

15

MAJ CHAPMAN: So you're not in a position now to sort of explain how that was achieved or when that was applied for.

LTCOL HAMLYN: Well, quite simply, they were different software. You could not take the HMSD software from the Tiger and plug it into an MRH. They were completely different, incompatible software.

20

MAJ CHAPMAN: Understood. But is it your understanding that that switching at the switch-off feature was not something that Australia applied for, it was just part of the software that came to the ARH?

25

LTCOL HAMLYN: I can't comment on that. I wasn't involved in the development of the ARH system. I think, given that there were only three nations involved, we potentially did have more say in a lot of the development of things in ARH than we had in MRH where there were, what, 11 or 12 nations involved; only, what, three or four of which were the core partner nations.

30

MAJ CHAPMAN: So it may have been the case this was an Australian request to switch that off, which was accepted, but you're just not in a position to say whether that's the case.

35

LTCOL HAMLYN: As I said, that would've been done way back in the early 2000s and I wasn't involved with ARH at that point.

40

MAJ CHAPMAN: Understood. At paragraph 7(c) you reference another Inquiry witness, MAJ Scullard's experience dealing with SUZ. Do you see that?

LTCOL HAMLYN: Yes.

45

MAJ CHAPMAN: And you say that:

*In 2016, MAJ Scullard was first made aware –*

5 and this is going to a point raised by the Air Vice-Marshal –

*of the off-axis issue, which he considered unusual.*

Do you see that?

10

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: However, he was told, you understand, that it was an intentional design feature and that the Germans had successfully introduced it. Do you see that?

15

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And, sir, you'd agree that the German Army – or the German Forces, rather, accepted 5.10. Is this your understanding? Based on their own testing that was conducted on their NH90s?

20

LTCOL HAMLYN: Correct, yes.

MAJ CHAPMAN: Though their testing was presumably done adopting their own Configuration Role and Environment or CRE; is that right?

25

LTCOL HAMLYN: That would be a safe assumption, yes.

MAJ CHAPMAN: It was necessarily the case that if they were testing for their forces, it would be in their own CRE?

30

LTCOL HAMLYN: Correct, yes.

MAJ CHAPMAN: And this was a software package, which I think you've adverted to before, which was developed for deployment in Afghanistan.

35

LTCOL HAMLYN: That was one of the key reasons they gave for it. Whether they had other reasons I can't say, but certainly that was one of the key selling points, if you want to describe it that way, that was put behind 5.10.

40

MAJ CHAPMAN: And you may have answered this to the Air



Vice-Marshal, but you're not aware of the conditions that the Germans put 5.10 to in their testing?

LTCOL HAMLYN: No.

5

MAJ CHAPMAN: So we don't know – fly overwater, at night, formation. Just don't know?

LTCOL HAMLYN: No.

10

MAJ CHAPMAN: At paragraph 8 of your statement you recount the steps involved in 5.10 leading to service release in 2020. Do you see that?

LTCOL HAMLYN: Yes.

15

MAJ CHAPMAN: And you refer at paragraph 8 to AATES, so the Army Aviation Test and Evaluation Section, conducting tests and evaluation notwithstanding that HMSD software was already approved by other user nations. Do you see that?

20

LTCOL HAMLYN: That's correct, yes.

MAJ CHAPMAN: And you say that it was part of the normal process of introducing a new item into service, that they be tested?

25

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: So whether or not a modification that has been introduced has been subject to foreign recognised testing, is it the case that there's always physical tests and evaluation back in Australia?

30

LTCOL HAMLYN: In every case I was aware of, yes.

MAJ CHAPMAN: But I think your evidence earlier was that it was possible, at least in theory, for the foreign recognised product to be introduced without testing.

35

LTCOL HAMLYN: In theory, if it's been certified by an authority that we recognise, then yes, we can simply accept that. Now, in practice, I never saw that happen.

40

MAJ CHAPMAN: And you'd agree that it's a prudent step to take given that other user nations, such as the Germans, may well be operating a different CRE?

45

LTCOL HAMLYN: Well, that's correct. And that would be one of the considerations that was looked at in deciding, "Well, will we do our own testing? Do we have our own unique requirements that need to be looked at?" It wasn't simply a case of reproducing testing that was done, it was,  
5 "Are there specific Australian issues we need to look at?"

MAJ CHAPMAN: Such, that is, if there are issues identified, steps can be taken to mitigate risk.

10 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: So can I take you now to the March – maybe go back to that March decision brief. So at paragraph 9 of your statement you deal with this and you say that you produced the decision brief following a  
15 discussion with COL Connolly. Correct?

LTCOL HAMLYN: Correct, yes.

MAJ CHAPMAN: And you say this having confirmed with the consulted officers listed on the decision brief that they were now satisfied that the identified control measures were appropriate. Correct?  
20

LTCOL HAMLYN: That's correct, yes.

25 MAJ CHAPMAN: And that included COL Connolly?

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And just looking at the consulted officers, that included SO1 AATES, so COL Reinhardt?  
30

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And at 9 of your statement you say:  
35

*COL Reinhardt maintained his objection to the off-axis display and he conceded the control measures would be sufficient to reduce the risk of - - -*

40 MS McMURDO: Could. Could.

MAJ CHAPMAN: I'm sorry.

LTCOL HAMLYN: Yes, the term was "could".  
45

MAJ CHAPMAN: "Could to an acceptable level".

LTCOL HAMLYN: Yes.

5 MAJ CHAPMAN: Is that something you recall COL Reinhardt saying or  
can that be found in a document somewhere?

10 LTCOL HAMLYN: Don't quote me, I think there is an email from  
COL Reinhardt, and I think that's where I took the term "could" from  
when I was preparing my statement.

MAJ CHAPMAN: Yes.

15 LTCOL HAMLYN: Yes. He maintained to the end he had his concerns.

MAJ CHAPMAN: And are you aware that following the Standards  
report – that is, what's known as the Operational Evaluation – that  
COL Reinhardt issued a written response to the Operational Evaluation?

20 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And the gist of that response was that AATES  
maintained the view that 5.10 represented an unacceptable risk to flight  
safety?

25 LTCOL HAMLYN: Correct, yes.

30 MAJ CHAPMAN: So do you agree, sir, that there's something of a  
difference between COL Reinhardt suggesting that control measures are  
sufficient on one hand and then AATES saying that you maintained a  
view that it was unacceptable - - -

MS McMURDO: He said they could be sufficient.

35 MAJ CHAPMAN: Could be.

40 LTCOL HAMLYN: Could be. Could be sufficient. From memory, there  
was one particular control measure that COL Reinhardt was not happy  
with that related to using the go around function to recover from your  
unusual attitudes. He was particularly concerned about that one was my  
memory.

45 MAJ CHAPMAN: So you recall that as being one of the control  
measures that were referred to?

LTCOL HAMLYN: That was one of the control measures that the OPEVAL came up with.

5 MAJ CHAPMAN: And did any of the control measures include placing limitations or conditions on the use of 5.10 in particular circumstances, like lower than two millilux lighting, et cetera?

10 LTCOL HAMLYN: I can't remember the exact criteria. I mean, throughout our time there were always discussions about what's the minimum light level you can operate with any night-vision devices in. I can't recall what particular limitations were put in place at that time.

15 MAJ CHAPMAN: I see. Now, at paragraph 11 of your statement, you say that, as normal procedure, you convened a stakeholder meeting on 27 June 2019 to address the report conclusions. Is that right?

LTCOL HAMLYN: That's correct, yes.

20 MAJ CHAPMAN: That's the Army Aviation Test and Evaluation section report; is that right?

LTCOL HAMLYN: Correct, yes. We refer to them as a TERC.

25 MAJ CHAPMAN: Yes. So just - - -

LTCOL HAMLYN: A T-E-R-C, Test and Evaluation Review Committee.

30 MAJ CHAPMAN: Thank you. And the TERC, so the Test and Evaluation Review Committee meeting, is that, so we understand it, a routine meeting that is convened by DACM following a test report such as an AATES report?

35 LTCOL HAMLYN: Yes, that was always routine, that. I mean, I would receive the report as the Desk Officer and obviously if the report had no – well, if everything was satisfactory, there was no point in gathering everyone together to say, “Everything is satisfactory”. If the report had any recommendations that required addressing, then we ran a TERC to come up with, “Well, how do we deal with these recommendations?”

40 MAJ CHAPMAN: And the TERC, just so we understand, is to get all the stakeholders together. So AATES staff were there. What other sort of staff were there to – DACM staff were there, DOPAW.

5 LTCOL HAMLYN: DACM was there as the convenor. You would have the AATES staff, you would have the project staff, the OEM, the Op Airworthiness staff, Training, whoever was relevant to those – you know, if there were recommendations that were relevant to an organisation, we'd bring them in. If it affected Navy, then Navy would attend as well.

10 MAJ CHAPMAN: And the obvious purpose of this is so that everyone can, you know, positively get on the same page or discuss differences and resolve those differences to progress it.

LTCOL HAMLYN: Yes.

15 MAJ CHAPMAN: And is it the case that DACM – so DACM chaired the meeting; is that right?

LTCOL HAMLYN: I chaired that meeting.

MAJ CHAPMAN: Sorry, you chaired the meeting.

20 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Faced with a choice here, given the unacceptable finding meant something had to be done?

25 LTCOL HAMLYN: The terminology is quite specific in the report. It said, you know, an unacceptable recommendation says that it must be addressed. Now, it doesn't say how or what context that takes, it simply says that you have to address that issue.

30 MAJ CHAPMAN: So on the one hand we've got, you have to address the issue by reference to the unacceptable finding. Correct?

LTCOL HAMLYN: Correct.

35 MAJ CHAPMAN: But then your evidence is that it had been confirmed by that stage that any possible modification to remove the off-axis attitude was several years away, at best.

40 LTCOL HAMLYN: Correct. And that would've been discussed in the TERC, what are our options? Don't fuel the modification, try and get 5.10 changed or come up with a means of being able to use 5.10 within a satisfactory risk. Now, very quickly, the first two options had to be ruled out because we already knew what the answers for that were.

45 MAJ CHAPMAN: And just in relation to the advice about it being

several years away, you also say in your statement that you received the same advice during NH community – sorry, NH user community meetings and discussions with Airbus in 2019.

5 LTCOL HAMLYN: Correct, yes.

MAJ CHAPMAN: And can you just assist the Inquiry to understand what the user community meetings are and who typically attends those meetings?

10

LTCOL HAMLYN: These were forums that were held usually in Europe of representatives of all the nations that operated the NH90. There would normally be an agenda, to some degree, of what would be discussed at that meeting but obviously, you know, general matters could be raised as well if they were of concern to other nations.

15

MAJ CHAPMAN: And were these meetings you attended or others attended?

20

LTCOL HAMLYN: I attended one or two, I believe. It would be either myself or DACM would normally attend these on behalf of Australia. If it was not possible to get an Australian representative over from Australia – and, bearing in mind, they were normally always held in Europe, sometimes we would have the Resident Project Team staff there attend. But normally a DACM rep tried to get to every meeting.

25

MAJ CHAPMAN: And how frequently were these meetings?

30

LTCOL HAMLYN: Initially, I believe every year. I'm just trying to remember exactly because it – obviously, then the COVID years changed all that and - - -

35

MAJ CHAPMAN: And when you say you received the same advice, so this is you attending one of these user community meetings and being told, when you raised the issue of a software fix, that it's years away. Is that the effect of what you're saying there?

40

LTCOL HAMLYN: I'm going on memory here because this is basically from discussion, and I don't have access to the Minutes from those meetings.

MAJ CHAPMAN: Sure.

LTCOL HAMLYN: But, yes, certainly that was the – well, what I took away from those meetings given that a next – call it a version 6 or whatever, was not even on the schedule at that stage for SUZ.

5 MAJ CHAPMAN: And you had discussions, you say in your statement, to a similar effect with Airbus in 2019?

LTCOL HAMLYN: With Airbus in Australia – well they were getting the same information. I'll just specify the difference here between Airbus  
10 Airbus Australia and Airbus Deutschland, who owned SUZ. Yes, they have the same name, sometimes they were very separate entities. But Airbus Australia could not automatically assume that they had, you know, immediate direct influence over Airbus Deutschland.

15 MAJ CHAPMAN: And just move to the topic of control measures. So do you recall being asked in your section 23 Notice about your understanding of control measures?

LTCOL HAMLYN: Yes.

20 MAJ CHAPMAN: And the context for the question was your understanding of the control measures that were put in place for service release of version 5.10.

25 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And your response we see is at paragraph 13 of your statement. And you referred to control measures being in the nature of publication changes, training sequences and procedures based on the  
30 OPEVAL. Is that correct?

LTCOL HAMLYN: That's correct, yes.

35 MAJ CHAPMAN: And you say that at 13, that LTCOL Norton, who – just pausing there – he was the Test Director of the OPEVAL? Is that your recollection?

LTCOL HAMLYN: Yes, he ran the OPEVAL.

40 MAJ CHAPMAN: That he had concluded that version 5.10 was able to be used within acceptable risk margins; is that right?

LTCOL HAMLYN: Yes.

45 MAJ CHAPMAN: And with the following control measures, and he

listed three of them to you, and they are: warnings in OIP. So that's Orders, Instructions and Publications. Correct?

5 LTCOL HAMLYN: Correct, yes.

MAJ CHAPMAN: The use of a declutter mode to remove the attitude - - -

10 MS McMURDO: Sorry, that was - - -

LTCOL HAMLYN: I'll just back up there. There's a second bit to that.

MS McMURDO: Yes. Combined - - -

15 LTCOL HAMLYN: Yes, warnings and so on. But there would be a specific training sequence - - -

MAJ CHAPMAN: Specific training sequence.

20 LTCOL HAMLYN: - - - where, you know, this feature would be shown to the pilot.

MAJ CHAPMAN: The second was the use of the [REDACTED].  
[REDACTED].

25 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And the third was, again, training on using the autopilot go around function as an emergency recovery measure in the event of disorientation.

30 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Now, you list those three type of control measures. And just to assist, that's your summary of the control measures as determined by COL Norton. Is that right?

LTCOL HAMLYN: That's correct, yes.

40 MAJ CHAPMAN: Is that reflected in a document that you're aware of?

LTCOL HAMLYN: I will say yes.

MAJ CHAPMAN: Yes.  
45



LTCOL HAMLYN: In as much as – so COL Norton worked for DOPAW. DOPAW would've put up their own information to the DG on this. I don't have the specific document.

5 MAJ CHAPMAN: So this is what you've stated here in paragraph 13 (a) to (c) is your recollection?

LTCOL HAMLYN: No, well, I would've taken that from, I think, the actual OPEVAL report.

10

MAJ CHAPMAN: Now just moving to some questions about the OPEVAL. You're obviously aware the OPEVAL was conducted with input from Army Aviation Tests and Evaluation Section?

15 LTCOL HAMLYN: They were involved in it, yes.

MAJ CHAPMAN: And the Inquiry has heard evidence that – and I'll use the acronym – AATES specifically included something in the order of 24 controls on that activity. Is that familiar?

20

LTCOL HAMLYN: Are you talking about the controls used during the conduct of that activity?

MAJ CHAPMAN: Correct.

25

LTCOL HAMLYN: Well, yes, AATES, as any test organisation would in designing an activity, put control measures in place for the conduct of that activity. I wasn't specifically involved in that.

30 MAJ CHAPMAN: So you're not specifically aware if they put in place 24 control activities?

LTCOL HAMLYN: No. I mean, DACM's role was to facilitate the activity – to fund it, to organise it. I wasn't directly involved in the conduct of it.

35

MAJ CHAPMAN: I understand. I'm just trying to establish whether or not you knew about that, okay. And without having direct knowledge of that – and you can take it from me that 24 control measures were put in place – that that reflected, would you agree, a degree of risk that AATES assessed as attending the testing? Would that be fair?

40

LTCOL HAMLYN: That's a reasonable statement, yes.

MAJ CHAPMAN: And the purpose of controls being put in place for testing is to ensure that it's conducted as safely as practical to do so.

LTCOL HAMLYN: Yes.

5

MAJ CHAPMAN: And in your experience, is imposing 24 specific controls on an activity such as OPEVAL high, low, or moderate in terms of the levels of controls?

10 LTCOL HAMLYN: I wouldn't have the expertise to say that. But I know full well that AATES does that in conducting any activity. Whether that's high/low, I wouldn't know.

15 MAJ CHAPMAN: Now, I'll not go into each of the controls, though. Not being involved in it yourself though, are you aware that they included restrictions on conducting the activity below two millilux or where there wasn't a discernible horizon?

20 LTCOL HAMLYN: I wasn't specifically aware, but that is exactly what I would've expected to see, yes.

25 MAJ CHAPMAN: And the Inquiry has received evidence that the OPEVAL activity was conducted in accordance with those controls. That's the evidence. Is that your understanding or you don't have knowledge of that?

30 LTCOL HAMLYN: Well, that's certainly my understanding. If it wasn't conducted in accordance with those controls, I would've expected there would have been issues raised.

MAJ CHAPMAN: Now, having been through testing which was controlled in this way, are you aware of any controls or limitations that were put on service release to reflect those controls?

35 LTCOL HAMLYN: The requirements, for example, now the warnings that had to go into the OIPs that would've all have been specifically addressed as part of service release. If they were not in place – ready to go into those publications, then we would not have granted service release.

40

MAJ CHAPMAN: What about the controls concerning not using the HMSD below two millilux or without a discernible horizon?

LTCOL HAMLYN: That would go into specific orders issued by Avn

Command, Aviation Brigade. They would not have been something to go into a service release document.

5 MAJ CHAPMAN: So your evidence is that the nature of that limitation would be, in your experience, reflected in a Special Flying Instruction, for example, as opposed to the CCB board conditioning release in that way?

10 LTCOL HAMLYN: That's correct, there would be an SFI which would detail how you can use that.

MAJ CHAPMAN: Or, rather than a CCB conditioning the release, possibly Director of Operational Airworthiness conditioning a release in that way?

15 LTCOL HAMLYN: Correct.

MAJ CHAPMAN: But was it an option open to the Director of Operational Airworthiness, for example, in granting operational consent, to condition how it was used?

20 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: So it could have been the case that DOPAW would have said, "Yes, operational consent is given, though you cannot operate this equipment, or use this equipment below two millilux and without a discernible horizon"? Is that right? It's possible?

25 LTCOL HAMLYN: That's quite common. Very many of our flying instructions are specifically that, "This is how you may use or operate this particular piece of equipment".

MAJ CHAPMAN: And you're saying that's not something which would fall within the remit of DACM as a consideration?

35 LTCOL HAMLYN: No, that was DOPAW's responsibility.

MAJ CHAPMAN: Thank you. Just move to what you discuss at paragraph 14. So, in response to a question from the Inquiry asking you to outline the steps that were taken to mitigate risk for service release, you deal with two matters, which we've touched on. But the first is the control measures that were approved by DOPAW. Correct?

LTCOL HAMLYN: Correct.

45 MAJ CHAPMAN: And the second, you've referred to:

*DACM and CASG were working –*

and that's the Capability and Sustainment Group –

5

*were working to have NHI/SUZ remove off-axis display or disable it from the next HMSD version.*

Do you see that?

10

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And just in respect of the second point, what is your specific understanding of DACM working with NHI and SUZ to remove that from the next version?

15

LTCOL HAMLYN: That would mean that when – typically the way this worked, if a modification was on the cards, as I say, at these user forums or they could convene specific meetings, the partner nations would all be asked, “What are your requirements for” – you know, let's call it, hypothetically – “version 6.0 of the HMSD?” We would then have raised, “Okay, we want to be able to remove the off-axis display”.

20

Now, by the time I finished with a job, that meeting – we'll call it a meeting – had not been called for yet. There was still nothing on the schedule for a next version of HMSD.

25

MAJ CHAPMAN: But it's your understanding that COL Grills – and we've been through this – had had some discussions or contact with NHI/SUZ about this, to raise it as a consideration for the next iteration of the HMSD system?

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LTCOL HAMLYN: Yes, we'd certainly flagged that this was something we were going to raise. But that formal process of NHI/SUZ collating all the user nations requirements and then running through them and determining which ones would go into this next version, that had not commenced at the time I finished the job in '20 – well, end of '21 – sorry, end of '20.

35

MAJ CHAPMAN: So the position as you understood it, this has been flagged in some way by COL Grills, though because SUZ had not opened invitations for comment in a formal sense, that hadn't formally been applied for by the Commonwealth of Australia. Is that right?

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LTCOL HAMLYN: Well, correct. There was no means we could

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formally apply for it. We had simply flagged that that was our intention. It was on record, but until such time as that process of collating the requirements for the next version of HMSD happened, that's as far as it could go.

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MAJ CHAPMAN: And part of your evidence earlier was that even if it had been applied for, there would be weighting, in your experience, given to that consideration given we are a relatively minor player in terms of using the MRH-90?

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LTCOL HAMLYN: Correct. All I can say is there's no guarantee that the requirements we would raise would necessarily be accepted in a final version.

15

MAJ CHAPMAN: Next, at paragraph 15 you were asked questions in relation to the recording of formal and informal risk assessments in respect of service release. Do you see that?

LTCOL HAMLYN: Yes.

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MAJ CHAPMAN: In your response you refer to DOPAW, so the Directorate of Operational Airworthiness, being responsible for conducting the risk assessments prior to service release; is that right?

25

LTCOL HAMLYN: That's correct, yes.

MAJ CHAPMAN: So that's not a DACM task, that's a DOPAW task?

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LTCOL HAMLYN: Correct. DACM coordinates, but that specific task would belong to DOPAW. Now, our responsibility would be to confirm with DOPAW, "Has this been done and are you satisfied with the outcome?"

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MAJ CHAPMAN: Does it follow from there that DOPAW was also responsible for recording the risk assessments in, for example, the OTCRM?

LTCOL HAMLYN: Yes, they maintained the OTCRM.

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MAJ CHAPMAN: Just on the OTCRM point, could you just assist to explain what that stands for?

LTCOL HAMLYN: Sorry, it's been several years; I'd get the acronym wrong, sorry.

45

MAJ CHAPMAN: Okay. But is it fair to describe it as a risk register?

LTCOL HAMLYN: It is basically the overarching risk register for Army Aviation.

5

MAJ CHAPMAN: Can you assist with understanding how that functions, doing the best that you can, the risk register and how that's a significant or important job?

10 LTCOL HAMLYN: Well, it's significant in that it's the central register of all the risks that we're seeing in Army Aviation now, particularly for the key decision-makers who have to keep their attention across what at the time was five platforms plus various other systems. That was a very effective way of then being able to keep track of what are the key risks, what are the highest priority risks, et cetera.

15

MAJ CHAPMAN: For example, when a decision-maker, such as the Director-General or the Commander in the Aviation Command is presented with a decision brief to deal with a significant decision, one consideration they would bring to bear is what does the OTCRM have to say about this?

20

LTCOL HAMLYN: They mightn't phrase it in that way, but the DG is not going to act without consulting with DOPAW, and DOPAW is going to be saying, "Yes, this has been entered into the OTCRM. It's been given this weighting", et cetera. They would run through it in that terminology.

25

MAJ CHAPMAN: Now, you say generally that DOPAW's responsibility was to deal with this risk register. Do you have any direct or even indirect knowledge of the full suite of risk assessments that were conducted in respect of version 5.10 before service release?

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LTCOL HAMLYN: No, I can't comment on that. As I say, my role would be to deal with my counterparts in DOPAW and confirm that they were satisfied that it had been conducted.

35

MAJ CHAPMAN: Your information was that they were?

40

LTCOL HAMLYN: Yes, but I wouldn't have been involved in the nuts and bolts of how they went about that.

MAJ CHAPMAN: Are you aware of what a seven-step risk assessment process is?

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LTCOL HAMLYN: Again, don't ask me to quote it now, after several years away, but yes, I knew there was a seven-step risk approach.

5 MAJ CHAPMAN: A seven-step risk assessment would – and this is very broadly – be an approach to assessing risk and provide fulsome results to inform decision-makers?

LTCOL HAMLYN: Yes.

10 MAJ CHAPMAN: Are you aware of a seven-step risk assessment process being mandated in respect of decisions to be made in particular contexts?

15 LTCOL HAMLYN: Not being part of DOPAW, I can't honestly say from five years ago what exactly was their mandated process. I wasn't directly involved in that. I mean, I fully understood there is a requirement that it had to be done. What the exact mandate was, I couldn't say.

20 MAJ CHAPMAN: Well, you say that you understood there was a requirement for it to be done. Are you talking about a risk assessment or a seven-step risk assessment?

25 LTCOL HAMLYN: A requirement that risk assessment, effectively, always be done. As I said, because I wasn't involved in the nuts and bolts, I don't want to get dragged into saying exactly what that process was at the time.

MAJ CHAPMAN: Sorry to interrupt you.

30 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Is the extent of the risk assessment that is engaged with really a matter for Command discretion as to how much they want to look into the issue of risk?

35 LTCOL HAMLYN: When you say "Command discretion", there was a very specific AVRМ process. In my role, I didn't have to directly be involved in doing that, so I don't want to speculate on exactly how they applied that process. But the process was written down in terms of that AVRМ of how it should be conducted.

MAJ CHAPMAN: Do you know what a bowtie analysis is?

45 LTCOL HAMLYN: I can't remember at this stage, no.

MAJ CHAPMAN: So would you expect in your experience – again noting you were not involved in this, but you would expect, would you, that a full risk assessment, with being a seven-step risk assessment, would be engaged in for a modification of this kind?

5

LTCOL HAMLYN: Again, I don't want to speculate as to exactly how they ran the process because I wasn't involved with it.

MAJ CHAPMAN: I'm just asking you your opinion as to whether you would expect that a seven-step risk assessment would be engaged in for a modification like this?

10

LTCOL HAMLYN: I would expect that the process was done in accordance with the documentation that outlined how we should run risk assessment processes.

15

MAJ CHAPMAN: That's especially the case here where there had been an unacceptable risk assessment by the Flight Test Organisation. Is that reasonable?

20

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Would you expect that any such risk assessment that may have been conducted to be featured in the OTCRM?

25

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Are you aware of any guidance requiring risk assessments to be included in the OTCRM, or is that DOPAW?

30

LTCOL HAMLYN: Again, I can't quite – yes, the specific orders or Regulations that would have said that, but yes, that was our understanding of how the system worked at the time.

MAJ CHAPMAN: But if the OTCRM did not contain a risk assessment, that in your view would be unusual in your experience?

35

LTCOL HAMLYN: For something like this, that would be unusual, yes. I mean, I'd expect that that's where, for those of us who weren't directly involved in the process, if we wanted to know, that's where we would look to see where it was recorded.

40

AVM HARLAND: I just have a question regarding the Configuration Control Board, and it relates to risk, so it's not off-track. As you are looking at changing the configuration of the aircraft and in doing so you

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introduce hazards that need to be treated, does the CCB specifically flag those up to DOPAW, who we've established is responsible for doing the risk management?

5 LTCOL HAMLYN: I would say it's almost the other way around. DOPAW would flag to the CCB that there had been risks identified and that they had been treated. The Chair of the CCB, in granting service release, is looking for a nod from each of the key stakeholders that they are satisfied and ready to go.

10

AVM HARLAND: Did that happen in this CCB for version 5.1?

LTCOL HAMLYN: Yes.

15

AVM HARLAND: That's great. Thank you, that's helpful.

MAJ CHAPMAN: Sir, are you all right to continue at this point?

LTCOL HAMLYN: Yes.

20

MAJ CHAPMAN: Thank you.

MS McMURDO: Would you like to have a break. We'll have a 10-minute break at some point.

25

MAJ CHAPMAN: It's convenient.

MS McMURDO: All right then. We'll have a 10-minute break now. Thank you.

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**HEARING ADJOURNED**

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**HEARING RESUMED**

MS McMURDO: Yes, MAJ Chapman.

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MAJ CHAPMAN: Thank you, Chair. We'll just wait for the witness. Thank you, sir. Have you still got your statement there?

LTCOL HAMLYN: Yes.

45

MAJ CHAPMAN: Yes, very good. We are up to questions in your

statement where you addressed any additional approvals required to commence the physical installation of version 5.10. Do you recall that?

LTCOL HAMLYN: Yes.

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MAJ CHAPMAN: In your answer, which appears at paragraph 16 of your statement, you make the important point that the approving authority for service release is the Capability and Sustainment Group and not the Director-General Army Aviation. That's right?

10

LTCOL HAMLYN: In the formal process, yes.

MAJ CHAPMAN: You say further in that paragraph that the Configuration Control Board Chair will not approve service release unless all key stakeholders give their assent to conditions being met?

15

LTCOL HAMLYN: I'll just clarify that. I would not expect that the Chair of a CCB would ignore a recommendation from a key stakeholder that they were not ready, and I certainly never saw that happen in my time.

20

MAJ CHAPMAN: So in this context – and just to be clear about it – is the decision-making process, as you understand it, leading to service release effectively at these two stages. So at stage 1, the Director-General Aviation considers the relative risks and makes an assessment and decision informed by, for instance, DOPAW. Is that right at stage 1?

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LTCOL HAMLYN: Yes, correct, the DG will consult his principal staff officers, DACM, DOPAW, and on technical, Continuing Airworthiness, and ensure that they are all happy before he gives his assent.

30

MAJ CHAPMAN: Can that be described as operational approval or how is that referred to?

LTCOL HAMLYN: The terminology can get a little bit jumbled up.

35

MAJ CHAPMAN: Yes.

LTCOL HAMLYN: Probably your next two witnesses are better versed to describe the exact terminologies there.

40

MAJ CHAPMAN: Then at stage 2, that's once a decision or a recommendation has been given by the Director-General, it then goes to the Configuration Control Board to give its approval if all the technical engineering pieces are in place, essentially?

45

LTCOL HAMLYN: Effectively, that all pieces are in place. The CCB is the formal mechanism where the assent of all the key stakeholders is recorded.

5 MAJ CHAPMAN: That includes DACM and AASPO, yes. So the physical installation of version 5.10 relied on something of a dual system, so being military approval in the DG and then CASG approval?

10 LTCOL HAMLYN: In practice, yes. In theory, that tick from the CCB is the final stamp.

MAJ CHAPMAN: Is there any risk assessment, to your knowledge, undertaken at the Configuration Control Board level as the final step prior to service release?

15 LTCOL HAMLYN: Not a separate one but as part of their process, they're ensuring that the organisation DOPAW, who is responsible for that, is saying yes, they are satisfied that it's been done. There will be similar on the Continuing Airworthiness side.

20 MAJ CHAPMAN: DOPAW having considered a risk assessment?

LTCOL HAMLYN: Yes.

25 MAJ CHAPMAN: At paragraph 17(d) you were asked to express a view as to whether you considered that the OPEVAL was at all unusual in your experience. Do you recall that?

LTCOL HAMLYN: Yes.

30 MAJ CHAPMAN: In your response, you say that it was only unusual to the extent that there was a significant difference in opinion between LTCOL Reinhardt and LTCOL Norton. Do you see that?

35 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Next, you explain that as:

40 *Removing the off-axis display was impossible and not having the version 5.10 DTG feature was also an unacceptable risk. Our next option was an activity to determine if the risk could be reduced to an acceptable level.*

45 Do you see that?

LTCOL HAMLYN: Yes.

5 MAJ CHAPMAN: When you say “impossible” in that response, again, that reflects your understanding that SUZ had no immediate or even short-term plans to produce a version that dealt with the ambiguous symbology. Is that right?

LTCOL HAMLYN: Correct, yes.

10 MAJ CHAPMAN: So in reality, instead of pursuing that software fix, having regard to your evidence, the decision was taken to proceed and to manage the risk through, or assess the risk through, OPEVAL?

15 LTCOL HAMLYN: Not instead of, but to proceed with version 5.10 and, as a longer term plan, look at a future version which would remove the off-axis display.

MAJ CHAPMAN: You refer to the DTG feature also being rated as an unacceptable risk if not introduced; is that right?

20 LTCOL HAMLYN: That’s right, yes.

MAJ CHAPMAN: That’s a reference back to paragraph 6 of your statement, I believe, and the last sentence there, is that a reference to the Minute, “Taipan Symbology Upgrade Way Ahead”?

LTCOL HAMLYN: It is, but the first mention of the “unacceptable” for the distance to go was in the brief that was done before my time that I attached as Annex A.

30 MAJ CHAPMAN: Yes.

LTCOL HAMLYN: So that lack of a feature – and, in fact, what had driven the entire – well, a significant part of the M4 program was the lack of that feature.

MAJ CHAPMAN: Can I invite you to go to Annexure A of your statement, which is a document dated 29 May 2017 by the then DACM Director of Army Capability Management, COL Barton? Do you see that?

40 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Do you agree that this document essentially makes the case for an upgrade of version 4 to 5.10 to benefit from distance to go function?

5 LTCOL HAMLYN: The distance to go function was the biggest improvement in 5.10. There were numerous other changes that were rated as highly desirable but the distance to go was the one that was rated as essential.

10 MAJ CHAPMAN: In support of COL Barton's view, it referred to the TATE Report which concluded that it was unsatisfactory to run SO approaches without this information?

LTCOL HAMLYN: That's correct.

15 MAJ CHAPMAN: Is it your understanding that the distance to go function was already a feature on the aircraft in the Primary Flight Display?

20 LTCOL HAMLYN: The information was available on your multifunction displays. The issue was the requirement to look down inside the cockpit to get that information. I'd flown aircraft in the SO role before we even had that feature in Black Hawk. So the solution was the co-pilot was the one who monitored and called that feature for the flying pilot.

25 MAJ CHAPMAN: In this Minute from COL Barton, he actually increased the risk categorisation to "unacceptable"; that is, that it's unacceptable not to have it, the distance to go function, as part of the HMSD. Is that right?

30 LTCOL HAMLYN: That's correct. As long as I was in the job, that was rated as an unacceptable risk, and that had been done before I came into the job.

35 MAJ CHAPMAN: And there's a reference there in paragraph 5 to SO1 – so that's on page 2 – SO1 TLH. Is that a reference to you having provided advice to COL Barton?

40 LTCOL HAMLYN: Sorry, you're in the Annex A here?

MAJ CHAPMAN: Sorry, I'm in Annexure A.

45 LTCOL HAMLYN: No, as I said, this is 2017, so LTCOL Grills was the SO1 TLH at that time.

5 MAJ CHAPMAN: Understood. Can I go back to paragraph 19 now of your statement – move to paragraph 19 of your statement? And we've dealt with this in part, so I'll just run through it quickly, but you set out your understanding of the purpose of the CCB. Correct?

LTCOL HAMLYN: Correct, yes.

10 MAJ CHAPMAN: And you say it's a Defence systems engineering process where the stakeholders come together to manage and prioritise changes to aircraft configuration. Correct?

LTCOL HAMLYN: Correct, yes.

15 MAJ CHAPMAN: And you provided some examples of the types of matters that CCB – which include OEM-mandated services, instructions, and user-initiated modifications, or role equipment additions.

20 LTCOL HAMLYN: Correct, yes.

MAJ CHAPMAN: And of course an example of a user-initiated modification is HMSD 5.10; is that right?

25 LTCOL HAMLYN: Yes, you could operate the aircraft with different versions. So we were looking at what version would we operate.

30 MAJ CHAPMAN: I'll now move, sir, to the Configuration Control Board meeting that took place on 2 April 2020, and can I show you a document? Thank you. There should be a copy for you, ma'am and sir, on the desk.

MS McMURDO: Yes, thank you.

35 MAJ CHAPMAN: So, sir, do you recognise that to be MRH systems Configuration Control Board No 53 Meeting Minutes? And this has been served.

LTCOL HAMLYN: Yes, I do.

40 MAJ CHAPMAN: And do you recognise that to be a document that was annexed to your section 23 Notice?

LTCOL HAMLYN: Yes, it was.

45 MAJ CHAPMAN: Ma'am, can I tender that document?

MS McMURDO: Exhibit 117.

5 **#EXHIBIT 117 - MRH SYSTEMS CONTROL CONFIGURATION  
BOARD MEETING NO 53 MINUTES**

10 MAJ CHAPMAN: Thank you. And, sir, just to orientate you to this  
document, you agree that – sorry, I withdraw that. If you go to page 5,  
and the page numbering is on the top right.

LTCOL HAMLYN: Yes.

15 MAJ CHAPMAN: So if you go to page 5, it sets out the CCB attendees  
on 2 April 2020. Do you see that?

LTCOL HAMLYN: Yes.

20 MAJ CHAPMAN: And you see that as attending number 4 – entry  
number 4, they're listed as DACM SO1, Staff Officer Grade 1, Troop Lift  
Helicopters Capability Representative.

LTCOL HAMLYN: That's correct, yes.

25 MAJ CHAPMAN: And for the purpose of the Minutes to follow, you  
were referred to by the abbreviation "KH".

LTCOL HAMLYN: Correct, yes.

30 MAJ CHAPMAN: And can I ask you to turn over to page 12 of that  
document, which is again in that top right-hand corner? You might have  
to turn it around. Yes, I'll just wait until you're there.

35 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And do you see there that on the table, item  
number 6.0, "Other business and topics of discussion"?

40 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And do you see there that "HMSD" is in that bottom  
square, "HMSD v 5.10", and other references?

45 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And there's some commentary and dot points concerning updates given to the CCB by the stakeholders, which include yourself.

5

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And in your contribution, which appears over the page, it records you as saying this:

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*No issue with delegating SR, AASPO is preferable. Remind everyone of the intent. 6 Aviation Regiment are currently in a quiet period. We have until 24 April for when we can push V5.10 in the aircraft, so can be used at next training in May. Needs to be on aircraft by the point for it to be utilised.*

15

Do you see that?

LTCOL HAMLYN: Yes.

20

MAJ CHAPMAN: Now, as a start, do you more or less agree – noting it was five years ago – that's an accurate representation?

LTCOL HAMLYN: That's accurate for what I said at the meeting.

25

MAJ CHAPMAN: Now, if you just go back to your statement at paragraph 18 – I'm sorry to ask you to go through two documents – you say that you attended the meeting on behalf of DACM, COL Connolly; is that right?

30

LTCOL HAMLYN: That's correct, yes.

MAJ CHAPMAN: And you were there, were you, to convey the Director-General Army Aviation's assent that 5.10 was now acceptable for service release?

35

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: So that was – withdraw that. And going ahead to paragraph 20 of your statement, when asked why you expressed support for the delegation of service release – do you see that?

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LTCOL HAMLYN: Yes.



MAJ CHAPMAN: And you express a view that it was not uncommon to delegate service release in circumstances where only minor actions were remaining; is that right?

5 LTCOL HAMLYN: That's correct, yes.

MAJ CHAPMAN: And that's so that service release could be authorised prior to the next CCB meeting; is that right?

10 LTCOL HAMLYN: Yes. Because the meetings were only held every two months - - -

MAJ CHAPMAN: Two months.

15 LTCOL HAMLYN: - - - you didn't want to delay something for two months if the remaining action was something that was, you know, simply a procedural thing that could be quickly solved.

MAJ CHAPMAN: So the intent behind that is, as you say, not to delay  
20 the physical installation of 5.10 on account of minor actions?

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Do you have a recollection of what those minor  
25 actions were?

LTCOL HAMLYN: I believe, in the case of 5.10, there was an engineering document that was required to be signed by the DG DASA - the RAAF Technical Organisation. That senior officer - obviously, you  
30 know, there's always difficulty getting documents before senior officers at times. But it hadn't been signed at the time of the CCB, therefore I believe the decision was, "Okay, service release delegated". So that when that document was signed and received, it could be approved.

35 MAJ CHAPMAN: Pursuant to a delegation.

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: But the minor action was certainly not in the nature  
40 of any flight testing or further testing?

LTCOL HAMLYN: No. And, you know, our understanding was from the staff of DG DASA, was that there was no issue that they saw that the DG would not sign. It was simply that he had physically not been able to  
45 yet, at the time of the meeting.

5 MAJ CHAPMAN: And in your response, you note – in your statement, rather, you note that Airbus, in your experience, frequently requested this delegated authority for themselves; is that right?

LTCOL HAMLYN: Yes.

10 MAJ CHAPMAN: Though most representatives, including COL Connolly, almost always insisted, in your experience, on the authority remaining with the Chief Engineer; is that right? Or the ADF?

LTCOL HAMLYN: Well, with a Commonwealth official.

15 MAJ CHAPMAN: A Commonwealth representative.

LTCOL HAMLYN: Normally a Chief Engineer.

20 MAJ CHAPMAN: Can you just explain, if you can, at least your preference or the preference expressed by COL Connolly as to why it should stay with Commonwealth representatives and not cleave to industry?

25 LTCOL HAMLYN: In effect, ultimately the Commonwealth is responsible. So the responsibility for that delegation should remain with a Commonwealth official.

MAJ CHAPMAN: And you were next asked by the Inquiry about the deadline of 24 April 2020 that's referred to in the meeting. Do you see that?

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LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And at paragraph 21 you confirm that you imposed that deadline consistent with the rollout plan, to take advantage of the low tempo at 6 Avn; is that right?

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LTCOL HAMLYN: That's correct, yes.

40 MAJ CHAPMAN: And the timing was important, you say, because there was a major training activity commencing in the May, and it was essential for the Regiment's instructors to have 5.10 installed so they could instruct on the course.

45 LTCOL HAMLYN: Yes. That's the SOQC that we've referred to previously.

MAJ CHAPMAN: Yes, the SOQC.

LTCOL HAMLYN: So, yes.

5

MAJ CHAPMAN: And that's the major training activity, just to be clear, you're talking about?

LTCOL HAMLYN: Yes.

10

MAJ CHAPMAN: And at paragraph – moving on to 22, essentially, that was the timing for 24 April 2020. Was that achievable in your view?

LTCOL HAMLYN: Yes. The process of putting 5.10 into the aircraft was actually a very simple operation: remove a box, install a new one, do the testing. Some of the senior aircrew had already used the 5.10, as in we'd previously installed it in a couple of aircraft to do the OPEVAL. The training package was all ready to go, and there was a perfect window in the unit. So, yes, there was absolutely no reason not to have it ready by then.

20

MAJ CHAPMAN: And the desire to meet the timings is a significant issue in the context of the MRH generally; is that right?

LTCOL HAMLYN: Yes.

25

MAJ CHAPMAN: And it was significant as the platform had been delayed in a whole variety of respects, and that had first, second and third order effects?

30

LTCOL HAMLYN: That's correct. If we didn't get it into 6 Avn in that time, every other unit would then have to wait for their next identified quiet period when we could install it in their aircraft.

MAJ CHAPMAN: And you give the example at paragraph 22 that delays were having serious consequences for Special Operations capability.

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LTCOL HAMLYN: Exactly. Because we were extending Black Hawk. Now, Black Hawk was performing magnificently, but you just could not keep asking to extend it for ever and ever.

40

MAJ CHAPMAN: And the risk, I gather, was that the MRH might not be able to replace the Black Hawk at the end of 2020, which was when it was scheduled for retirement.

45

5 LTCOL HAMLYN: Yes, you know, that, to a point. I'll just caveat my responses a little bit here. I'm not going to go into too much detail. We had taken certain decisions, particularly with relation to transitioning of  
10 aircrew and so on. But I mean we were more or less committed. It would have been difficult to stop once we took certain decisions to proceed. It's not impossible, but with each – you know, with each step we took of taking people from Black Hawk to MRH, it was going to make it harder if we had to continue with Black Hawk.

10 MAJ CHAPMAN: Understood.

15 AVM HARLAND: Just a question. Was there ever any consideration about what you've characterised as the essential requirement to have distance to run displayed on the helmet-mounted display, which was the driver for version 5.1, or a driver? Was there any consideration to, like, reassess that and think, "Yes, perhaps we don't actually need it"?

20 LTCOL HAMLYN: To that, sir, I'd say, yes, it had been frequently discussed. If you were to ask my personal opinion, "Could it be managed?", having flown the aircraft in the days before we had any Head-Up Display at all, yes, it could be managed. The decision of the pilots, the senior aircrew, the senior Standards people who were currently operating the aircraft, was that it was essential. And I'll take into account  
25 the fact that, you know, this is a generation of pilots who had operated the aircraft exclusively with Head-Up Displays or helmet-mounted displays.

AVM HARLAND: So "essential" means - - -

30 LTCOL HAMLYN: So their experience will be different to mine and their feeling of how important it was to be able to fly the entire approach heads-up would be a little bit different to mine.

35 AVM HARLAND: Yes, okay.

LTCOL HAMLYN: The actual operators who were doing the task were of the view they needed it, and our opinion was to back the operators.

40 AVM HARLAND: So just confirming that in the MRH-90 that distance to run information is available elsewhere? It didn't just reside on the helmet?

45 LTCOL HAMLYN: On the MFDs, but you have to bring your head inside the cockpit to see it.

AVM HARLAND: Or?

LTCOL HAMLYN: Or a procedure whereby one of the pilots is looking in and calls it for the flying pilot.

5

AVM HARLAND: Yes. So there's an available other path of doing that. So you did have those conversations and it was decided that it would remain "essential". Now, just for clarification, "essential" means that if you don't get it, you couldn't do the SO role. Is that a correct statement?

10

LTCOL HAMLYN: Well, it doesn't mean you couldn't do it. It would mean you would have to accept an elevated risk in doing it.

AVM HARLAND: So it's not "essential"? Because essential to me means if you don't have it, you can't do it.

15

LTCOL HAMLYN: Well, the only example I can give, sir, is to refer to another aircraft type, which is the CH-47. We had a period in Afghanistan where we had an issue with our GPS. For some reason that stopped working. It eventually proved to be a software issue, which meant that the pilots lost that distance to go information in their Head-Up Displays in the CH-47. The decision of Commander 16 Brigade at the time, who was effectively DG AVN under that com struc, was that we would not conduct in effect air mobile assault landings, that we'd call out in that function. And he conveyed that restriction to me.

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25

AVM HARLAND: Yes, okay, great. Thanks, that's cleared it up. Thank you.

30

LTCOL HAMLYN: Mm.

MAJ CHAPMAN: And, sir, just to hop forward to paragraph 27 of your statement where you deal with service release, and you were asked to set out in summary form a narrative of the events, and I'll just quickly go through them as a final topic. So the OPEVAL was produced, as we know, with recommendations for control measures to reduce risk of misinterpreting the off-axis symbology. Correct?

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LTCOL HAMLYN: Yes.

MAJ CHAPMAN: The Director of Operational Airworthiness staff reviewed that report and completed a risk analysis, to your understanding?

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LTCOL HAMLYN: Yes.

MAJ CHAPMAN: On the basis of the risk analysis, they recommended that the risk could be reduced to an “acceptable” level?

5 LTCOL HAMLYN: Through the introduction of those controls, yes.

MAJ CHAPMAN: And then you then produce the decision brief for the Director-General Army Aviation recommending service release as the last remaining issue.

10 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: The decision brief was cleared by Director Army Capability Management and approved by the Director-General?

15 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: You produced the Minute to CASG, the MRH Project Office, requesting they proceed to service release.

20 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Version 5.10 is put on the agenda for the April Configuration Control Board meeting.

25 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: At the Configuration Control Board meeting, Airbus advised there was still an Engineering Change document what was awaiting final signature from the Director-General DASA, the Defence  
30 Aviation Safety Authority.

LTCOL HAMLYN: Yes, correct. Sorry - - -

MAJ CHAPMAN: That’s all right, I can - - -  
35

LTCOL HAMLYN: Yes, forgetting the exact designated – the exact acronym there.

MAJ CHAPMAN: From the Director-General, Defence Aviation Safety  
40 Authority.

LTCOL HAMLYN: Yes.

MAJ CHAPMAN: And it was agreed that service release, at the meeting  
45 of the CCB, could, in the circumstances, be delegated to the Chief

Engineer LTCOL Marshall, who could approve service release once the paperwork had been received back from DASA.

LTCOL HAMLYN: Yes.

5

MAJ CHAPMAN: And then service release was approved and maintenance personnel at 6 Aviation Regiment began installing version 5.10 to the fleet.

10 LTCOL HAMLYN: Yes.

MAJ CHAPMAN: Thank you, sir. Ms McMurdo, those are my questions.

15 MS McMURDO: Thank you. Applications to cross-examine? Yes, LCDR Gracie.

**<CROSS-EXAMINATION BY LCDR GRACIE**

20

LCDR GRACIE: Sir, my name's LCDR Malcolm Gracie. I represent the interests of CAPT Danniell Lyon of Bushman 83. I just want to ask you some things about paragraph 6 of your statement, and you've touched on this in part, and this is your evidence, your assessment, that the distance to go information was essential for the safe conduct of Special Op approaches. Is that right?

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LTCOL HAMLYN: Yes.

30

LCDR GRACIE: And another way you put it over in paragraph 17(d) was that not having it was rated as an unacceptable risk.

LTCOL HAMLYN: Yes.

35

LCDR GRACIE: Two sides of the same coin. Does it follow that the Special Operations that were utilising version 4, which didn't have that distance to go function as part of the symbology, was an unacceptable risk?

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LTCOL HAMLYN: They weren't able to do it. The aircraft was only introduced into 6 Aviation Regiment in 2019, and one of the limitations was that they were only flying those approaches – at this stage it was only a couple of – a very small information team – implementation team of the senior aircrew. They were flying approaches under very controlled

45

circumstances. In order to get to the point where 6 Avn could perform it, normally we needed the distance to go feature.

5 LCDR GRACIE: So prior to the introduction of the upgraded symbology with version 5.10, are you saying that the Special Ops were operating other than in accordance with their expected operational capability?

10 LTCOL HAMLIN: Well, they were happy to resort to the old procedure of having a non-flying pilot calling the distance to go. But bear in mind that, you know, this is well long before that the capability had been declared operational. So this was only the implementation team still familiarising themselves with their aircraft. They were operating under very constrained conditions at that stage.

15 LCDR GRACIE: And I just want to understand the source of your understanding about the distance to go information being “essential”. I’m working from your March brief where that is how you’ve described it, but I want to work back to the source of that information. Can you tell me, 20 was it the OPEVAL, was it?

LTCOL HAMLIN: No, that requirement had been set before I came into the job. That was an outcome of the – there was an AATES testing done I think back in about 2015 or 16. Don’t quote me on the exact date. I think 25 it’s mentioned in LTCOL Grills’ brief. And between that and the DSTG, a valuation. From that, it had been determined that it was an essential requirement and had been put into that MOD 4 proposal as an essential requirement.

30 So, in effect, I inherited a situation where it had already been determined that this was an essential requirement.

LCDR GRACIE: Let me ask you about that then. If you look at paragraph 11, you say in I think it was the third sentence:

35 *DACM had previously determined that the DTG –*

distance to go function –

40 *was essential, and I had confirmed any modification to remove the off-axis display was several years away, at best.*

So you’re there referring to Annexure A of your statement?

45 LTCOL HAMLIN: Yes.



LCDR GRACIE: Which is May 2017?

LTCOL HAMLYN: '17, yes.

5

LCDR GRACIE: That predates the AATES testing and it predates the OPEVAL?

LTCOL HAMLYN: Which were done in 2019, yes. As I've just mentioned, there was a previous AATES testing done back in about 2015, looking at more broadly the use of the MRH in the SO role, and that was one of the deficiencies that had been identified then.

LCDR GRACIE: So five years before your decision brief to DG Avn?

LTCOL HAMLYN: Yes.

LCDR GRACIE: On 20 March 2020, in your decision brief for DG Avn, what did you do to update your understanding of the characteristics of the distance to go symbology as part of the upgrade between the time of the previous DACM brief in 2017 and March 2020?

LTCOL HAMLYN: Sorry, that's a very broad question.

LCDR GRACIE: I'll put it differently.

LTCOL HAMLYN: Yes.

LCDR GRACIE: How did you update your knowledge about the essentiality or unacceptable factors of not having distance to go between 2017 and March 2020?

LTCOL HAMLYN: In effect, nothing had changed. It had been determined as essential and nothing had happened since then to suggest that it wasn't.

LCDR GRACIE: Well, what about the unacceptable finding in relation to the off-axis symbology in the context of evaluating the desirability of one feature over another?

40

LTCOL HAMLYN: Okay, sorry, yes, I was referring there to the distance to go was nothing had changed in relation to it still being considered an essential requirement.

LCDR GRACIE: But aren't you then having to do a balancing exercise between the desirability of one that's found by a test organisation to be unacceptable and a 2017 assessment that it's essential.

5 LTCOL HAMLYN: Of course there was a balance.

LCDR GRACIE: Three years apart.

10 LTCOL HAMLYN: One of the key decisions that the DG had to look at in making his decision was I have a requirement that this distance to go information is an essential safety feature. I have an issue with my test organisation telling me that this feature of the pitch axis is unacceptable. How do I resolve this, which is the bigger risk? The distance to go could not be changed by any other means but putting in  
15 5.10. The pitch axis feature could be dealt with by control measures. The DG weighed that up and made his decision.

LCDR GRACIE: Well, the distance to go can also be controlled to the extent that it's still available on the primary display.

20

LTCOL HAMLYN: That was determined to be unacceptable.

AVM HARLAND: Excuse me, could I just ask a clarifying question?

25 LCDR GRACIE: Yes, sir.

AVM HARLAND: You read the OPEVAL report?

LTCOL HAMLYN: Yes.

30

AVM HARLAND: That was part of your decision making and was part of the decision making in terms of how to go ahead?

LTCOL HAMLYN: Yes.

35

AVM HARLAND: Do we have a copy of the OPEVAL report available for the Lieutenant Colonel?

40 LCDR GRACIE: I've already flagged with – it will either be in 41 or 103. So that's Exhibit 41, if you have that? Otherwise, it will be in Exhibit 103, I think.

AVM HARLAND: Apologies, but this is probably a good time to ask a question.

45

LCDR GRACIE: No, I was going to go there, sir. It's better from you than me.

5 MS McMURDO: It's an annexure to LTCOL Reinhardt's statement.

LCDR GRACIE: Yes.

MAJ CHAPMAN: It's Annexure E to LTCOL Reinhardt's statement.

10 MS McMURDO: Thank you.

LCDR GRACIE: If we don't have that going back so far, it's also - - -

AVM HARLAND: If you could just go to the OPEVAL report.

15 MS McMURDO: Sorry, just a minute, please.

MAJ CHAPMAN: I'm sorry, if I could just raise a caution in relation to this document. It has been reclassified and it has actually had some redactions made in light of that reclassification. So I don't know if that's been flagged with all of the Counsel.

20 AVM HARLAND: I have a redacted copy here and the question I'll ask isn't from a redacted section.

25 MAJ CHAPMAN: Thank you, I didn't mean for you, sir. I actually meant more generally for the other Counsel, if they were going to follow on with your questioning.

30 AVM HARLAND: No worries. Do you have the OPEVAL report in front of you, sir? Was it Annex E?

MS McMURDO: I think that's only to the point of redacting parts of it, so you can still refer to it. Someone should be able to give you a redacted copy of it.

35 AVM HARLAND: Could I ask you to go to Annex B? And in Annex B there is a table. It's towards the back of the document.

40 LTCOL HAMLYN: Yes, I have that, sir.

AVM HARLAND: Could you go to serial 6, thanks.

LTCOL HAMLYN: Yes.

45

AVM HARLAND: So serial 6 asks a question:

5                   *If the distance to run information was not present, [REDACTED],  
would that affect your ability to conduct the SO approach as per  
STANMAN?*

So that question was asked to all of the test pilots who conducted the OPEVAL.

10           LTCOL HAMLYN: Yes.

AVM HARLAND: Now, out of those test pilots, they responded. Can you tell me how many said that they would be able to continue to do the SO approach if they did not have the distance to run on HMSD? So, effectively, it's anything but a "Yes" answer on there. So if you just have a read through that and get your head around it.

LCDR GRACIE: Ignoring perhaps the first column, sir.

20           LTCOL HAMLYN: Yes, I'm still trying – effectively, about half said the same thing in terms to there was ways it could be worked around.

AVM HARLAND: So certainly from my read I would say that seven out of 12 said that you could continue the SO approach mission without the distance to run marker. This is a collection of pilots with experience in both MRH-90 operations, ANVIS operations and SO Operations. And seven out of 12 of them said that they didn't really need it. So the question I ask is, was that factored in to how essential it was for this particular feature to go ahead with version 5.10?

30           LTCOL HAMLYN: I wouldn't say they said they didn't really need it. They were effectively saying they could still do the job without it.

AVM HARLAND: Which means they didn't really need it.

35           LTCOL HAMLYN: No, it's a very subtle difference, sir. It's pilots with a desire to achieve the mission saying, "If you tell me you take this away, I will find a way to make it still happen". The decision the DG has got to make is, "Do I put my pilots in that position?"

40           AVM HARLAND: So, by my read, seven out of 12 of them said that they could continue and do the SO approach should they not have distance to run on the HMSD?

5 LTCOL HAMLYN: And as I said, sir, put me back a younger man in the cockpit when I was doing it, I'd have answered the same, "Yes, I can still find a way to do it". Wiser heads than me might say, "Thank you, but I don't want to put you in that position".

AVM HARLAND: Did that come into your decision-making in terms of whether to proceed or not with version 5.1 modification?

10 LTCOL HAMLYN: Yes. And that discussion, I can't remember the exact details, but it would have been a discussion very much along the lines I just said there, "Yes, we understand that there are pilots saying that they would be prepared to do it without that information, but we do not want them in that position".

15 AVM HARLAND: In fact, I'd say they would be able to do it, not prepared to. They would be able to do it. That's what they say.

LTCOL HAMLYN: That's what I would expect them to say, and I would have said the same as a younger man in their position.

20 AVM HARLAND: Okay. No, that's good. That's my question, thank you.

25 LCDR GRACIE: Thank you, sir. It's actually able to conduct SO in accordance with STANMAN. It's quite a specific question in terms of the answers that - - -

30 LTCOL HAMLYN: Well, that is correct, they would be doing it in accordance with the STANMAN which would say the non-flying pilot is to bring their head into the cockpit, look at the distance to go and call it out to the flying pilot, who is to maintain their head outside the cockpit. Now, you know, as I said, "That was how I was used to in the days before we had HUD. Do you necessarily want to put people in a position of having to revert to that?" They're doing it correctly, as best they can with  
35 the equipment they have.

40 LCDR GRACIE: I have the same number of seven as Air Vice-Admiral (sic) Harland. I have four only saying "Yes", and I have removed one because the first person, CAPT Anderson, says, not being SO qualified, he wouldn't comment. So we've actually got 11. And so we've got seven "Yes", four - sorry - seven "No", it won't affect their ability, and only four that say "Yes".

So having that awareness of the OPEVAL, why was it that on 20 March, about a month later, you're still maintaining in your decision brief to DG AVN that it's essential? Who's given you that information?

5 LTCOL HAMLYN: That was still the outcome of the OPEVAL.

LCDR GRACIE: On your reading of it?

LTCOL HAMLYN: Yes.

10

LCDR GRACIE: Do you have it there? Can you point to anywhere in the OPEVAL, if you're still familiar with it, where it actually says that, that it's essential? Because - - -

15 MAJ CHAPMAN: It's the second one.

LCDR GRACIE: Is this the redacted part?

LTCOL HAMLYN: All right. Sorry, without going through the full  
20 document, the simple answer is no.

LCDR GRACIE: No. I'll take you to it. If - - -

MAJ CHAPMAN: I'm sorry to interrupt you, but that's redacted.

25

LCDR GRACIE: It is?

MAJ CHAPMAN: Can I just indicate, Chair, that we'll be tendering a  
30 copy of the redacted version after. We're just making copies of it.

30

MS McMURDO: Making copies now.

MAJ CHAPMAN: Yes.

35 MS McMURDO: Okay, thank you.

LCDR GRACIE: All right.

MS McMURDO: Has anyone got a copy of the redacted version that  
40 they can - - -

LCDR GRACIE: Sorry, ma'am.

MS McMURDO: I'm just wondering if anyone has a copy of the

redacted version they can show to you just so you can cross-reference and make sure that you're not asking - yes, thank you.

5 LCDR GRACIE: Sorry. Excuse me, ma'am.

MS McMURDO: The Commonwealth's come to the rescue again.

LCDR GRACIE: Rescue again.

10 MS McMURDO: Yes. Thank you.

LCDR GRACIE: They're always rescuing me though. I want to know – all right, well, we won't go there.

15 MS McMURDO: I'm not going to comment, LCDR Gracie.

LCDR GRACIE: We won't go there.

20 So is it your reading of the OPEVAL, despite what the serial 6 of the schedule shows, that affirmed in your mind the essentiality of the distance to go feature?

25 LTCOL HAMLYN: The essential recommendation of the distance to go was not removed. Never – it was never conveyed to me by anyone that it was now no longer essential.

LCDR GRACIE: Well, that shortens things, with the redaction. I only want to ask you one other matter, and it's paragraph 25.

30 LTCOL HAMLYN: Yes.

LCDR GRACIE: I just want to ask what your recollection is, going back to your time as CO Army Helicopter School in 2014-2016, that you remember CAPT Lyon?  
35

LTCOL HAMLYN: Yes.

LCDR GRACIE: Is it just recollection or did you have access to something to remember what you say in paragraph 25?  
40

LTCOL HAMLYN: I'm going on recollection there. There were no formal Minutes of that allocation meeting that I could find, but I do remember the discussion quite clearly.

45 LCDR GRACIE: And definitely Black Hawk?

LTCOL HAMLYN: He definitely was very keen to go to the SO role, which meant Black Hawk.

5 LCDR GRACIE: Can I suggest to you that his preference was actually Chinook.

LTCOL HAMLYN: I can't recall exactly what he put down, but he – I definitely remember in conversation that he was very keen to go to SO.

10

LCDR GRACIE: But he wouldn't be going to SO straight out of AHS, would he?

LTCOL HAMLYN: We were in an unusual situation at the time because Black Hawk had been moved to entirely be in Sydney. There had still been a training Troop for Black Hawk in AAvnTC until a few years before that, but the entire Black Hawk capability had now been consolidated in Sydney. In effect, that meant if you were going to Black Hawk, you were going into 6 Avn Regiment with the intention of streaming into SO.

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LCDR GRACIE: Except for the fact that I want to suggest to you that CAPT Lyon at the time knew, as did others, that the Black Hawk was being phased out and that if you wanted to do SO, you had to be in an MRH-90.

25

LTCOL HAMLYN: That was not the way anyone looked at – to be honest, at the time most pilots were of the view that, you know, the transition at 6 Avn Regiment would happen one day/maybe someday. I mean, a pilot on a – on an HQC did not have the visibility of, you know, the issues that were going on in terms of the transition, they just knew that it was being delayed. There were some of them who quite happily took the view of, "It'll never happen. It'll always be Black Hawk".

30

LCDR GRACIE: Well, what I'll suggest to you – because I know you say you remember it very clearly, but I want to suggest to you that there is evidence that the Inquiry has heard that CAPT Lyon's first preference was to be posted to fly Chinooks, not Black Hawk. Does that ring any bells?

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LTCOL HAMLYN: It doesn't. But as I say, I don't have access to the records. The way the process worked, we asked each trainee to give us their preferences in order, and then we ran through them and considered them. Now, I don't have that matrix, if you like, that would be presented to me available to me anymore, but I do remember that, you know, Dan

40



was very keen on the SO role. And that was from discussion I had with him.

5 LCDR GRACIE: Is it possible that you have conflated that desire to take an SO role with a desire in reconstructing the timeline for flying Black Hawks instead of MRH-90 or Chinook?

10 LTCOL HAMLYN: I will not rule that out simply because Dan remained in AHS for a period after he graduated from course. He was in the Graduate Pilot Troop which meant I would encounter him. It was a small building we were in. So, yes, I would, you know, encounter the members of that Troops, and in those times, yes, I would have talked to him. That said, what I do remember is conversations with him where he indicated he was very keen to be involved with SO.

15 LCDR GRACIE: And so maybe you've added the Black Hawk into that recollection.

20 LTCOL HAMLYN: As I said, without having the actual matrix in front of me that we used in that meeting, I can't confirm or deny that. I very strongly suspect that if it was so, I know that MRH would've been his third preference.

25 LCDR GRACIE: You know that?

30 LTCOL HAMLYN: If that matrix was in front of me, I would – well, I won't say I "know". I'll say I would, based on what I remember, strongly expect that his preference order would've then been Chinook, Black Hawk, MRH.

LCDR GRACIE: Let me see if this assists too. The instructions I have is that there was only one position for a Chinook pilot, and it went to a female pilot called Candace. Does that ring any bells?

35 LTCOL HAMLYN: That's correct.

LCDR GRACIE: So if his preference was for Chinook, there was only one posting in any event.

40 LTCOL HAMLYN: Correct. And it was the smallest of the capabilities, so yes, there were. And the postings and that were very strictly limited by our ability to get positions on the American courses.

LCDR GRACIE: And I just want to pick up something that's at the top of page – it's in paragraph 25 at the top of the last page, with your signature block where you say:

5                    *6 Avn Regiment had limited capacity to develop junior pilots.*

In your time in allocating graduate pilots, you didn't send them directly to 6 Avn, did you, after graduating? They would always have a time at 5 Avn?

10 LTCOL HAMLYN: No. Once the Black Hawk was exclusively in 6 Avn, we had to send normally one or two pilots per course directly to Black Hawk. That meant they would go to Sydney. They would be – I still owned the course that was run to qualify them on Black Hawk, but it was conducted in 6 Avn, with 6 Avn aircraft under their flight management system, and from that point they belonged to 6 Avn and they would be developed with a view of they were going to become SO pilots.

20 Now, this was not how we normally did it. In previous times, when 5 Avn and 6 Avn operated the same aircraft, yes, 6 Avn was a second tour. Pilots would go to 5 Avn first, then be posted to 6. We couldn't do that whilst we were in this transition period.

25 LCDR GRACIE: And so while the MRH-90 fleet is being reduced from 5 Avn – sorry?

LTCOL HAMLYN: Sorry, the 5 Avn fleet, MRH was in 5 Avn.

30 LCDR GRACIE: Yes.

LTCOL HAMLYN: But 6 Avn still had Black Hawk, hadn't commenced the transition to MRH yet.

35 LCDR GRACIE: That's all right. I've put it badly. So once the transition was happening where MRH-90 was going from 5 Avn, you're reducing the numbers there.

LTCOL HAMLYN: Yes.

40 LCDR GRACIE: Was it the fact that more junior pilots were being sent to 6 Avn without doing their two to three years at 5 Avn?

45 LTCOL HAMLYN: It was always the intent, as part of the transition plan for Black Hawk, that at a certain point we would bring pilots from 5 Avn to 6 Avn who had experience on the aircraft type. Now, they

weren't SO qualified, but they were type qualified. And the development of 6 Avn would be based on a mix of experienced Black Hawk SO pilots and experienced MRH pilots from 5 Avn.

5 LCDR GRACIE: My question really is what was the previous experience, where you might have them two to three years at 5 Avn before going to Special Ops, dramatically reduced in the time that a junior pilot spent at 5 Avn before going to 6?

10 LTCOL HAMLYN: I wasn't involved in any of the posting process once that drawdown was happening, so I can't say what policies were being applied at that point.

15 LCDR GRACIE: When you say 6 Avn Regiment had limited capacity to develop junior pilots, do you know if that changed the transition?

20 LTCOL HAMLYN: They'd had a couple of years at that point operating under this system. They'd set themselves up now in two separate Squadrons where the second Squadron could act as the Training and Development Organisation. But by that stage they were looking at MRH people. So they were getting pilots who had at least some background on MRH.

25 In the period where Dan went through pilots' course, we were in that difficult transition phase where we had to send someone straight to 6 Avn to do their Black Hawk course, straight from having done their - - -

LCDR GRACIE: Straight out of Graduate School.

30 LTCOL HAMLYN: Straight out of their graduation from HQC.

LCDR GRACIE: Even though it didn't have the resources to deal with that?

35 LTCOL HAMLYN: It had the resources. It didn't have the resources necessarily to give everyone the fullest opportunity, and like any organisation, they concentrated their resources on those who were most likely to quickly make the leap to being ready to undertake SO training.

40 LCDR GRACIE: So it had a training component as part of the Special Ops?

45 LTCOL HAMLYN: You had to qualify. You had to do, well, initially an SO qualification course as a co-pilot. Now, obviously they were going to concentrate on the people who were showing the best promise.

LCDR GRACIE: Thank you, sir. Thank you, ma'am.

MS McMURDO: Any other applications? Yes, LCDR Tyson.

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**<CROSS-EXAMINATION BY LCDR TYSON**

10 LCDR TYSON: Sir, my name's LCDR Matthew Tyson. I represent the interests of CPL Alex Naggs. Sir, I want to ask you about the email transmission that's at the back of your witness statement. Have you got that, please, sir?

15 LTCOL HAMLYN: One moment. This is the email regarding Peter Scullard?

LCDR TYSON: Yes, it's dated 24 June 2019. Do you see that, sir?

20 LTCOL HAMLYN: Yes.

LCDR TYSON: I'll just read it. So it says this:

25 *Scully contacted the HMSD T&E crews in Germany regarding the 5.10 HUD symbology upgrade. Comments from the Germans is as I said a few weeks ago. Maybe I'm not mad after all?? I will recommend a caution or note in the STANMAN and GD for FM regarding the issue. The Germans didn't bother!! So we have one T&E unit saying "enhancing feature", while the other*  
30 *says "unacceptable"? I have never seen this predicament before.*

Do you see that email, sir?

LTCOL HAMLYN: Yes.

35

LCDR TYSON: First, sir, the background to this, of course, is that AATES has done flight testing and provided a report of an unacceptable risk to flight safety. Can you say first, sir, who was it that instructed MAJ Scullard to contact someone in Germany?

40

LTCOL HAMLYN: I can't say for certain who it was. I was probably one of the people talking to him saying, "Find out what you can from the Germans. I knew he had good contacts with them from his time over there when he'd been in the Resident Project Team and his involvement in the project for many years. Look, we'd seen the comment from

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LTCOL Reinhardt saying he didn't really understand the system. So our inquiry was simple, "Okay, let's go back to the source, find out from the Germans what was their intent when they designed this". Pete was one of the guys with those contacts.

5

LCDR TYSON: I'm not sure I understood that, but doing the best you can, was it you yourself who instructed MAJ Scullard to make that contact?

10 LTCOL HAMLYN: I cannot remember giving him any specific instruction. If anything, he might have offered himself to say, "Hey, look, I still know people in the German system I can ask". You'd need to ask him that. I do know that we had these conversations saying, "Okay, we need more information about the system". Pete was one of the people  
15 who had the contacts who could get it.

LCDR TYSON: Do you know when it was that he made that contact?

20 LTCOL HAMLYN: No, other than it would be after the TERC and before the OPEVAL.

LCDR TYSON: Well, was it actually before you received AATES's signed report?

25 LTCOL HAMLYN: Not that I can recollect, no. I don't remember this being a big subject of discussion prior to the AATES report.

LCDR TYSON: Well, just to put it in context, so this is dated 24 June 2019. A meeting took place on 27 June 2019 when you say that was a stakeholder meeting upon receipt of the AATES report?  
30

LTCOL HAMLYN: Yes.

LCDR TYSON: Do you understand that context, sir?  
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LTCOL HAMLYN: Yes.

LCDR TYSON: Have a look at the second sentence in that email. It says:  
40

*Comments from the Germans is as I said a few weeks ago.*

So that suggests that there was some discussion about this sometime in perhaps early June 2019; is that correct?  
45

LTCOL HAMLYN: That's highly likely. When was the actual AATES testing conducted? It was sometime before that. Yes, we would have been talking about this as soon as Brendan raised it.

5 LCDR TYSON: Sorry, specifically comments about "the Germans". Do you remember discussion about any German experience in early June 2019 with LTCOL Norton and MAJ Pooley?

10 LTCOL HAMLYN: All I can remember is, yes, we were discussing this based on the information I got from LTCOL Grills when I came into the job, which was that the Germans were using 5.10 and quite happy with it. So our obvious question when Brendan raised these issues was, "Well, let's talk to the Germans and find out why they're happy".

15 LCDR TYSON: Did you tell AATES that you were discussing it with the Germans?

20 LTCOL HAMLYN: As I said, I can't remember exactly who I had conversations with on this one. I just know that it wasn't the subject of discussion.

LCDR TYSON: Did you pass on to AATES anything that the Germans said to MAJ Scully – Scullard, sorry?

25 LTCOL HAMLYN: Not me directly, no. As I said, MAJ Scullard got the information. He provided it to myself, LTCOL Norton. I don't know who else he spoke to directly.

30 LCDR TYSON: Well, LTCOL Norton calls it a predicament, doesn't he, sir?

LTCOL HAMLYN: It is a predicament. I've got two very experienced test pilots giving me two different answers.

35 LCDR TYSON: You don't know whether or not this material that you got back from the Germans was actually presented to AATES for their comment or review?

40 LTCOL HAMLYN: Do I know what conversation Peter Scullard or Tony Norton had with AATES? No.

LCDR TYSON: Do you know whether MAJ Scullard actually sent a copy of the AATES report to anyone in Germany?

LTCOL HAMLYN: I don't know the conversation he had or the nature of it. He would have advised them that our test organisation had come up with an "unacceptable" recommendation because that's common test pilot language. They would understand what he was saying there.

5

LTCOL TYSON: And is it your understanding that MAJ Scullard contacted a colleague from Germany, or he actually contacted Test and Evaluation people in Germany?

10

MS MUSGROVE: I object. I'm sorry.

LTCOL HAMLYN: Yes, there's - - -

MS MUSGROVE: I'm sorry.

15

LTCOL HAMLYN: Might be an issue here.

MS McMURDO: Just a moment, please.

20

MS MUSGROVE: There's evidence from Mr Scullard as to who he contacted and when he contacted them before the Inquiry already. If my friend wants to reference that in his questions, that would be fairer to this witness.

25

MS McMURDO: I think you're just asking him if he knows when he did those – so you can ask that question.

LCDR TYSON: Yes. So do you know whether MAJ Scullard contacted a colleague or do you know whether he contacted the German Test and Evaluation authorities?

30

LTCOL HAMLYN: I am pretty sure that the way it was described to me, he contacted a personal colleague he knew in the German organisation who had done the testing on 5.10 in the German organisation.

35

LCDR TYSON: Do you recall a conversation where he said that specifically to you?

LTCOL HAMLYN: It's 2019, I can't recall exact conversations. I do know that there were numerous conversations between all of us discussing this.

40

LCDR TYSON: And do you know whether the German colleague who responded to MAJ Scullard – was that person authorised by the authorities in Germany or SUZ, or the Testing and Evaluation authorities in

45

Germany? When that response went back to MAJ Scullard, was the German colleague authorised to provide that response?

5 MS McMURDO: Do you know whether he was?

LTCOL HAMLYN: I don't know whether - - -

MS McMURDO: He doesn't know.

10 LTCOL HAMLYN: - - - he was authorised to say it. Effectively, the only piece of information we're interested in was that the system had been approved and was operating in the German Army.

15 LCDR TYSON: Now, you can see if you've got that chain of email transmissions before you. I've asked you about – sorry, before I leave the 24 June 2019 email, who was MAJ Pooley, again?

20 LTCOL HAMLYN: He was my SO2. So I had a Major Staff Officer for each platform type I was responsible for. He was the MRH.

AVM HARLAND: Just before you move on from this topic. At any time was there a formal request put to the German Flight Test Organisation to gain access to their report or more formal information about how the V5.10 testing was done?

25 LTCOL HAMLYN: I don't know if a formal request was made. Normally, that would go from test pilot organisation to test pilot organisation. So AATES had the links to make those sort of formal requests. They'd used that before in ARH.

30 AVM HARLAND: Were you aware of, do you know if the ADF had access to that report, the German report for flight tests?

35 LTCOL HAMLYN: I don't know if we had access to it. We could have got it, but the essential piece of information to us was that the Germans had certified the system and had installed it on their aircraft.

AVM HARLAND: Yes, okay. Thank you.

40 LCDR TYSON: And just before I leave that one, so LTCOL Norton ends his email by say, "I've never seen this predicament before". Did you respond to his email about the predicament?

LTCOL HAMLYN: I've had a look at the email. That email was



provided by me from my personal email account. There's nothing indicating I sent an email response to him. I certainly discussed it with him personally.

5 LCDR TYSON: Now, if you look at the email transmission below, which is the one sent at 11 am on 24 June 2019, can you see there that a specific question was asked:

10 *Do any of your NH90 documents – for example, Flight Manual Pilot Ops Manual or Training Manual, et cetera – include information in relation to the characteristic? For example, a note or a caution advising pilots that the roll angle display is only accurate when looking ahead?*

15 Do you see that specific question?

LTCOL HAMLYN: Sorry, yes.

20 LCDR TYSON: In terms of the framing of that specific question, do you have any recollection of whether you came up with that question, whether it was MAJ Scullard or whether it was LTCOL Norton?

LTCOL HAMLYN: That is MAJ Scullard's specific question to the Germans.

25 LCDR TYSON: So he came up with a question, and the answer was:

30 *There is no such information in any of our Flight Manual, Pilot Ops Manual or Training Manual.*

Do you see that?

LTCOL HAMLYN: Yes.

35 LCDR TYSON: So that's sent at 11 am on 24 June. At 11.39 am on the same day, so 28 minutes later, LTCOL Norton says:

40 *I will recommend a caution or note in the STANMAN and GD for FM regarding the issue. The Germans didn't bother!!*

Do you see that?

LTCOL HAMLYN: Yes.

LCDR TYSON: Did you ask him about that? Do you say, “Well why, sir, are you recommending a note when the Germans don’t have one?”

5 LTCOL HAMLYN: We don’t know the full context of the German training system. When they train their pilots, they had an intention in mind with this system. How they addressed that, good question. We had the issue that AATES had raised this as an anomaly, that we had to address in our system. We chose to address it by putting in specific notes in our training and our publications.

10 LCDR TYSON: So that’s a very important answer. You didn’t know the full context of the German testing system or pilot training, did you?

15 LTCOL HAMLYN: No, we don’t.

LCDR TYSON: Thank you. All right, nothing further, sir, ma’am.

MS McMURDO: Thank you.

20 LCDR GRACIE: Ma’am, there was something that I forgot to put, which - - -

MS McMURDO: Yes, all right then.

25 LCDR GRACIE: - - - I was going to suggest I do it now, in fairness to my learned friends who follow.

MS McMURDO: You just have to be a bit more careful about not knocking things over, I think, LCDR Gracie.

30 LCDR GRACIE: I said I’m like the Johnny in the schoolroom; I get blamed for everything, ma’am. Do you mind if I revisit one item?

MS McMURDO: No. No, go ahead.

35

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

40 LCDR GRACIE: Could I take you back to your 20 March 2020 brief to DG AVN and paragraph 6. I just want you to read on the third line – well, in fact, in fairness to you, it’s probably starting on the third - - -

LTCOL HAMLYN: Bear with me. I gather the document is here.

45

LCDR GRACIE: Sorry.

LTCOL HAMLYN: Naturally, it's right at the fold.

5 Lcdr GRACIE: Always is. If you want to take that clip off, we'll - - -

LTCOL HAMLYN: No, it's okay, I've got it.

10 Lcdr GRACIE: If you go to the third line of paragraph 6, which begins with the words, "The off-axis", and just read that to yourself. And then there's a reference to including use of the AFCS go around mode of automated unusual attitude recovery. Was that one of the factors that reassured you about the desirability of recommending the upgrade to DG AVN?

15

LTCOL HAMLYN: Well, that was a requirement. We had to address the issue in the AATES report. The mechanism we identified to address it was to conduct further trials to see what control measures would work. These were the control measures that were recommended and approved by DOPAW. So, yes, that reassured me that we'd addressed the issue.

20

LCDR GRACIE: Were you made aware that about four weeks later there was another brief to DG AVN which made reference to the fact that:

25

*AATES testing and quality evaluation of the go around mode has indicated that in some regions the operational flight envelope – use of this mode will lead to unsafe flight and likely controlled flight into terrain.*

30

LTCOL HAMLYN: I do remember Brendan Reinhardt raising that objection to the go around mode, that particular control measure, yes.

35

LCDR GRACIE: So your brief four weeks earlier recommending the service release of – or the introduction of service of HMSD 5.10 relied upon a mitigating factor that was, four weeks later, identified as being unsafe and likely to lead to a controlled flight into terrain?

40

LTCOL HAMLYN: And that is something that DOPAW could have addressed in the SFI.

LCDR GRACIE: Do you feel any embarrassment - - -

LTCOL HAMLYN: No.

45

LCDR GRACIE: - - - about relying upon that as a mitigating factor in

recommending the service release when the recommending factor that you rely upon, the mitigating factor, could have caused a controlled flight into terrain if it was activated in UA?

5 LTCOL HAMLYN: One of the control measures.

10 LCDR GRACIE: But it's not a bad one, is it? If it has to be taken out of the Standards Manual because the warning is so dangerous to lead to a controlled flight into terrain, you've recommended that as a mitigating factor for the access - - -

LTCOL HAMLYN: DOPAW recommended as a mitigating factor.

15 LCDR GRACIE: You drafted the brief.

20 LTCOL HAMLYN: Yes. And I act on the advice that I've received from DOPAW. I'm the coordinator of the information. DOPAW, who is my senior officer, full Colonel, had evaluated this and determined what the appropriate control measures were, and he was recommending those to DG AVN.

LCDR GRACIE: So you don't take any responsibility for putting in that brief to DG AVN - - -

25 LTCOL HAMLYN: I don't take responsibility for overruling a senior officer to me and, a test pilot much, much more familiar with the aircraft than me, if they have recommended a particular measure as suitable. I'm simply putting the brief together to DG AVN to say, "This is the advice from DACM. This is the advice from DOPAW", and the other factors, yes.

30 LCDR GRACIE: That's your answer to recommending - - -

35 LTCOL HAMLYN: That is my answer in this case, yes.

LCDR GRACIE: - - - service release to DG AVN relying upon a mitigating factor that was assessed as being likely to lead to a controlled flight into terrain when using a go around feature in a UA situation.

40 LTCOL HAMLYN: You're exaggerating the extent of "likely". Brendan correctly identified there was a circumstance where this could be problematic.

45 LCDR GRACIE: Problematic - - -

LTCOL HAMLYN: Yes.

LCDR GRACIE: Controlled flight into terrain is problematic?

5 LTCOL HAMLYN: Yes.

LCDR GRACIE: That's all?

LTCOL HAMLYN: No.

10 LCDR GRACIE: It's problematic?

LTCOL HAMLYN: You're playing words here, please. Brendan identified a circumstance where, yes, that would not be an appropriate control measure.

LCDR GRACIE: Let me put this differently too. Doesn't it underscore the time pressures that you were working under to get this thing across the line because four weeks after you recommended the service release, they're still working out the appropriate warnings to put into the Standards Manual?

LTCOL HAMLYN: And this is not unusual, that things will change. And an AL1 version will be brought out that says, "Okay, we're going to recommend this. No, we will now remove that one". You'll see, you know, numerous documents, SFIs, that have "AL", Amended List, 1 through whatever.

LCDR GRACIE: Forgive if I'm sounding a bit obtuse here, but it sounds a bit rushed.

LTCOL HAMLYN: I would not accept the term "rushed". Nothing in the MRH world happened quickly.

35 LCDR GRACIE: Well, this seems, if we've got a four-week window between your decision brief and the next decision brief where the mitigating feature is completely removed - - -

LTCOL HAMLYN: One of the control measures was questioned, and it could be removed if it was decided by DOPAW that that particular control measure wasn't appropriate. It could be removed.

LCDR GRACIE: All right, thank you.

45 MS McMURDO: Any other applications to cross-examine? No. Yes,

thank you, Ms Musgrove.

**<CROSS-EXAMINATION BY MS MUSGROVE**

5

MS MUSGROVE: Sir, my name is Musgrove, and I appear for the Commonwealth. Just briefly, can you just clarify, there were some questions asked of you about whether or not the German test organisation was contacted for their reports? You recall those questions?

10

LTCOL HAMLYN: Yes.

MS MUSGROVE: And was it your answer that AATES could have sought that information?

15

LTCOL HAMLYN: Yes. We could certainly – I can't guarantee the Germans would have provided it, but I can't think of any reason they wouldn't have if a formal request had been put in. We had that sort of level of cooperation with those nations in the past.

20

MS MUSGROVE: And would it ordinarily be AATES who would make such a request?

LTCOL HAMLYN: It could be, or it could be CASG. The reason that AATES was often asked to do it was because they had the direct relationship with their fellow test pilot organisations.

25

MS MUSGROVE: And you don't know definitively whether or not such a request was made?

30

LTCOL HAMLYN: I can't remember if ever a formal request was received. I mean, once we had the information confirmed that the Germans had installed the – they'd certified the system, installed the system and were still using it several years later, that was the essential information that we needed.

35

MS MUSGROVE: In terms of that information, Annexure 2 to your statement is a series of emails that you've been taken to already. If I could ask you to turn that up, please? And if you can see there, halfway down the first page, there's the email from MAJ Scullard to LTCOL Norton and LTCOL Satrapa? And I'm just going to read this and verify that this is your understanding of what's written there. It says:

40

*Hello, sir. As requested, below are extracts from emails I have received from a German Army NH90 colleague in relation to the HMSD V5.10 symbology, especially the roll attitude display ...*

5 MS McMURDO: So, just to be clear, there are some redactions in there - - -

MS MUSGROVE: There are some redactions.

10 MS McMURDO: - - - which obviously you haven't read out, and they don't – I should just make clear, for the record, that you're not reading verbatim for the record.

MS MUSGROVE: Certainly, I don't – yes. Thank you.

15 MS McMURDO: So perhaps if you just read in the redactions, just say "Redaction".

MS MUSGROVE: Redaction. Yes. So after the word "colleague" and before the word "in relation to" there's a redaction. And after the word "display", there's a full stop. There's a redaction, a comma and then it reads:

*and has been involved in the NH90 for longer than me.*

25 And you'd accept, wouldn't you, that what follows is in a different text and is larger?

LTCOL HAMLYN: Yes.

30 MS MUSGROVE: Do you take that to be something that's been extracted from an email from the German contact and placed into this email?

35 LTCOL HAMLYN: That is the actual email response from the German colleague.

MS MUSGROVE: Thank you. And it reads:

40 *We have the 5.10 symbology now in use for years, and we appreciate the improvements a lot, especially when operating in areas as –*

and I'm not going to say – well, as:

45

*as AFG or recently –*

and I'm not going to say that –

5 *in a “brown out” environment.*

It says that, correct?

10 LTCOL HAMLYN: Correct, yes.

MS MUSGROVE:

15 *The feature you describe was discussed (and accepted by us) in the development phase, when the decision was made to implement the pitch ladder no longer as fixed symbol but now related to the horizon.*

Correct?

20 LTCOL HAMLYN: Yes.

MS MUSGROVE:

25 *From my perspective, as a Flight Platoon Lead in an operational NH90 unit, I never heard a complain –*

do we take that as “complaint”?

30 LTCOL HAMLYN: Complaint, yes.

MS MUSGROVE:

35 *About that from one of my pilots. Moreover, the symbology is in “mission tested” and, as I said, highly appreciated by our pilots.*

Is that correct?

LTCOL HAMLYN: Yes.

40 MS MUSGROVE: Is that the information that you became aware of as to the position of the German Army?

LTCOL HAMLYN: Yes, that was the information provided to me by – well, as you can see on the email chain at the top – from COL Norton.

45



MS MUSGROVE: Thank you. I have no further questions.

MS McMURDO: Thank you. Any re-examination?

5 MAJ CHAPMAN: No, ma'am.

MS McMURDO: Thank you.

10 Thank you very much. We greatly appreciate the assistance you've given to the Inquiry. You have had some testing questions, so that assistance is available if you need it. Thank you.

LTCOL HAMLYN: Thank you, ma'am.

15 MS McMURDO: You're excused and free to go.

**<WITNESS WITHDREW**

20

MS McMURDO: MAJ Chapman, did you want to start the next witness?

MAJ CHAPMAN: I'm able to. I think it might be a convenient time for lunch. I'm in the Inquiry's hands.

25

MS McMURDO: It might be. Yes, we might have the lunch break now. We'll have a one-hour lunch break and resume at 12.50.

MAJ CHAPMAN: May it please the Inquiry.

30

**HEARING ADJOURNED**

**HEARING RESUMED**

5 MS McMURDO: Yes, MAJ Chapman.

MAJ CHAPMAN: Thank you, Chair. The next witness I call is LTCOL Cameron Satrapa.

10 <LTCOL CAMERON JAMES SATRAPA, Affirmed

<EXAMINATION-IN-CHIEF BY MAJ CHAPMAN

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

LTCOL SATRAPA: Thank you.

20 MS McMURDO: Thank you. Yes, MAJ Chapman.

MAJ CHAPMAN: Thank you, Chair.

25 Sir, can you please state your full name?

LTCOL SATRAPA: Cameron James Satrapa.

30 MAJ CHAPMAN: And can you also confirm that you've received each of the following documents prior to your appearance today: a section 23 Notice requiring your appearance?

LTCOL SATRAPA: Yes.

35 MAJ CHAPMAN: An extract of the Inquiry Directions?

LTCOL SATRAPA: Yes.

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

40 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Frequently Asked Questions Guide for Witnesses?

45 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And Privacy Notice?

LTCOL SATRAPA: Yes.

5 MAJ CHAPMAN: Thank you. Sir, I don't think it's going to be an issue  
on this occasion, though I just give the caution that if there's a matter of  
security and classification comes up and you consider that a question I've  
asked or any answer that you may give may go into classified territory,  
10 just let me know and we might need to go into private hearing. Do you  
understand?

LTCOL SATRAPA: I do.

15 MAJ CHAPMAN: Thank you. Sir, have you prepared a statement for  
the purpose of the Inquiry?

LTCOL SATRAPA: I did.

20 MAJ CHAPMAN: I'll just hand you a copy. And, sir, do you recognise  
that to be a statement dated 7 February 2025?

LTCOL SATRAPA: Yes.

25 MAJ CHAPMAN: And it's 11 pages in lengthy?

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And it has four annexures, A to D?

30 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And do you wish to make any amendments to that  
document?

35 LTCOL SATRAPA: No.

MAJ CHAPMAN: Thank you. Chair, I tender the statement of  
LTCOL Cameron Satrapa dated 7 February 2025, together with the four  
40 annexures.

MS McMURDO: Exhibit 118.

**#EXHIBIT 118 - STATEMENT OF LTCOL SATRAPA AND ANNEXURES**

5 MAJ CHAPMAN: Sir, could I just begin with some information that  
you've given by way of your background and professional experience,  
which commences at paragraph 4? So I'm just going to summarise this  
and just ask you to agree and to just to confirm. You joined the Regular  
Army in July 1997.

10 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And you graduated RMC Duntroon in December  
1998.

15 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And commenced pilot training in July '99.

20 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: From '99 to 2011 you were in various flying roles,  
including at 6 Avn Regiment.

25 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And a number of overseas postings with the US  
Army.

30 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Since 2011 you've been in staff roles, including  
representative roles as a military attaché in Washington DC?

35 LTCOL SATRAPA: I worked in the Military Attaché's Office. I was  
not the military attaché.

MAJ CHAPMAN: Understood, yes. And your tertiary qualifications  
include Bachelor of Commerce from University of Canberra.

40 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: A Master of Military and Defence Studies from  
ANU.

45

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And recently, a Graduate Diploma in Occupational Health and Safety from QUT.

5

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Thank you. Sir, your most recent role was Staff Officer Grade 1 Aviation Safety within Headquarters Army Aviation Command. Correct?

10

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And you posted into that position, in your statement, in January 2021.

15

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And your posting concluded in January of this year.

20

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And where are you posted now, sir?

25

LTCOL SATRAPA: I'm currently SO1 Safety Intelligence in Army Headquarters.

MAJ CHAPMAN: And back to your role of SO1 in Aviation Safety, you reported in that role to the Director of Operational Airworthiness; is that right?

30

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: In DOPAW. And you say that you were responsible for a variety of matters in that role, and you list them. And they include managing Army Aviation Safety Management Systems.

35

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Managing military freight flight operations.

40

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Quality - - -

45

LTCOL SATRAPA: Well, quality assurance, yes.

MAJ CHAPMAN: Quality assurance. Contributing to Aviation audits.

5 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And managing the Army Risk Aviation Management Tool. Correct?

10 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And providing advice to Commanders and staff; is that right?

15 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Now, just in relation to the Army Aviation Management Tool, that's not the same tool as what's referred to as the OTCRM, is it? Or is it?

20

LTCOL SATRAPA: No, different tools.

MAJ CHAPMAN: Can you just explain that?

25 LTCOL SATRAPA: So the tool I refer to here is the Aviation Integrated and Aggregated Risk Tool, which replaced the OTCRM which was an Excel-based system. AVIART was a digitalised online platform.

MAJ CHAPMAN: So we're - - -

30

LTCOL SATRAPA: And it was introduced in 2021, from memory.

MAJ CHAPMAN: That's AVIART was introduced in '21?

35 LTCOL SATRAPA: AVIART, yes.

MAJ CHAPMAN: And so you say that the OTCRM was an Excel-based register?

40 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And this has been moved into a tool. And was the information from OTCRM transposed into the new system or there was just a point in time when one ended and the other one started?

45

LTCOL SATRAPA: No, it was transposed. So there was a directive released in 2021 – 07/2021, from memory. Part of the introduction of AVIART was to transfer entries from the OTCRM into AVIART.

5 MAJ CHAPMAN: So a search of the AVRМ would incorporate all the OTCRM entries?

LTCOL SATRAPA: It should, yes.

10 MAJ CHAPMAN: If it was being done correctly?

LTCOL SATRAPA: Yes.

15 MAJ CHAPMAN: I now turn to discuss your participation in a CCB board meeting in April 2020, and that's a Configuration Control Board meeting in 2 April 2020. Can I just ask that the witness be shown Exhibit 117?

20 MS McMURDO: Where is that - - -

MAJ CHAPMAN: That's the Minutes.

MS McMURDO: 117A, is it? Annexure A?

25 MAJ CHAPMAN: No, the CCB which is standalone exhibit.

MS McMURDO: Yes.

30 MAJ CHAPMAN: Thank you. Yes, that's the one.

LTCOL SATRAPA: Cheers.

MAJ CHAPMAN: And, sir, do you recognise that as a document that's been provided with your section 23 Notice?

35 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And you confirm that you had regard to that document in preparing your statement, particularly from paragraph 8?

40 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And do you recognise those to be the Minutes of the Board meeting you attended on 2 April 2020?

45

LTCOL SATRAPA: Yes.

5 MAJ CHAPMAN: And just to orientate yourself to that document. And I ask you to go to page 5. And there's some page numbering in the top right-hand corner, page 5/14. Just let me know when you have that?

LTCOL SATRAPA: Yes, I'm on page 5.

10 MAJ CHAPMAN: And you'll see there the CCB attendees?

LTCOL SATRAPA: Yes.

15 MAJ CHAPMAN: And you see there you are listed. The numbering seems to be a bit out, but you're the fifth entry. So you're below LTCOL Karl Hamlyn.

LTCOL SATRAPA: Yes.

20 MAJ CHAPMAN: And you're described in the position there as Headquarters Forces Command, SO1 OPAW-8, and you're the Operational Representative?

25 LTCOL SATRAPA: Yes. The eight should be a B for Bravo. But, yes, that is the position I was in at the time.

MAJ CHAPMAN: So that's Staff Officer Grade 1 within the Directorate of Operational Airworthiness and - - -

30 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Did you say it should follow with a "B"?

35 LTCOL SATRAPA: Yes. So there were at least perhaps three of us at the time. We had different responsibilities in each of our portfolios.

MAJ CHAPMAN: So the B just denoted there was an A, there was a B and - - -

40 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: How many others, to your recollection?

45 LTCOL SATRAPA: There may have been a C at that time. There was definitely an A and a B, and there may have been a C at that time. If not, the C was introduced shortly afterwards.



MAJ CHAPMAN: And, sir, as part of the B role there I suppose would you be the one from OPAW to attend as the Operational Representative for the CCBs?

5 LTCOL SATRAPA: Yes. So I attended CCBs for Tiger and Taipan.

MAJ CHAPMAN: I see.

10 LTCOL SATRAPA: They were in my portfolio.

MAJ CHAPMAN: And you'll see there the abbreviation that's given to you is obviously CS. Correct?

15 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And your recollection, having been at that meeting and now having reviewed the Minutes, is that it was a meeting that came together every couple of months, generally. Is that right?

20 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And this was a meeting that dealt with a number of items of business, which included HMSD 5.10?

25 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And can I just ask you, sir, to go over to page 12 in the top right-hand corner? You might have to turn it on its side. And do you see there, sir, halfway down the page, "6.0, Other business and topics of discussion"?

30 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And if you go down to the second entry concerns HMSD V5.10.

35 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And the last bullet entry on the box to the right says this:

40

45 *CS: No issue or objections with SR delegated to AASP. We do own an RMP reservations on certain aspects that need to be refined.*

Do you see that?

LTCOL SATRAPA: I do.

5

MAJ CHAPMAN: Do you agree that is – noting it's five years ago – more or less an accurate representation of what you said at that meeting?

LTCOL SATRAPA: I don't recall the words specifically, but to the extent that I do recall the meeting, I did not have objections with service release being delegated to AASPO. The syntax of the comments look odd to me. I don't know whether that's a result of transcription through WEBEX; the CCB was held online. But, yes, they look like reasonable comments for that.

15

MAJ CHAPMAN: Just to be clear, I'm not suggesting this is a verbatim representation of what you said.

LTCOL SATRAPA: Sure. Yes.

20

MAJ CHAPMAN: It's obviously a Minute.

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: So there'd be a degree of interpretation.

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: But you're more or less satisfied that captures what you said?

30

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Do you agree that the effect of what you're saying here is that from an operational airworthiness perspective you had no issues or objections for the service release being delegated to the AASPO?

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LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And that the AASPO for this purpose was LTCOL David Marshall?

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LTCOL SATRAPA: When you say "the AASPO", so I would characterise LTCOL Marshall being the representative of AASPO, AASPO being an organisation.

45

MAJ CHAPMAN: Quite. So the representative being COL Marshall; is that right?

5 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And the Inquiry understands that need for service release to be delegated in this way was because there was some minor outstanding actions that had not been completed in time for this Board, or  
10 this Configuration Control Board. Is that your understanding?

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Otherwise, had those actions been ready, you would expect, would you, the Chair of the meeting could have themselves signed off with the Board on service release at that meeting.

LTCOL SATRAPA: Yes.

20 MAJ CHAPMAN: The Inquiry has also heard some evidence that delegating service release in this way at a CCB meeting was not particularly unusual. Do you agree with that?

LTCOL SATRAPA: It wasn't necessarily the preferred method, but  
25 no, I wouldn't characterise it as unusual, but it was always a considered decision based on the advice from Board members.

MAJ CHAPMAN: And it was intended to enable service release to be given effect to, so as not to delay for the next CCB.

30 LTCOL SATRAPA: In this instance, yes.

MAJ CHAPMAN: And the reference in your response which appears recorded in a Minute there, "We own an RMP reservation on certain  
35 aspects that need to be refined", could you just expand on what "RMP" means?

LTCOL SATRAPA: So RMP is an abbreviation for Risk Management Plan.

40 MAJ CHAPMAN: So you're saying, then, that you had some – when you say, "We own a Risk Management Plan reservation on certain aspects", is that what you're trying to say there?

45 LTCOL SATRAPA: Well, this is where I raised the point about

transcription errors. So that's not language that I would use. So I clearly had reason to identify that we had a Risk Management Plan. I don't recall using the word "reservations". But as I've said in the statement, to the extent that I harboured any reservations, they weren't adequate to prevent me recommending or granting operational endorsement for service release. And I cannot recall what any of the reservations may have been. And I think I mention in my statement that perhaps "reservations" was too strong a word, and that we were simply managing issues through a Risk Management Plan or a risk process.

MAJ CHAPMAN: Reflecting on it now, you say your evidence is, as far as you can recall, you intended to convey that there was a Risk Management Plan in place in respect of service release?

LTCOL SATRAPA: Yes, that's an accurate characterisation.

MAJ CHAPMAN: And just returning now to your statement at paragraph 11 – so you can put that to one side – you were asked by the Inquiry whether you were aware that prior to this Configuration Control Board – so in March 2020 – BRIG Fenwick had signed a decision brief approving service release – sorry, recommending service release of 5.10. Do you recall that?

LTCOL SATRAPA: Sorry, do I recall?

MAJ CHAPMAN: So we're at paragraph 11.

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Do you recall you were asked by the Inquiry whether you were aware that prior to this CCB – so this being in April – so in March 2020 BRIG Fenwick had signed a decision brief in respect of service release of 5.10? Do you recall that?

LTCOL SATRAPA: I recall the question, yes.

MAJ CHAPMAN: And your response which starts on page 3 and goes into page 4, you say that you recall reading the decision brief and the Minute shortly after they were signed. Correct?

LTCOL SATRAPA: Can we just clarify the page numbers? I've got that on page 2. Are we at question 11?

MS McMURDO: Page 3, top of page 3.

MAJ CHAPMAN: Top of page 3.

LTCOL SATRAPA: Page 2, into page 3. I thought you said page 3 and 4.

5

MAJ CHAPMAN: I may have. I apologise.

LTCOL SATRAPA: Yes, that's my answer.

10 MAJ CHAPMAN: And you clarify that:

*DG –*

the Director-General –

15

*Aviation is not authorised to grant service release, so I did not interpret either document to mean that he had.*

Correct?

20

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And what you are saying there, sir, is consistent with other evidence received by the Inquiry to the effect that it is the CCB and not Director-General Aviation who formally approves service release. Correct?

25

LTCOL SATRAPA: The Chair of the CCB grants service release, yes, not DG AVN.

30

MAJ CHAPMAN: You're characterising it as the Chair of the CCB and not – and you're distinguishing the Board generally, or are you saying the Board Chair - - -

35

LTCOL SATRAPA: Well, the Board comprises, I think it's eight members.

MAJ CHAPMAN: Yes.

40

LTCOL SATRAPA: There is a Chair, and the Chair makes the decisions informed by advice from the Board members.

MAJ CHAPMAN: And the Chair, in this case, is LTCOL Wheatley?

45

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And to the extent that the Minute we've been referring to from BRIG Fenwick gives his approval in a decision brief in March. Those were recommendations for service release. Correct?

5

LTCOL SATRAPA: I don't think I have that in front of me, do I? But my recollection of that Minute is that it requests the Project Director to progress with implementing the hardware into the aircraft in preparation for service release.

10

MAJ CHAPMAN: Correct.

LTCOL SATRAPA: Yes.

15

MAJ CHAPMAN: Though the formal - - -

LTCOL SATRAPA: Here we go. It's here, yes. Work to achieve service release of version 5.10, yes.

20

MAJ CHAPMAN: The formal decision rested with the Chair of the Board, CCB board.

LTCOL SATRAPA: The decision to grant service release - - -

25

MAJ CHAPMAN: Correct.

LTCOL SATRAPA: - - - rested with the CCB Chair, yes.

MAJ CHAPMAN: That decision, as we know from the Minutes, was

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delegated down from the Chair of the CCB to LTCOL Marshall.

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Are you aware of whether this CCB approval

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process is reflected in the DASRs or in policy in some places?

LTCOL SATRAPA: I'm not aware of it being regulated through DASR, which is not to say it's not. There is policy in place that CASG has generated and it's one of the annexes to my statement that guides the CCB

40

process.

MAJ CHAPMAN: And I might just take you to that, and the Inquiry to that. So is that Annex A to your statement?

45

LTCOL SATRAPA: That's Annex A, yes.

5 MAJ CHAPMAN: And Annex A, I'll just identify is a corporate governance of outsourced Tiger and Taipan configuration management. And if you go over to page 8 of that document, just as example, it starts with a section on Configuration Control Boards. Do you see that, sir?

LTCOL SATRAPA: Yes.

10 MAJ CHAPMAN: And then over the page there's tables about authorisations and then it's a helpful document which goes through responsibilities on page 10, types of CCBs. At paragraph 26 on page 11 there's a reference to CCB authority delegation, the exercise of which was taken in respect of COL Marshall. And then there are various other aspects of that which – including a diagram and a flow chart at page 13.

15 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: So that's your understanding of the policy as it concerns CCBs?

20 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: One of them. And just returning to the issue of the March decision brief – and I might pull up a copy of that if I can. So that's at – I'll just take instructions. Can the witness be shown Exhibit 104? That's COL Lynch's statement, and it's Annexure E. It's the same one the previous witness was taken to.

30 LTCOL SATRAPA: Can I just ask you a question? I've got five attachments here. The fifth one is not labelled. Sorry, five attachments to my statement.

MAJ CHAPMAN: I think we recorded – I may have said - - -

35 MS McMURDO: Four.

LTCOL SATRAPA: You did say four.

MS McMURDO: You did say four.

40 MAJ CHAPMAN: Correction on my part. I apologise, sir.

45 LTCOL SATRAPA: There should be five. Yes.

MAJ CHAPMAN: There's five.

LTCOL SATRAPA: Yes. And I do recall the fifth one.

5 MAJ CHAPMAN: Thank you.

MS McMURDO: Well, we probably should label that fifth one "E", because the others are A to D. So the witness is now looking at what document – or is about to be looked at?

10

MAJ CHAPMAN: It's an annexure to COL Lynch's statement, which is Annexure – sorry, it's Exhibit No 104. Yes.

MS McMURDO: And the annexure is? Which annexure is it? Number?

15

MAJ CHAPMAN: It's Annexure 2.

I'm sorry, sir, can I just ask you, I'm sorry, to - - -

20 LTCOL SATRAPA: It looks like - - -

MAJ CHAPMAN: There should be a tab.

LTCOL SATRAPA: 2. Yes.

25

MAJ CHAPMAN: 2. Annexure 2 to Exhibit 104.

MS McMURDO: Mm-hm.

30 MAJ CHAPMAN: And that's the March decision brief.

LTCOL SATRAPA: Okay.

35 MAJ CHAPMAN: Now, sir, do you see that on page 2 you're listed as having been consulted?

LTCOL SATRAPA: Yes.

40 MAJ CHAPMAN: And just to cover off on that point, you say in that you do not recall being consulted, though it's possible that you did not respond to an email requesting as much.

LTCOL SATRAPA: Yes.

45 MAJ CHAPMAN: And you say further that you were involved in



meetings about this.

LTCOL SATRAPA: Mm-hm.

5 MAJ CHAPMAN: So you're aware of it generally.

LTCOL SATRAPA: Mm-hm.

10 MAJ CHAPMAN: And you concurred with the content of the decision brief?

LTCOL SATRAPA: Yes.

15 MAJ CHAPMAN: In that it was reasonable, at least insofar as you were consulted?

LTCOL SATRAPA: Yes.

20 MAJ CHAPMAN: If you turn, possibly back to Annexure 1, it should be another decision brief. It should be an April decision brief, 21 April 2020?

LTCOL SATRAPA: That looks like it. HUD test and evaluation - - -

25 MAJ CHAPMAN: It's in very small font at the top. There should be an electronic signature at the top.

LTCOL SATRAPA: Yes, I can see a signature: BRIG Fenwick, COL Lynch.

30

MAJ CHAPMAN: Yes.

LTCOL SATRAPA: Yes.

35 MAJ CHAPMAN: So in addition to that March decision brief, you're aware at the time that the Director of Operational Airworthiness had produced a further decision brief, 21 April 2020. Is that right?

LTCOL SATRAPA: Yes.

40

MAJ CHAPMAN: Is that right, sir?

LTCOL SATRAPA: Yes.

45 MAJ CHAPMAN: And is it between the March decision brief and the

April decision brief you say in your statement that they were prepared for different purposes?

5 LTCOL SATRAPA: Did I say that in my statement? They were prepared by different parts of the organisation. So the March decision brief came out of the Directorate of Aviation Capability Management. And it was directed to the Program Director. The brief in April came out of the Directorate of Operational Airworthiness and the intent was to – without reading through the entire thing again, the intent was to effectively provide operational endorsement.

10 MAJ CHAPMAN: Yes.

15 LTCOL SATRAPA: A decision on operational endorsement to the Chief Engineer or the Military Type Certificate Holder.

MAJ CHAPMAN: And in the March decision brief the Director-General was approving an action, which is proceeding with the introduction into service of HMSD 5.10 to the Project Office.

20

LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And in the April decision brief, as you say, the DG, Director-General, is recommending to the MRH MT, Military Type, Certificate Holder service release of 5.10?

25

LTCOL SATRAPA: In effect, yes. Yes. So providing operational endorsement for service release.

30 MAJ CHAPMAN: So not a capability decision. It's an operational decision, in effect. Is that right?

LTCOL SATRAPA: I wouldn't necessarily separate capability from operational. "Operational endorsement" is the term we used to identify all the criteria that we required to be in place had been satisfied. But, in effect, it was about informing the service release of a capability, being HMSD 5.10.

35

MAJ CHAPMAN: So if this process were to be followed again with another modification, would you expect to see on the file two decision briefs being put up to the now Aviation Commander?

40

LTCOL SATRAPA: I don't believe Commander Avn Command gets

involved in operational endorsement of decisions at the CCB, but I don't have – I'm not familiar with the current writing in the OIMP. So I wouldn't necessarily expect to see briefs to Commander Aviation Command. Perhaps to the Deputy Commander or DG AVN, whichever hat he is wearing on the day.

5  
MAJ CHAPMAN: You'd expect to see one which is from Director of Aviation Capability Management and another one from the Directorate of Operational Air Worthiness?

10  
LTCOL SATRAPA: I would not necessarily expect to see two separate briefs as was presented here. Which is not to say that this is an incorrect process; there just would not necessarily be a requirement for two separate briefs.

15  
MAJ CHAPMAN: And you may not have an understanding of this, but what's your understanding as to why the two briefs were sent up in this way if it's not, as you would say, common practice to approach it in that way.

20  
LTCOL SATRAPA: So if I can look at the – have you got the brief from DACM handy? But my recollection of the decision brief from DACM was to the Project Director to be prepared to install hardware, but I'd have to review the Minute again.

25  
MAJ CHAPMAN: The decision brief should be there. You have the March decision brief and - - -

LTCOL SATRAPA: No, was it 2, number 2?

30  
MAJ CHAPMAN: Yes. 1 and 2.

LTCOL SATRAPA: 1 and 2, yes. Yes, so 1 was to the – the brief from DACM was to the Project Director. I wouldn't necessarily expect to see a brief like that. And I don't recall seeing other briefs like that in relation to introduction of other equipment.

35  
MAJ CHAPMAN: But you don't have any knowledge as to why it was presented in that way or why the brief was - - -

40  
LTCOL SATRAPA: I can't recall, no.

MAJ CHAPMAN: That's okay. So just returning to the Configuration Control Board, if it's the CCB's decision ultimately to approve service release of this modification, as far as you're aware does the Configuration

45

Control Board require a recommendation from the Director-General Army Aviation in order to approve service release?

5 LTCOL SATRAPA: No, that wasn't CASG policy, that was Aviation Command or Forces Command at the time policy in relation to a major design change.

10 MAJ CHAPMAN: So, in theory, it could be approved without an operational endorsement?

LTCOL SATRAPA: No, no, no. There would always be a requirement for operational endorsement.

15 MAJ CHAPMAN: There'd always be - - -

LTCOL SATRAPA: Whether it came from the SO1 level, as in Lieutenant Colonel representing Headquarters Aviation Command, or it came from the DG. But there was always a requirement for operational endorsement.

20 MAJ CHAPMAN: Understood.

LTCOL SATRAPA: At the CCB.

25 MAJ CHAPMAN: And that is likely reflected in that policy document that's on - - -

LTCOL SATRAPA: When you say "that policy document"?

30 MAJ CHAPMAN: The policy document that we've gone to that was annexed to your statement, the CASG policy document in respect of Configuration Control Boards.

35 LTCOL SATRAPA: That talks to the requirement for operational endorsement.

MAJ CHAPMAN: Yes, thank you.

40 LTCOL SATRAPA: Yes.

MS McMURDO: That is A, is it?

MAJ CHAPMAN: It is.

45 MS McMURDO: That's Annexure A. Thank you.

MAJ CHAPMAN: It is.

LTCOL SATRAPA: Yes.

5

MAJ CHAPMAN: Is it your understanding, sir, that without either the capability and/or the operational endorsements being received, that the CCB would not be in a position to proceed to service release?

10 LTCOL SATRAPA: I think ultimately that would be a decision for the Chair to make based on advice or otherwise from the members of the Board.

15 MAJ CHAPMAN: Now, sir, you were asked in your section 23 Notice whether, in your experience, the request made for delegation of service release to LTCOL Marshall was typical or atypical in this context. Do you recall that?

LTCOL SATRAPA: I do.

20

MAJ CHAPMAN: And in your response which is at the bottom of page 4 of your statement and goes on to page 5, you confirm that the request for delegation to COL Marshall was – and just to confirm, this is correct – made by someone at Airbus, though you cannot recall who. Correct?

25

LTCOL SATRAPA: That's correct.

30 MAJ CHAPMAN: That it came about because not all the requirements for service release had been achieved, such as the Training Plan and update to the Flight Manual. Correct?

LTCOL SATRAPA: Yes.

35 MAJ CHAPMAN: So as we've established, service release was requested to avoid having to await the next CCB. Right?

LTCOL SATRAPA: Yes.

40 MAJ CHAPMAN: You thought it was not essential, delegation was a – sorry, though it was not essential, delegation was a recognised and acceptable means of achieving service release and that it was reasonable in the circumstances. Correct?

45 LTCOL SATRAPA: Yes.

5 MAJ CHAPMAN: And you considered it reasonable in the circumstances, am I right, because 6 Aviation Regiment was looking to conduct a major training exercise for the Special Operations Qualification Course in the May. Is that right?

LTCOL SATRAPA: Yes.

10 MAJ CHAPMAN: So we're really talking only about a matter of about a month away, perhaps a bit more?

LTCOL SATRAPA: Yes.

15 MAJ CHAPMAN: And there was a need to introduce the update prior to the training so that pilots could train on the new modified software?

LTCOL SATRAPA: Yes.

20 MAJ CHAPMAN: And the next CCB was not until June 2020. You were asked by the Inquiry's annexed questions in relation to the AASPO, being the Army Aviation System Program Office, and your response is on page 4 – do you see that – at (d), halfway down the page?

25 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And the effect of your response is to clarify that the Army Aviation System Program Office had responsibility for the Configuration and Control Board and its members. Correct?

30 LTCOL SATRAPA: (No audible reply).

35 MAJ CHAPMAN: And you say that the Commander of the Army Aviation System Program Office, then COL David Phillips, as the Executive Authority, delegated his authority to the CCB Chair, LTCOL Wheatley. Is that right?

LTCOL SATRAPA: Yes.

40 MAJ CHAPMAN: And that the CCB Chair sought endorsement from all members before determining whether to formally grant service release. Correct?

LTCOL SATRAPA: Yes.

45 MAJ CHAPMAN: Next, you were asked, towards the bottom of page 4,

5 to comment as to whether the request made for – I withdraw that. Just returning to page 12 of the Minutes, if I may? And there is a reference in there which is attributed to you that, “We do only RMP reservations”. And we’ve discussed this in some evidence previously, but you address this halfway down page 5 of your statement. Do you see that?

LTCOL SATRAPA: Yes.

10 MAJ CHAPMAN: And you say this is the issue with syntax and it may have been incorrectly transcribed, what you say there. That’s recorded in the Minutes.

LTCOL SATRAPA: Yes.

15 MAJ CHAPMAN: But just to be clear about that, your best recollection now is that you did not have any significant reservations at the time to prevent you from supporting the operation endorsement?

20 LTCOL SATRAPA: Like I said in the statement, to the extent that I may have had reservations. And whether or not that was an appropriate word to use at the time or not can be debated. But any reservations that I may have had weren’t significant enough for me to withhold operational endorsement for service release.

25 MAJ CHAPMAN: I just want to now ask you some questions about risk assessment issues, which you address on page 5 of your statement.

LTCOL SATRAPA: Yes.

30 MAJ CHAPMAN: So at this time – so service release of version 5.10 – you were in the Directorate of Operational Airworthiness. Correct?

LTCOL SATRAPA: Yes.

35 MAJ CHAPMAN: And your report, and the Director, was COL Lynch; is that right?

LTCOL SATRAPA: Yes.

40 MAJ CHAPMAN: At this time, yes. Now, the Inquiry has asked you questions concerning risk assessments undertaken in support of version 5.10, and you agree that risk assessments were a Command consideration in terms of whether to provide operational endorsement to a change. Would you agree with that statement?

45

LTCOL SATRAPA: Sorry, can you just repeat the question? “Were a Command”?

5 MAJ CHAPMAN: So would you agree that risk assessments were – well, it’s an important Command consideration in terms of whether or not Command was going to provide an operational endorsement to a particular change?

10 LTCOL SATRAPA: Yes, I agree that they were a Command consideration and a means of informing Command of risk and controls.

MAJ CHAPMAN: And were risk assessments being mandated in the DASRs or in any policy, or that’s a command function essentially?

15 LTCOL SATRAPA: So the process that we use, the seven-step Risk Management process is prescribed in the Defence Aviation Safety Manual and we adopted – well, that is fundamentally the Aviation Safety Management System. So we adopted the seven-step Risk Management process as our risk management method.

20 MAJ CHAPMAN: And so that’s reflected in the DASRs. And the seven-step process you’re referring to, is that also reflected in the Australian Standards, to your knowledge?

25 LTCOL SATRAPA: Not in the Australian Standard, to the best of my knowledge. So we’ve got the Defence Aviation Safety Regulation. Safety Management System is an element of the Regulation. The Defence Aviation Safety Manual is effectively the meat on the bones of the Regulation, if you like. The detail of the seven-step Risk Management process is contained within the Safety Manual, not the Safety Regulation. I’d have to refer to the Safety Regulation to understand the extent to which it says “manage risk”, but it will be in there somewhere.

35 MAJ CHAPMAN: Yes.

LTCOL SATRAPA: Fundamentally, it’s a requirement of the Work Health and Safety Act.

40 MAJ CHAPMAN: And not just the risk assessment, but the seven-step risk assessment?

LTCOL SATRAPA: Seven-step risk assessment is not prescribed anywhere other than the Defence Aviation Safety Manual.

45 MAJ CHAPMAN: Would you characterise the seven-step risk



assessment as being best practice in this context?

5 LTCOL SATRAPA: I'm not sure whether it's best practice. It's a practice.

MAJ CHAPMAN: It's a practice which you understand is, based on your experience, followed in other significant decision-making processes?

10 LTCOL SATRAPA: It's unique to Defence Aviation, as far as I'm aware. In Army Ground Safety Management, they use something that's more akin to a five-step process. But it follows largely the same process, just in about five steps instead of seven.

15 MAJ CHAPMAN: All right, sir. And without going into the detail of those Minutes which I've taken you to, would you agree that risk assessment was an important consideration to the Director-General's decision to support service release as it was put to him?

20 LTCOL SATRAPA: So the risk assessment helps inform a decision-maker and record their decision, yes.

MAJ CHAPMAN: But the Minutes each refer to and discuss risk assessment in some detail. Do you agree with that?

25 LTCOL SATRAPA: I would have to read the Minutes in detail. Again, I don't recall specifically whether they mention risk assessment.

MAJ CHAPMAN: You're free to have a look at the - - -

30 LTCOL SATRAPA: Sure, okay. Yes.

MAJ CHAPMAN: Just without referring to the contents of those Minutes, because one of them is at a "Sensitive" level - - -

35 LTCOL SATRAPA: Yes, sure. So one talks about retaining low risk to personnel. That's - - -

MAJ CHAPMAN: Without reading.

40 LTCOL SATRAPA: So I'm certainly picking up - - -

MAJ CHAPMAN: Yes. Well, perhaps I can put it this way. The proposition that I'm just putting to you, sir, is that each of those decision briefs deal with risk assessment.

45

LTCOL SATRAPA: I'm not picking up a strong sense of that in the decision from March, but certainly in April, yes.

5 MAJ CHAPMAN: The risk assessment would be, in your experience, particularly relevant to a decision-maker here concerning version 5.10, where the history of this upgrade is there had been an "unacceptable" finding made by the Flight Test Organisation. Do you agree with that?

10 LTCOL SATRAPA: Could you repeat that question, please?

MAJ CHAPMAN: That risk assessment would be, I'd suggest, front of mind to a decision-maker in this context, having regard to the Flight Test Organisation having arrived at an "unacceptable" finding?

15 LTCOL SATRAPA: So a risk assessment would help the decision-maker understand the risk, the activity, the context of the activity, and the controls that had been considered to manage the risk. So it would be an important consideration for a decision-maker, yes.

20 MAJ CHAPMAN: Thank you. I'd just like to go to the second half, or page 5, of your statement. I'll just pull up a reference.

AVM HARLAND: Just while you're doing that?

25 MAJ CHAPMAN: Yes.

AVM HARLAND: Who is the decision-maker on the Risk Management Plan and, in essence, who accepts the risk?

30 LTCOL SATRAPA: So authority to provide a decision is based on risk level and it varies between – or it's graduated from really Lieutenant Colonel level for low-level risk, up to Chief of Army for very high.

35 AVM HARLAND: So if a risk was characterised as low, it would be a lower level of approval.

LTCOL SATRAPA: Yes.

40 AVM HARLAND: As the risk escalates, it's a higher level of authority within the Army chain. Do you accept that?

LTCOL SATRAPA: Yes.

45 AVM HARLAND: So a Staff Officer could prepare a Risk Management Plan and allocate it as a low risk and then accept that, and if they made a

misjudgement and it was actually a higher risk than low, then the senior officer wouldn't actually get to see it. Is that a correct statement?

5 LTCOL SATRAPA: Not necessarily they wouldn't get to see it. This was, in good measure, the purpose of the OTCRM and the purpose of AVIART, to be able to capture all those risk assessments so that  
10 Commanders and staff, and any interested party, could understand the risk. Whether they had signed the decision to proceed or someone else had signed the decision to proceed, well, the OTCRM certainly was a summary of all of the – most of the risk assessments that had been signed. Whereas the risk is actually managed in AVIART, but it's a database where anyone can search for risks.

15 So in the absence of those two systems, potentially a Commander might not be aware of risks that were below their threshold.

AVM HARLAND: Okay, thank you.

20 MS McMURDO: While we're interrupted, can I just ask you a process question? The Minutes to the Configuration Control Board, would they be circulated afterwards for comment, endorsement, or correction in draft form?

25 LTCOL SATRAPA: Yes, typically they were. There are some errors in that one, so I'm not sure why I didn't correct them. When I say "errors", well, we've already pointed to one which is the syntax error and the Op Airworthiness B rather than 8. But typically, unless there was a significant error, I typically wouldn't – so a spelling error – for example, I typically wouldn't make comment on a spelling error.

30 MS McMURDO: Okay. Thank you.

35 MAJ CHAPMAN: Thank you, Chair. Sir, at this time, this is around service release and the Board. You were in the Directorate of Operational Airworthiness at the time?

LTCOL SATRAPA: Yes.

40 MAJ CHAPMAN: Is it fair to say that the process for assessing risk fell within DOPAW at that time for the purposes of - - -

LTCOL SATRAPA: Not exclusively, but often we would take the lead for developing risk assessments.

45 MAJ CHAPMAN: That's because you're involved in the decision to

give operational endorsement to a modification?

LTCOL SATRAPA: So specifically in relation to the CCB, yes.

5 MAJ CHAPMAN: So if you go to page 5, and can you go to – do you see there “(g)” in the middle?

LTCOL SATRAPA: Yes.

10 MAJ CHAPMAN: The second part of your – this is a question the Inquiry has put to you, and it says this:

15 *Please also explain whether in your cell, so DOPAW at the time, any risk management assessments had been undertaken with respect to proposed service release of 5.10.*

Do you see that?

LTCOL SATRAPA: Yes.

20 MAJ CHAPMAN: We’ve dealt with the first two paragraphs of your response.

LTCOL SATRAPA: Yes.

25 MAJ CHAPMAN: But then draw attention to the bottom of page 5 where you say this:

30 *I don’t recall the section developing a risk assessment and I can’t find evidence that we did, although I note the bowtie and risk advice in the brief.*

Do you see that?

35 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Then the bowtie analysis is the reference to what was annexed to the decision brief in April; is that correct?

40 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: You next say at the bottom of page 5, and going into page 6:

*The absence of a risk assessment does not indicate that risk was not managed, merely that the process may not have been documented.*

5 Do you see that, sir?

LTCOL SATRAPA: Yes.

10 MAJ CHAPMAN: So is it the situation that you don't recall the Directorate of Operational Airworthiness performing a risk assessment, or a seven-step risk assessment?

15 LTCOL SATRAPA: Well, in that context, a risk assessment would have been in the seven-step risk management format. And what you say is correct, I don't recall how the Directorate was developing that risk assessment, which is not to say that it wasn't. What I will say though is that I had reason to make that comment at the CCB. So that comment may have been made on the basis of conversations with others in the Directorate about what was being done, not necessarily within my section  
20 but potentially within other sections within the Directorate to document risk management.

MAJ CHAPMAN: Though just to return to the question, you don't recall your Directorate performing a risk assessment per se; is that right?

25 LTCOL SATRAPA: I think my statement relates to my section. I don't recall the section developing a risk assessment. So that's the section that I headed, the Operational Airworthiness Section.

30 MAJ CHAPMAN: Yes.

LTCOL SATRAPA: Whereas DOPAW is the Directorate which is larger than just my section. So it encompassed other Operational Airworthiness Sections, Standards, and a few others. My statement  
35 indicates that I don't recall my section developing a Risk Management Plan.

MAJ CHAPMAN: Your section was Taipan and the ARH; is that right?

40 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Is it too reasonable to conclude that if there was a risk assessment to be prepared, it would fall to your section to prepare?

45 LTCOL SATRAPA: It wasn't always the case that the Operational

Airworthiness Section would take the lead for developing a risk assessment. In most cases, we did.

5 MAJ CHAPMAN: You say then you can't find a record of one and that's also a reference to your section, is it? It's a record of a risk assessment, I should say?

10 LTCOL SATRAPA: So in preparing the statement, I looked through our record management system.

MAJ CHAPMAN: Yes.

15 LTCOL SATRAPA: I looked at the OTCRM, so that's the Operational Technical Combined Risk Matrix. I looked at the Aviation Integrated and Aggregated Risk Tool which replaced the OTCRM. I couldn't see any risk assessment in relation to HMSD 5.1. I couldn't see a risk assessment. Other than this bowtie, I couldn't see a seven-step risk assessment in relation to HMSD 5.1.

20 MAJ CHAPMAN: Understood. So the extent of the risk assessment that's been documented – and you have had the benefit of reviewing the OTCRM and files – is that you've only identified the bowtie risk assessment?

25 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Then, just returning to the question, you say:

30 *The absence of the risk assessment does not indicate a risk assessment was not managed.*

Isn't the point of completing these risk assessments is to reflect that effort has been put into managing risk?

35 LTCOL SATRAPA: It's a means of documenting that effort, yes, absolutely. But not having a documented risk assessment does not mean that risk has not been managed. I say somewhere else in the statement that the entire process we went through was a process of managing risk to introduce HMSD 5.1 into service. The other aspect to consider here is  
40 that simply because something is written in a risk assessment doesn't mean that it's accurate, and it's useless unless it's implemented.

MAJ CHAPMAN: But, sir, doesn't an absence of a risk assessment in  
45 the OTCRM, a documented risk assessment, point precisely to the risks not being satisfactorily managed? Do you agree or disagree?

LTCOL SATRAPA: No, I disagree.

5 MAJ CHAPMAN: If it was satisfactorily managed, you would have found a record. Correct?

LTCOL SATRAPA: I don't agree with that statement, no.

10 MAJ CHAPMAN: But your understanding is that the risk was not recorded in the OTCRM. You can't find a record of it?

LTCOL SATRAPA: That's correct.

15 MAJ CHAPMAN: It was required to be recorded in the OTCRM. Correct?

LTCOL SATRAPA: I'm sure our policy at the time indicated that it should have been summarised in the OTCRM, yes.

20 MAJ CHAPMAN: Indeed, there's a reference in some decision briefs to the fact that it would be recorded in the OTCRM; is that right?

25 LTCOL SATRAPA: I think it's in a couple of my enclosures here – annexes here, that it would be recorded in the OTCRM, yes.

MAJ CHAPMAN: Recording risk accurately is not only for governance reasons though, it's to ensure that the risk assessment exercise that is carried out is carried out correctly. Is that right?

30 LTCOL SATRAPA: It's a means of documenting the considerations and the decision to proceed with an activity, yes.

35 MAJ CHAPMAN: Can I just move down to page 10 of your statement? You were asked by the Inquiry to set out your knowledge as to how version 5.10 progressed to service release. Do you see that?

LTCOL SATRAPA: Which question?

40 MAJ CHAPMAN: Sorry, page 10 of your statement, under – sorry, I'll turn it around.

LTCOL SATRAPA: So question 16?

45 MAJ CHAPMAN: You've beat me there, sir. 16, yes. You were asked about service release there. Do you see that?

LTCOL SATRAPA: Yes.

5 MAJ CHAPMAN: In your response at paragraph 16, you essentially give evidence that your role at the Board was to represent the Director of Operational Airworthiness. Correct?

LTCOL SATRAPA: Yes.

10 MAJ CHAPMAN: That was COL Lynch?

LTCOL SATRAPA: Yes.

15 MAJ CHAPMAN: You've given some evidence about you were there to provide the operational endorsement.

LTCOL SATRAPA: Yes.

20 MAJ CHAPMAN: You did that by reference to what you refer to as the Army Military Air Operator Operational Airworthiness Management Plan, or the OAMP, version 3.

LTCOL SATRAPA: Yes.

25 MAJ CHAPMAN: Without going into any detail about that document as it's Official: Sensitive, you say that it identifies some criteria that need to be met for operational endorsement?

LTCOL SATRAPA: Yes.

30 MAJ CHAPMAN: Ultimately, we know you, on behalf of DOPAW, provided the operational endorsement?

LTCOL SATRAPA: Yes.

35 MAJ CHAPMAN: You did so on the basis that you were satisfied that, save for some minor matters, the criteria in the OAMP had been met; is that right?

40 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: And that you took the view that LTCOL Marshall was capable of resolving those incomplete actions?

45 LTCOL SATRAPA: No, he didn't need to resolve the actions. He



needed to satisfy himself that those matters had been resolved before granting of endorsement.

5 MAJ CHAPMAN: Apart from the operational endorsement, what other endorsements are necessary for the CCB?

LTCOL SATRAPA: As spelled out in the CASG instruction.

10 MAJ CHAPMAN: Just your understanding of them?

LTCOL SATRAPA: So there were endorsements from technical organisations. There were eight Board members, from memory.

15 MAJ CHAPMAN: Just turning to paragraph 17 of your statement, under the heading, "Members of Bushman 83", you were asked whether you knew personally or ever flew with CAPT Danniell Lyon, LT Maxwell Nugent, WO2 Joseph Laycock, and/or CPL Alexander Naggs. Do you see that?

20 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: You say that you flew with WO2 Joseph Laycock when you were junior aircrew. Correct?

25 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Under the heading, the last topic, sir, "Other Issues", you were invited by the Inquiry to provide details of matters that you wish to bring to the Inquiry's attention. Do you see that?

30 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: You provide a response, which is at paragraph 18, which I might just summarise and ask you to agree with. You say:

35 *It is important for the Inquiry to understand the nature of the entire system, not just the aircraft, but be aware that the introduction of HMSD 5.10 was one of many challenges and issues being managed at the time.*

40 Is that right?

LTCOL SATRAPA: "Changes". I say "many changes".

45 MAJ CHAPMAN: Sorry, "changes and issues being managed at the

time”.

LTCOL SATRAPA: Yes.

5 MAJ CHAPMAN: You make the point that because of these competing pressures, it should not be understood to mean that adequate attention was not applied to identifying or managing risk.

LTCOL SATRAPA: Yes.

10

MAJ CHAPMAN: Your hope is that the Inquiry will investigate the entire system and the extraordinary effort people from Defence and industry were investing to ensure that it met requirements for operators.

15 LTCOL SATRAPA: Yes.

MAJ CHAPMAN: Just when you refer in that statement – what is it that you mean when you refer to “entire system” in that context?

20 LTCOL SATRAPA: So the aircraft operates within a system from the original equipment manufacturer through the supply chain through Defence. So it’s a large complicated system on which Defence relied to operate the aircraft, and we faced many – it’s not a pejorative assessment – we faced many challenges within that system to achieve the outcomes  
25 that we desired to achieve with the aircraft.

MAJ CHAPMAN: Thank you, sir. Those are my questions, Chair.

30 MS McMURDO: Thank you. Applications to cross-examine?

30

LCDR GRACIE: Ma’am, at the moment there are no questions, but can I raise a couple of matters that I’m struggling with in terms of the evidence today with this witness? There’s references to - - -

35 MS McMURDO: Is it relevant to this witness?

LCDR GRACIE: Yes, it goes to his statement. Ma’am, if I could take you to page 3, subpara (c). There’s a reference to the brief signed by BRIG Fenwick on 21 April. I cannot find that document anywhere. It  
40 might be in this statement, but I have not been able to see it.

BRIG Fenwick’s evidence – I should indicate, BRIG Fenwick is in the hearing room. I don’t know if he’s being called again.

45 MS McMURDO: Well, he may be, but I understand that’s by consent.

LCDR GRACIE: Is it? Okay.

MS McMURDO: Yes, he's a potentially affected person.

5

LCDR GRACIE: I thought Practice Note para 23 required an application, but I wasn't aware of it. Sorry. And no offence to BRIG Fenwick. His evidence only talked about the 20 March brief which predated the April brief. I know his evidence was truncated but his witness statement doesn't mention a 21 April brief. I don't know where this brief is.

COL STREIT: It's in COL Lynch's statement.

15 LCDR GRACIE: Is it? It's in COL Lynch's statement.

MS McMURDO: There are a lot of annexures to COL Lynch's statement, if you recall.

20 LCDR GRACIE: Right. I've gone through it and could not find it. But just while I'm on my feet, I might add, Annexure C doesn't appear in my copy here either, which seems to be some emails passing between SO1 Standards and SO1 Op Airworthiness. That could be where the confusion is about the four annexures. There's five, but only four referenced.

25

MS McMURDO: Well, perhaps if you, out of session, talk to the Inquiry legal team, they can assist you with what you're having - - -

30 LCDR GRACIE: I was just wondering if everyone's in the same position, that's all.

MS McMURDO: So does anyone else not have Annexure C to the Statement - - -

35 LCDR GRACIE: Yes. Yes, that's - - -

MS McMURDO: - - - rather than keep this witness here on these formalities that don't really directly concern him. They're just practicalities.

40

LCDR GRACIE: Well, I was just wondering whether I might need to cross-examine on it, but I - - -

MS McMURDO: You might want to cross-examine.

45

LCDR GRACIE: - - - I thought everyone else might've been in the same position. But - - -

5 MS McMURDO: Well, no one else seems to be complaining at the moment that they don't have C. And as to the copy of that document which is part of COL Lynch's statement, can we help there?

MAJ CHAPMAN: I understand it was served, Annexure C, from instructions.

10 MS McMURDO: It was served?

MAJ CHAPMAN: Yes.

15 MS McMURDO: Can someone give - - -

LCDR GRACIE: I have it.

MS McMURDO: You have a copy of it?

20 LCDR GRACIE: I mentioned - - -

MS McMURDO: And what about the document that you were asking for that - - -

25 LCDR GRACIE: 21 April.

MS McMURDO: Yes, 21 April. Has it – yes, COL Streit?

30 COL STREIT: Yes, Madam Chair, can I raise two matters briefly? First, in relation to BRIG Fenwick, his Counsel now seeks appearance at the start of these proceedings. He has also been given notice by Counsel representing of being an affected person. That doesn't require an application by anyone.

35 MS McMURDO: Potentially affected person, yes.

COL STREIT: And leave was sought that he be represented by his Counsel.

40 MS McMURDO: That's the position.

COL STREIT: - - - there's no mystery to this.

45 MS McMURDO: No.

COL STREIT: The second, if there are matters – and there’s a volume of material that’s been served to Counsel representing – if there are matters where they, on review of a statement, consider they don’t have material, then it’s apposite to raise those matters early with Counsel Assisting and, with respect, not at the time you’re cross-examining a witness and we leave ourselves in the position we’re presently at.

MS McMURDO: Or not cross-examining a witness. It’s unfortunate to have to raise that here and hold the witness up, and on matters that don’t concern him.

COL STREIT: Thank you.

LCDR GRACIE: I didn’t know it until I was looking at the file.

MS McMURDO: I know. Anyway, are we making arrangements to ensure that LCDR Gracie has access to that material or understands where to find it?

MAJ CHAPMAN: Well, there we are.

MS McMURDO: All right. In the meantime, are there any other applications to cross-examine?

MS MUSGROVE: Yes.

MS McMURDO: Yes, Ms Musgrove.

**<CROSS-EXAMINATION BY MS MUSGROVE**

MS MUSGROVE: Sir, my name is Musgrove, and I appear for the Commonwealth in these proceedings. You said that you disagreed that not finding a risk assessment in the OTCRM indicated that the risk was not considered. Did I hear your evidence correctly?

LTCOL SATRAPA: I believe my comment was, “It’s not a reflection that risk had not been managed”.

MS MUSGROVE: What did you mean by that?

LTCOL SATRAPA: So a risk assessment is simply a means of

documenting the considerations. In and of itself it's not evidence that all risk has been managed. In this case, I would say that through the process of introducing the equipment into service we went through a risk management. The process was fundamentally about managing risk, identifying a hazard, learning about the hazard and the risk, and then introducing controls to manage that risk. And two of those fundamental controls were the Training Management Plan that we introduced and the updates to the Flight Manual.

5  
10 MS MUSGROVE: Thank you. Your statement at page 8, do you have that in front of you?

LTCOL SATRAPA: I do.

15 MS MUSGROVE: You were asked your understanding as to the basis on which the April decision brief concluded that, "The risk of CFIT was low (E1)", and that, "The likelihood of confusion leading to CFIT was assessed as rare", in circumstances where the earlier AATES report had concluded, in effect, that the risk was one of CFIT?

20 LTCOL SATRAPA: Mm-hm.

MS MUSGROVE: Can you please explain your answer that you've provided here?

25 MS McMURDO: And perhaps not using the acronym so that the general public can understand.

MS MUSGROVE: Sorry. Controlled flight into terrain.

30 LTCOL SATRAPA: So controlled flight into terrain. Yes, absolutely. I find the question unclear. But in essence the T&E report identified a risk of controlled flight into terrain - - -

35 MS MUSGROVE: Sorry, when you say "the T&E report", do you mean the report about the assessment conducted by AATES?

LTCOL SATRAPA: Yes.

40 MS MUSGROVE: Sorry, go on.

LTCOL SATRAPA: Yes. And the April decision brief also refers to the risk of controlled flight into terrain. So the decision brief in April characterises the risk by combining the consequence, which was

“catastrophic outcome”, with the likelihood. In our Risk Management System, we combine those in a risk matrix to determine the risk level.

5 And that is fundamentally the difference between the brief in April and the report from – well, that’s a difference between the two. The brief in April characterised the risk. The AATES report did not characterise the risk, it simply said, “There is a risk of controlled flight into terrain”. But it didn’t characterise it because it didn’t discuss a likelihood.

10 MS MUSGROVE: And is that characterisation appropriate in the circumstances of risk analysis?

15 LTCOL SATRAPA: It’s fundamental to risk analysis. We must consider the consequence. We must consider the likelihood. In our system, we combine them through a risk matrix to identify a risk level, which in this instance was determined to be low.

MS MUSGROVE: I have no further questions. Thank you.

20 LTCOL SATRAPA: Thank you.

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

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**<CROSS-EXAMINATION BY LTCOL HEALEY**

30 LTCOL HEALEY: LTCOL Satrapa, I’m LTCOL David Healey. I’m representing BRIG Fenwick. Can I get you to look at your statement, at paragraph 18? Just let me know when you’re there.

LTCOL SATRAPA: Yes.

35 LTCOL HEALEY: You’d recall the learned Counsel Assisting taking you through that paragraph.

LTCOL SATRAPA: Mm-hm.

40 LTCOL HEALEY: And you’d recall he stated that:

*This should not be interpreted to mean that we did not afford adequate attention to identifying and managing risks.*

45 Correct?

LTCOL SATRAPA: Yes.

5 LTCOL HEALEY: Now, did you agree with that point?

LTCOL SATRAPA: I wrote it. Yes.

10 LTCOL HEALEY: Yes. And would you agree that that point was actually referring to “associated with HMSD version 5.10”?

LTCOL SATRAPA: Yes.

LTCOL HEALEY: No further questions.

15 MS McMURDO: All right, thank you. Any other applications? LCDR Gracie, is there anything you wanted to cover?

LCDR GRACIE: No, ma’am. Thank you for asking.

20 MS McMURDO: All right. Thank you. No re-examination? Thanks very much, Lieutenant Colonel, for your assistance.

LTCOL SATRAPA: Great. Thanks, ma’am.

25 MS McMURDO: You’re free to go. You know that some of the questions have been challenging. It’s a challenging topic in the circumstances, so make sure, if you need it, that you avail yourself of the assistance that is provided.

30 LTCOL SATRAPA: Thank you. Appreciate it.

MS McMURDO: Thank you.

35 **<WITNESS WITHDREW**

MS McMURDO: MAJ Chapman, do you want to go on with the next witness or do you want to have a short break?

40 MAJ CHAPMAN: I’m content to, but I’m in the Inquiry’s hands. I don’t anticipate – I could be proven wrong – that we’ll be too long.

MS McMURDO: Okay, let’s see how we go.

45



MAJ CHAPMAN: Ma'am, I call LTCOL Gary Lamont.

**<LTCOL GARY DOUGLAS LAMONT, Sworn**

5

**<EXAMINATION-IN-CHIEF BY MAJ CHAPMAN**

10 MAJ CHAPMAN: Sir, you have some water there. Can you just please state your - - -

MS McMURDO: Yes, and please let me know - - -

15 MAJ CHAPMAN: I'm sorry.

MS McMURDO: - - - if you need a break at any time.

LTCOL LAMONT: No worries. Thank you.

20

MAJ CHAPMAN: Sir, you have some water there. Can you just please state your - sorry.

25 MS McMURDO: And please let me know if you need a break at any time.

LTCOL LAMONT: No worries. Thank you.

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

LTCOL LAMONT: LTCOL Gary Douglas Lamont.

35 MAJ CHAPMAN: And, sir, can you confirm, just as a preliminary matter, that you received each of these documents prior to today? So a section 23 Notice requiring your appearance to give evidence?

LTCOL LAMONT: Yes.

40 MAJ CHAPMAN: An extract of the Inquiry Directions?

LTCOL LAMONT: Yes.

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

45 LTCOL LAMONT: Yes.

MAJ CHAPMAN: The Frequently Asked Questions Guide for Witnesses in IGADF Inquiries?

5 LTCOL LAMONT: Yes.

MAJ CHAPMAN: A Privacy Notice for witnesses giving evidence?

10 LTCOL LAMONT: Yes.

MAJ CHAPMAN: Thank you. And, sir, have you prepared a statement for the purposes of the Inquiry?

15 LTCOL LAMONT: I have, yes.

MAJ CHAPMAN: Can I hand you a copy? And, sir, do you recognise that to be your statement, which is dated 7 February 2025?

20 LTCOL LAMONT: Yes.

MAJ CHAPMAN: And it's 12 pages in length?

LTCOL LAMONT: That's correct.

25 MAJ CHAPMAN: And there are no annexures to it?

LTCOL LAMONT: That's correct.

30 MAJ CHAPMAN: And, sir, do you wish to make any amendments to the document?

LTCOL LAMONT: No.

35 MAJ CHAPMAN: Chair, I tender the statement of LTCOL Gary Douglas Lamont dated 7 February 2025.

MS McMURDO: Exhibit 119.

40 **#EXHIBIT 119 - STATEMENT OF LTCOL LAMONT**

MAJ CHAPMAN: Thank you, Chair.

And, sir, just before I commence with some questions, can I ask you to be mindful of security obligations, such that if we enter into territory where you think we're going to travel into security issues, just let me know and we may need to go to a private hearing?

5

LTCOL LAMONT: Will do.

MAJ CHAPMAN: So, sir, just to begin with, I'll start with a brief overview of your professional experience, which commences at paragraph 4. And I'm just going to read it out and ask you to confirm. So you joined the ADF in 1995, via ADFA?

10

LTCOL LAMONT: That's correct.

MAJ CHAPMAN: In '98, you attended RMC?

15

LTCOL LAMONT: That's correct.

MAJ CHAPMAN: The Royal Military College. Sorry, Chair. And you have held a variety of positions in the Army Aviation space, though in the context of a qualified engineer, as opposed to an aviator. Is that correct?

20

LTCOL LAMONT: That's correct.

MAJ CHAPMAN: These appointments have included, between 2000 and 2001, being in the Armed Reconnaissance Helicopter Project Office?

25

LTCOL LAMONT: That's correct.

MAJ CHAPMAN: Was that within CASG? That's the Capability and Sustainment Group Office.

30

LTCOL LAMONT: It was a combination of Defence Acquisition Office and Defence Materiel Organisation at the time, so it's prior to CASG being in existence.

35

MAJ CHAPMAN: It was the predecessor?

LTCOL LAMONT: But, yes, it was the CASG Organisation as it's known today.

40

MAJ CHAPMAN: Yes, thank you. In 2004, in the 1st Aviation Regiment, Technical Support Troop Commander and Engineering Operations Officer.

45

LTCOL LAMONT: That's correct.

5 MAJ CHAPMAN: And in 2007, Headquarters 16 Aviation Brigade, Aircraft Maintenance Standards, which included accident investigation training, and a deployment to Timor Leste.

LTCOL LAMONT: That's correct.

10 MAJ CHAPMAN: In 2010, you attended the Australian Command and Staff College?

LTCOL LAMONT: Correct.

15 MAJ CHAPMAN: In 2012, you were part of the Capability Development Group, which included some oversight of the MRH-90 Acquisition Project. Is that right?

LTCOL LAMONT: That's correct.

20 MAJ CHAPMAN: And just pausing there. The Capability Development Group, is that part of CASG or is that within Army Aviation? How is that described?

LTCOL LAMONT: No, it was a separate group within Defence.

25 MAJ CHAPMAN: Yes.

30 LTCOL LAMONT: So it had its own three-star. It doesn't exist as a group anymore. It was disbanded I think probably around about in the vicinity of 2015-ish, and it was separated between CASG and the service headquarters.

35 MAJ CHAPMAN: So was that a group in Defence which had, I suppose, oversight of a number of systems being acquired in the respective platforms?

LTCOL LAMONT: Its primary role was to prepare submissions to government for the acquisition of new capabilities.

40 MAJ CHAPMAN: Understood.

45 LTCOL LAMONT: So it was prior – it was basically everything leading up to second pass approval, but it also had some level of oversight over, and reporting on, post-second pass projects as well.

MAJ CHAPMAN: Thanks. Was that a reference twice now to “second pass”, was it?

LTCOL LAMONT: That’s correct, yes.

5

MAJ CHAPMAN: Second pass approval, thank you. In returning to your CV, in 2015 to ‘18, you were in the Reconnaissance and Air Mobility Systems Program Office, which was renamed the Tiger Taipan Management Unit.

10

LTCOL LAMONT: That’s correct.

MAJ CHAPMAN: In 2019 to ‘20, you were part of the Headquarters Forces Command Aviation Branch in the role of Aviation Support Operations and Deputy Continuing Airworthiness Manager.

15

LTCOL LAMONT: That’s correct.

MAJ CHAPMAN: And 2021 to ‘25, most recently you’ve been in the Defence Aviation Safety Authority as the Deputy Director Continuing Airworthiness.

20

LTCOL LAMONT: That’s correct.

MAJ CHAPMAN: And lastly, you say that you have nil flying experience.

25

LTCOL LAMONT: That’s correct.

MAJ CHAPMAN: Your listed qualifications are Bachelor of Aeronautical Engineering.

30

LTCOL LAMONT: Correct.

MAJ CHAPMAN: Master of Arts, Management and Strategy.

35

LTCOL LAMONT: Correct.

MAJ CHAPMAN: And a number of Graduate Diplomas in Auditing and Project Management, Business and Management in Defence Studies.

40

LTCOL LAMONT: Correct.

MAJ CHAPMAN: Sir, I’ll just take you now to – I’ll commence by asking you something about your DASA role, which is your recent role, or

45

your current role. In that role, you set out at paragraph 6 your responsibilities within the Directorate of Continuing Airworthiness, which include prescribing – sorry, this was in your role within the Directorate of Operational Airworthiness. Is this right or not?

5

LTCOL LAMONT: No, no, no. So as of 28 July 2023, I was in the Defence Aviation Safety Authority.

MAJ CHAPMAN: Yes, and there you're talking about your responsibilities, and you list them as:

10

*Prescribing Continuing Airworthiness Safety Policy and Defence Aviation Safety Regulations for Defence Aviation.*

15 Correct?

LTCOL LAMONT: Correct.

MAJ CHAPMAN:

20

*Promoting Defence Aviation safety through education, training, dissemination of safety information.*

LTCOL LAMONT: Correct.

25

MAJ CHAPMAN:

30

*Establishing and certifying the initial safety requirements and standards for Maintenance Training Organisations, in accordance with DASR 147 –*

et cetera.

LTCOL LAMONT: Correct.

35

MAJ CHAPMAN:

40

*Oversight and enforcement of ongoing certification of Maintenance Training Organisations, and managing and leading a team of Australian Public Service and Australian Defence Force personnel achieving the above.*

Is that all correct?

45 LTCOL LAMONT: That's correct.

5 MAJ CHAPMAN: I just want to turn to ask you some questions about the Configuration and Control Board meeting you attended on 2 April 2020. Can the witness please be shown a copy of, I think it's 117? Thank you. I suggest – yes, thank you.

LTCOL LAMONT: Thanks.

10 MAJ CHAPMAN: Sir, these are the Configuration Control Board Minutes of 2 April 2020. Do you recognise that document as having been provided to you as an annex to your section 23 Notice?

LTCOL LAMONT: Yes.

15 MAJ CHAPMAN: Thank you. Just to confirm, you recognise these to be the Board Minutes you attended of that meeting?

LTCOL LAMONT: Correct.

20 MAJ CHAPMAN: If you could just go over quickly to page 5, and it's in the top right-hand corner. You're listed there as a CCB attendee. Sorry, you're not yet there.

LTCOL LAMONT: Yes.

25 MAJ CHAPMAN: And second line item, "DAS (CAMO Representative)"; is that right?

LTCOL LAMONT: Correct.

30 MAJ CHAPMAN: With the abbreviation obviously GL. What does DAS (CAMO) stand for, if you could just explain?

35 LTCOL LAMONT: So DAS was Director – or Director of Aviation Support, which was a full Colonel position within Aviation Branch within Headquarters Forces Command. And the CAMO is the Continuing Airworthiness Management Organisation representative, which is an organisation approved by DASA in accordance with DASR-M Regulations.

40 MAJ CHAPMAN: Okay, thank you. And you're aware that the CBB, as with other CBBs, I gather, dealt with a number of issues of business, which on this occasion also include HMSD 5.10?

45 LTCOL LAMONT: Yes.

5 MAJ CHAPMAN: And we see this at page 12; just go over to page 12, if  
you could? Top right-hand corner, and you might as well turn it on its  
side. Do you see there 6.0, “Other business and topics of discussion”?

LTCOL LAMONT: Yes.

10 MAJ CHAPMAN: Just go down to the second entry – that’s “HMSD  
5.10” – and there a number of bullet points on the right-hand side.

LTCOL LAMONT: Yes.

15 MAJ CHAPMAN: Do you see the bullet point attributed to you, “GL  
says this”:

*I understand urgency. Recommend OOS SR, rather than  
delegation. But if not, two AASPO.*

LTCOL LAMONT: Yes.

20 MAJ CHAPMAN: Just to understand that, the Inquiry has received  
evidence that this comment was made when the CCB board was  
considering delegating service release to LTCOL Marshall.

25 LTCOL LAMONT: That’s correct.

MAJ CHAPMAN: As the Chief Engineer of the AASPO; is that correct?

LTCOL LAMONT: That’s correct.

30 MAJ CHAPMAN: And just to unpack that statement into its parts. The  
reference to – well, first of all, I should say do you generally agree with  
that is a more or less accurate summary of what you said, being five years  
ago?

35 LTCOL LAMONT: Yes.

MAJ CHAPMAN: And where you refer to “understand urgency”, can  
you just assist the Inquiry to understand what the urgency is that you’re  
40 referring to?

LTCOL LAMONT: So in the CCB – and I would have to go and check  
the exact ones – but during the introduction, I think, of this capability, it  
was identified that there was a particular training window that was going  
45 to be available at the 6th Aviation Regiment. And then in order to meet



that training window, that the HMSD modification needed to be service released by a particular date.

5 MAJ CHAPMAN: Yes. And it might assist if you go over the page there, to page 13. And do you see next to the entry “KH”, which is COL Hamlyn, do you see in the middle there, “We have until 24 April”. So just to provide you in context, you understand that to be the reference to a time by which the version 5.10 would be installed in the aircraft?

10 LTCOL LAMONT: Correct.

MAJ CHAPMAN: And that was, as you say, in support of the Special Operations Qualification Course in May?

15 LTCOL LAMONT: Yes.

MAJ CHAPMAN: And we’re in April in this document, so we’re talking about a course which is perhaps only a matter of weeks away, which accounts for the urgency?

20 LTCOL LAMONT: Yes. And it was, I guess, in the context of it wasn’t the only change that we were trying to push through at the same time to improve the capability of the MRH-90 in the Special Forces role. So the idea being is that there was a lot of change that needed to be made and then we obviously needed to move through them quickly in order to get them all through.

25 MAJ CHAPMAN: And the accelerated timeframe, if I can – my words – also explains why this delegation was applied for and ultimately to LTCOL Marshall, because it was necessary to meet those timings and not await the next CCB board?

30 LTCOL LAMONT: Yes. Although, the recommendation that I made was for an out-of-sessions CCB. The difference between an in-session and out-of-session is basically whether it’s held in person or remotely. So, an out-of-session would require all of the key members to be available again and to, you know, to basically coordinate their diaries to be available for an out-of-session but is generally not held with the people physically in the room.

35 MAJ CHAPMAN: So I was going to come to that as my next question. So the OOS, with reference to your suggestion or proposal, was you convene an out-of-session CCB to deal with this as your first preference before delegation to a service release to COL Marshall.

40  
45

LTCOL LAMONT: Correct.

MAJ CHAPMAN: And that's not to say there were any reservations about service release being delegated to COL Marshall, I gather?

5

LTCOL LAMONT: No. I was very confident that COL Marshall was able to engage with the relevant subject-matter experts as were necessary. From my understanding, the only thing outstanding was, I think, the Flight Manual at the time. And I think he was able to, in that circumstance, engage with those people to confirm the necessary completion of service release was ready.

10

MAJ CHAPMAN: And would it be fair to characterise the application for delegation to be routine or is that uncommon in your experience?

15

LTCOL LAMONT: I think it depends on the circumstance. It did happen; I wouldn't say routinely, but it did happen several times. But it would be very much dependent on the actual change in question.

20

MAJ CHAPMAN: Yes.

LTCOL LAMONT: Depending on the hazard associated with the change, whether or not it had a Human-Machine Interface change to the aircraft, that was often really important to make sure we had the necessary operation and operational safety personnel confirming that, well, though the technical content might be ready, that it was then ready and safe to be employed in the operational environment as well. So the idea being there is, the more complex and the higher the hazard, the less likely the delegation would normally occur.

25

30

MAJ CHAPMAN: And just on page 13, do you see the entry in the third bullet point, "AW"? And is that a reference to the Chair, LTCOL Andrew Wheatley?

35

LTCOL LAMONT: It is.

MAJ CHAPMAN: And do you see the words attributed to COL Wheatley was:

40

*Thanks for input.*

*Gary: Yes. Prefer OOS. Assume support delegation to DM.*

David Marshall. Do you see that?

45

LTCOL LAMONT: Yes.

5 MAJ CHAPMAN: And while what's recorded is possibly a little unclear, could you just assist in our understanding that the Chair was supporting your view about out-of-session, about OOS? Is that right?

10 LTCOL LAMONT: I think – and again, I guess an assumption based on my recollection – but I think what he was saying was that, yes, normally we would probably go to an out-of-session, but in the context of what was left to do and of the time pressures that a delegation to LTCOL Marshall would be acceptable.

15 MAJ CHAPMAN: And then in your response, which is following on on that third dot point, your response is, “Yes”. And I should just be clear, that is you saying yes to a question from the Chair saying, “Assume you support delegation to COL Marshall”, which you've already agreed that you did. Is that right?

20 LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And then you go on to say this, you qualify your “Yes”, or you make the further statement that, “It is another example of cutting corners and going around the system”. Do you see that?

25 LTCOL LAMONT: I do.

MAJ CHAPMAN: Now, you were asked in your statement to address various aspects of that observation, which you do at paragraph 11 of your statement, which I'll just ask you to go to.

30 LTCOL LAMONT: Yes.

35 MAJ CHAPMAN: And you provide a comprehensive response which, in the interests of time, I might just summarise and ask you to agree with. So you first make the point that the purpose of a CCB is to ensure that all aspects of an engineering change are considered and completed before the change is released. So that's service release. Correct?

40 LTCOL LAMONT: Correct.

MAJ CHAPMAN: And that the CCB considers all elements necessary for safe operation. So not just engineering but logistics and training.

45 LTCOL LAMONT: Correct.

MAJ CHAPMAN: And that it reflects the fact that the CCB is the very – sorry, and that reflects the fact that the CCB is a very final decision prior to ground technicians being instructed, in this case, to install software. Is that right?

5

LTCOL LAMONT: Not necessarily. Service release is all about making sure the item is not released to operational service. You can still go and prepare the aircraft in anticipation, but it shouldn't fly in that configuration until service release is granted.

10

MAJ CHAPMAN: Understood. In anticipation of service release being granted they can carry out the work, but it's just that once service release – sorry, flying the aircraft with the new modification is conditional on service release being issued.

15

LTCOL LAMONT: Correct.

MAJ CHAPMAN: The CCB members at the meeting want to ensure that essentially all the pieces are correctly in place before they issue service release, or they vote on service release?

20

LTCOL LAMONT: Correct. And, sorry, just to add to what I was saying before is the aircraft is safe to fly in normal operations. It doesn't mean that the aircraft can't fly for testing purposes, for some reason, prior to service release.

25

MAJ CHAPMAN: And you say that for complex engineering changes, particularly ones, as you've given evidence, impacting on Human-Machine Interface, it's important that experts from across the capability test the correctness of the system. Is that right?

30

LTCOL LAMONT: Correct.

35

MAJ CHAPMAN: And clearly in the instance of HMSD 5.10 this was a complex engineering change that impacted on Human-Machine Interface. Do you agree?

LTCOL LAMONT: Correct.

40

MAJ CHAPMAN: And you continue at paragraph 11 to express confidence in the delegation to COL Marshall to deal with his subject matter experts to close out the issues; is that right?

45

LTCOL LAMONT: Correct.

5 MAJ CHAPMAN: If we're to understand your statement correctly, your comment about cutting corners, going around the system, you say, was directed to the CCB board, COL Wheatley, in effect, to caution that delegations of this nature should be avoided, if possible?

LTCOL LAMONT: Not so much be avoided but shouldn't be normalised. Or shouldn't become a precedent.

10 MAJ CHAPMAN: You use the expression:

*They should not become normalised deviations for future changes where there were time pressures.*

15 Is that right?

LTCOL LAMONT: Correct.

20 MAJ CHAPMAN: And over the page, sir, on page 5 of your statement, you continue to discuss aspects of, "for time pressures in this project" and "on service release". Is that right?

LTCOL LAMONT: That's correct.

25 MAJ CHAPMAN: And you provide some context that there was a lot of pressure to make the MRH-90 aircraft work from within ADF and Defence industry. Is that right?

LTCOL LAMONT: That's correct.

30 MAJ CHAPMAN: And perhaps pausing there for a moment, could you just assist the Inquiry and expand on what you say that the pressures were from inside the ADF?

35 LTCOL LAMONT: Wow, that's a big question.

MAJ CHAPMAN: Yes.

40 LTCOL LAMONT: So I'm trying to think where to start. The MRH-90 was acquired, as its name gives away, as a multirole helicopter. To take on multiple capability that were previously undertaken by different helicopter types. Part of that was that particularly for the Special Forces role, the aircraft, as originally acquired through the acquisition of contract, was not deemed as fit for purpose to undertake that role without

substantial additional modification. Part of that was also that the program was running very late.

5 It was years later that it was expected to be delivered and that resulted in the extension in service of the S-70A-9 Black Hawk. And that had been extended, like, multiple times and was reaching the very end of its ability to continue to be extended in service. So there was a time pressure, effectively, to be able to replace that in the 6th Aviation Regiment with a platform that could actually – had the capabilities to meet the 6 Aviation  
10 Regiment requirements.

MAJ CHAPMAN: And when you refer to the end of the life of the Black Hawk as the capability, was that scheduled to be around 2020? Is that right? So the same year that we're talking about the CCB board?  
15

LTCOL LAMONT: I couldn't speak to that exactly. I believe it was originally some time – no, I couldn't. I'd be guessing a bit. I think the original withdrawal date was probably much earlier than that. Five or six years earlier than that was the intended date, and it had been extended  
20 multiple times because of the delays in the MRH-90 program.

MAJ CHAPMAN: Though your evidence you've just given is that the pressure that was coming to bear on dealing with these modifications for the MRH for SO roles is because there was possibly going to be a capability gap with the retirement of the Black Hawk. Is that right?  
25

LTCOL LAMONT: Yes. And the desire to make the MRH-90 work in that Special Forces role as well.

MAJ CHAPMAN: You were asked some questions by the Inquiry concerning the role of the Army Aviation Systems Program Office in the context of service release.  
30

LTCOL LAMONT: Yes.  
35

MAJ CHAPMAN: You address this at paragraph 13 of your statement. Do you see that?

LTCOL LAMONT: I do.  
40

MAJ CHAPMAN: You say that COL Phillips was the Director of the wider AASPO office.

LTCOL LAMONT: That's correct.  
45

MAJ CHAPMAN: And LTCOL Wheatley, who chaired the CCB, was the ARH and MRH Sustainment Director. Is that right?

LTCOL LAMONT: That's correct.

5

MAJ CHAPMAN: And in your experience with the MRH and the ARH, I take it that the Chair of the CCB was frequently delegated to COL Wheatley as an SME on MRH and ARH. Is that right?

10 LTCOL LAMONT: I can't remember. I know that COL Wheatley was filling a vacant APS Executive Level 2 role. I think he was on higher duties allowance in the absence of that member. So he was effectively filling a full Colonel position as a Lieutenant Colonel.

15 MAJ CHAPMAN: I see. And just in terms of your understanding, and for our benefit, the role of the Army Aviation Systems Program Office was to sustain in-service Army Aviation platforms. Is that right?

LTCOL LAMONT: Fundamentally, yes.

20

MAJ CHAPMAN: And you make the point at paragraph 13(b) on page 6 that for the MRH-90, the vast majority of the engineering maintenance and logistical service was outsourced to Airbus Australia Pacific. Correct?

25

LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And that the Army Aviation Systems Program Office and its staff worked side by side with Airbus Australia Pacific. Correct?

30

LTCOL LAMONT: Correct.

MAJ CHAPMAN: To ensure safe and timely delivery of engineering maintenance and logistic services to the MRH. Correct?

35

LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And you also say that the MRH acquisition phase was managed by the MRH Project Office, which was not part of – sorry, I withdraw that. You say that the MRH acquisition phase was managed by the MRH Project Office; is that right?

40

LTCOL LAMONT: That's correct.

45 MAJ CHAPMAN: And that was not part of the Army Aviation System

Program Office?

LTCOL LAMONT: Correct.

5 MAJ CHAPMAN: And the AASPO was part of CASG; is that - - -

LTCOL LAMONT: Both the AASPO and also MRH Project Office were both part of CASG. One focused on sustainment; one focused on acquisition.

10

MAJ CHAPMAN: Yes.

LTCOL LAMONT: And an overlap between the two of them.

15 MAJ CHAPMAN: So effectively we had two ADF organisations dealing with a platform. We had, for acquisition purposes, the Project Office?

LTCOL LAMONT: Correct.

20 MAJ CHAPMAN: And then, once it had been introduced into service – and it had well and truly by the time of version 5.10 – that sustainment piece fell to the Army Aviation Systems Project Office?

LTCOL LAMONT: So the HMSD capability was being acquired by the MRH Project Officer, I think under a contract they had with Airbus Australia Pacific. But the ability to then move that capability onto the in-service aircraft required the configuration management and the in-service systems to be in place. Hence, the overlap between the two organisations.

30

MAJ CHAPMAN: And at 13(b) – and I'm on page 6 of your statement – you said that:

35 *There was originally a separate acquisition Configuration Control Board and a sustainment Configuration Control Board being run by the Project Office and AASPO.*

Is that right?

40 LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And in 2015, owing to the MRH not meeting in-service configuration management requirements, a single CCB was implemented.

45



5 LTCOL LAMONT: That's correct. There was an audit by what was then the Directorate General Technical Airworthiness, a predecessor to DASA, who identified that the configuration management of the platform was suboptimal, and they raised a finding associated with that. And as a result of acting on that finding, the two Configuration Control Boards were merged into one.

10 MAJ CHAPMAN: Next in your statement – and I'll go to paragraph 15 – you return to the issue of service release and the delegation issue and you say that it was Airbus who initially made the request to the CCB for delegated authority for service release. Is that right?

15 LTCOL LAMONT: In accordance with the Minutes, yes, I believe that's correct.

MAJ CHAPMAN: And according to the Minutes, you understood that to be a request for either Airbus itself or the AASPO for delegation?

20 LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And it's your recollection that COL Marshall recommended that he be delegated the service release as opposed to Airbus.

25 LTCOL LAMONT: Yes.

MAJ CHAPMAN: And that was also your preferred course of action?

30 LTCOL LAMONT: No, my recommendation was for an out-of-session service release, but the compromised solution of a delegation to COL Marshall was acceptable.

35 MAJ CHAPMAN: And that was to ensure that members of the ADF held the final decision on service release; is that right?

40 LTCOL LAMONT: That's correct. The purpose there being is that to make sure that someone in the ADF who understood the ADF context was making the final decision and was also not unduly influenced by any commercial issues.

MAJ CHAPMAN: So just to recap on that, your concern was to ensure that ADF members were more familiar with the operational context, were better placed to understand that. Yes?

45 LTCOL LAMONT: Correct.

5 MAJ CHAPMAN: You were asked by the Inquiry to comment with respect to any pressure to have version 5.10 progress to service release. Do you see that?

LTCOL LAMONT: Yes.

10 MAJ CHAPMAN: And your response is at page 7 and into 8, and you accept that there was pressure to have HMSD version 5.10 progressed, as we've said, in time for that SOQC training course. Is that right?

LTCOL LAMONT: Correct. As part of the broader pressure on the platform, in order to get it ready for all the roles which it needed to complete.

15 MAJ CHAPMAN: And you discussed that further on in that response, making the observation:

20 *There was a lot of pressure generally at that time to improve the platform for a Special Operations capability.*

Correct?

LTCOL LAMONT: Correct.

25 MAJ CHAPMAN: And that there was some frustration, to your observation, about the speed of that improvement; is that right?

LTCOL LAMONT: That's correct.

30 MAJ CHAPMAN: I suggest, as a final topic, you were asked next by the Inquiry to provide any further useful context, and you address the number of matters at paragraph 17 on page 8. And again, I might, just in the interests of time, summarise those. So, again, you restate a theme of your evidence that there was a lot of pressure to make the MRH work and to maximise the delivery of a safe capability to Army; is that right?

35 LTCOL LAMONT: That's correct.

40 MAJ CHAPMAN: And is it fair to say that this pressure came from the fact that – and you've adverted to this in your evidence – that the platform had something of a troubled past and was over-extended and had been subject to delays over a long period of time?

45 LTCOL LAMONT: Yes, that's correct.

5 MAJ CHAPMAN: And you refer also to significant resistance from Special Forces community to introduce the MRH into a Special Operations role at 6 Aviation Regiment?

LTCOL LAMONT: Yes.

MAJ CHAPMAN: You say that:

10 *The introduction of the MRH into the Special Operations role added pressure because it involved introducing a large number of modifications to the aircraft within compressed timeframes.*

Correct?

15 LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And those were modifications which were not part of the original specification for the aircraft.

20 LTCOL LAMONT: That's correct.

MAJ CHAPMAN: So there was significant engineering challenges, from your point of view?

25 LTCOL LAMONT: Correct.

MAJ CHAPMAN: And we need not go into each of those modifications, for obvious security reasons. Though, one of those modifications was HMSD 5.10?

30 LTCOL LAMONT: Correct.

MAJ CHAPMAN: But there were also physical modifications?

35 LTCOL LAMONT: Correct.

MAJ CHAPMAN: And you go on in your statement to say that, ultimately, some of the pressure came from the fact that the MRH was not the platform that Army had recommended that the Australian Government buy in the first place.

40 LTCOL LAMONT: That's correct.

45 MAJ CHAPMAN: And this meant that there was a large remediation

effort required to make the MRH work. Correct?

LTCOL LAMONT: Yes. Both from a configuration management and also from a logistic supportability perspective.

5

MAJ CHAPMAN: And you saw indications that the MRH project was struggling to achieve the capability requirement as early as 2011?

LTCOL LAMONT: Yes.

10

MAJ CHAPMAN: And are you aware that it was listed as a project of concern from 2011?

LTCOL LAMONT: Prior to that, I think. But yes, I was aware of that.

15

MAJ CHAPMAN: So your knowledge was, even prior to 2011, it was a project of concern?

LTCOL LAMONT: I think so, yes.

20

MAJ CHAPMAN: The Inquiry has heard evidence, in fact, that the MRH was never removed from the Project of Concern List. Are you aware of that?

25

LTCOL LAMONT: Not specifically, but it doesn't surprise you.

MAJ CHAPMAN: Doesn't surprise you. And you make the point that, as you describe at page 9 of your statement:

30

*There was a platform immaturity in respect of MRH-90 which was a cause of major concern and contributed to a high workload impacting most of the capability.*

Correct?

35

LTCOL LAMONT: Correct.

MAJ CHAPMAN: And just going back to page 9 of your statement. You develop, in detail, the nature of that immaturity, as you describe it, which you say at (ii) – can you see there in the middle of page 9 – “manifested in several ways”? And I might just summarise those. You say as your first point that:

40

45

*The MRH was a helicopter with many design features, and it used a lot of emerging technology and design concepts.*

Correct?

LTCOL LAMONT: That's correct.

5

MAJ CHAPMAN: And:

*There were components which didn't perform as designed.*

10 Correct?

LTCOL LAMONT: Correct.

MAJ CHAPMAN:

15

*The manufacturer –*

*you make the observation –*

20 *was extremely transparent with safety issues and very timely with corrective action.*

Correct?

25 LTCOL LAMONT: Yes, correct.

MAJ CHAPMAN:

30 *However, the rate of these unsafe conditions and the work required to implement corrective action was substantial and continuous.*

LTCOL LAMONT: That's correct.

35 MAJ CHAPMAN: And:

*This all contributed to a significant maintenance burden to the MRH-90 and the ADF workforce.*

40 LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And:

45 *The remedial actions to fix unsafe conditions often took between five to 10 years, which meant ongoing management and*

*maintenance burden associated with unsafe conditions were cumulative.*

LTCOL LAMONT: Correct.

5

MAJ CHAPMAN: It's your second point about how the immaturity of the platform manifested. You say that:

10 *It was a first-of-type aircraft, again using a lot of emerging technology.*

Correct?

LTCOL LAMONT: That's correct.

15

MAJ CHAPMAN:

20 *There were many components to it where the actual mean time between failure was significant lower than the estimated meantime before failure.*

LTCOL LAMONT: Correct.

MAJ CHAPMAN:

25

*And this caused significant increases again in the maintenance burden and the ability to produce serviceable aircraft.*

LTCOL LAMONT: Correct.

30

MAJ CHAPMAN: Relatedly, in your third point – and you give some more examples in your statement which is in evidence – but you say that:

35 *The MRH was a highly complex aircraft with complex configuration management problems.*

LTCOL LAMONT: Correct.

MAJ CHAPMAN: And:

40

*The decision to produce the MRH locally led to a low rate of aircraft production of only –*

so approximately 10 years to produce all 47 aircraft.

45

LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And there were various management issues subject of  
5 a major finding by the then Directorate of General Technical  
Airworthiness as resulted in creation of a Configuration Master Plan.  
Correct?

LTCOL LAMONT: That's correct.

10 MAJ CHAPMAN:

*There was a huge workload to manage the platform, and this was  
exacerbated when we were trying to configure it for a Special  
Operations role.*

15

LTCOL LAMONT: Correct.

MAJ CHAPMAN: So those are just some examples of how you identify  
the immaturity of the platform. I said that was my final topic. There's  
20 one further one I'll just quickly take you to, and that's DASA. If I could  
just draw on your experience having worked at DASA. As mentioned,  
you're currently in the role of Deputy Director Regulations, Licensing and  
Training. Correct?

25 LTCOL LAMONT: That's correct.

MAJ CHAPMAN: In that role, you set out your responsibilities at  
paragraph 6, so early on in your statement, at page 2. And we've been  
through those.

30

LTCOL LAMONT: Yes.

MAJ CHAPMAN: I take it that you're familiar generally, if not  
specifically, with the stages of DASA approval with respect to a major  
35 change in type design?

LTCOL LAMONT: Yes.

MAJ CHAPMAN: And DASA's involvement, at least in principle, in  
40 respect of version 5.10? Are you aware of DASA's involvement in  
respect of - - -

LTCOL LAMONT: I wasn't specifically aware of the involvement of  
that, but I'm aware of the process that we follow.

45

5 MAJ CHAPMAN: So the Inquiry has received evidence to the effect that DSAS's involvement in this change of type design, which was a major change, was essentially at two stages. So, first, DASA were required to and did approve a Certification Control Plan. Is that right?

LTCOL LAMONT: I don't think that's the correct name, but I can't recall the name of it right now. Certification Program Plan.

10 MAJ CHAPMAN: Certification Program Plan.

LTCOL LAMONT: That's correct.

MAJ CHAPMAN: And it was that plan, as a matter of process, pursuant to which the modification was introduced or followed?

15 LTCOL LAMONT: Correct. That effectively defines which parts of the certification standard are relevant.

MAJ CHAPMAN: Yes.

20 LTCOL LAMONT: And what evidence is required to demonstrate compliance with those elements of the certification program.

MAJ CHAPMAN: And that Certification Program Plan was developed by Airbus Australia Pacific. Are you aware of that?

25 LTCOL LAMONT: Yes.

MAJ CHAPMAN: And the approval of the CPP, is that the development approval stage? Is that right?

30 LTCOL LAMONT: No. So development approval is normally the ability for the Configuration Control Board to effectively start spending resources, which would normally be prior to a Configuration Program Plan being developed. But in cases, there may have been some overlap where there may have been a risk-based approach taken to starting the design elements prior to development approval being granted to try and effectively speed up the process of - - -

35 MAJ CHAPMAN: And so just so I understand it, when do you say ordinarily the Certification Program Plan is approved?

LTCOL LAMONT: So normally after development approval would

40



normally be the case, because there'd be no point in spending time developing a Certification Program Plan if the Configuration Control Board had not provided development approval

5 MAJ CHAPMAN: And are you aware that in this case that at a second stage DASA were required to indeed approve or provide incorporation approval for the version 5.10 modification?

10 LTCOL LAMONT: No. So incorporation approval again is a Configuration Control Board element that is effectively to understand what are all of the systems, training, logistics, manuals, et cetera, are actually required to reach service release, and the service release is the achievement of those things. The DASA's involvement would be design approval, which would be prior to incorporation approval. You wouldn't  
15 be able to get to incorporation approval without design approval.

MAJ CHAPMAN: Though to come to my point, is the final piece of DASA approval in respect of a modification such as this provided prior to actual flight testing?  
20

LTCOL LAMONT: It depends. You can still flight test prior to DASA approval, but you would have to do so under a Military Permit to Fly, and that is a specific instrument identified that there are elements of the design verification which are yet to be completed and then sets out a risk-based  
25 approach to be able to fly the aircraft.

So a good example: if you needed to verify a design element through test, you can't get to the approval stages until you've flown it and actually demonstrated through the test. After you've approved the design, you  
30 don't necessarily need a Permit to Fly after that point in time, but you do if you want to test fly the aircraft prior to design approval.

MAJ CHAPMAN: And once the flight test is being undertaken, and if in the case of 5.10 there was this "unacceptable" issue which was identified, is that something you would expect to come to the attention of DASA?  
35

LTCOL LAMONT: Sorry, can I get you to repeat that question again?

MAJ CHAPMAN: Certainly. In the case of 5.10, you're aware that  
40 there was flight testing undertaken by the Army Aviation Test and Evaluation Section?

LTCOL LAMONT: Yes.

45 MAJ CHAPMAN: And that they came to an "unacceptable" finding

with respect to the symbology?

LTCOL LAMONT: I became aware of that subsequently and recently, but not at the time.

5

MAJ CHAPMAN: I understand. I'm just asking you if - - -

LTCOL LAMONT: Yes, I'm aware of it now.

10 MAJ CHAPMAN: And would that ordinarily be something that you would expect DASA to be briefed on or informed about?

LTCOL LAMONT: It depends on the sequence. If that was done as part of the verification of the design - - -

15

MAJ CHAPMAN: Yes.

20 LTCOL LAMONT: - - - then 100 per cent yes. But if the design had already been approved prior to that testing occurring, then no, the design at that stage is effectively approved, and any concern I would expect DASA to be made aware of it. But it might be a safety-related issue associated with specific operations associated with aircrew training and may not have anything to do with the design.

25 MAJ CHAPMAN: So if they were made aware of it post-incorporation approval or that stage and DASA formed the view that this was a significant problem, what options are available to DASA to address that to try and effectively put a stop on this?

30 LTCOL LAMONT: So I'm not familiar enough with the actual "unacceptable" requirement. If it was something that invalidated some of the verification, DASA might revisit the design approval. But if it's not something that invalidated the verification of the design, then it would be something that would be part of the Safety Management System of the operator.

35

AVM HARLAND: So if I can just clear that up? The risk that was identified by the Army Aviation Test and Evaluation Section, AATES, was an unacceptable risk to flight safety?

40

LTCOL LAMONT: Mm-hm.

AVM HARLAND: And that was in their initial testing, and it related to controlled flight into terrain.

45

LTCOL LAMONT: Yes.

5 AVM HARLAND: So effectively DASA have approved the type design and then an authorised Flight Test Organisation has then come up with a risk, which is a substantial risk, of, you know, losing an aircraft. So that's about as high as it gets.

LTCOL LAMONT: Yes.

10 AVM HARLAND: There's no mechanism for that to get fed back to DASA, who have approved the design. So it's effectively gone down range and they get no feedback.

15 LTCOL LAMONT: It would have to be something that would be pushed to DASA as a, "Please review this", in the context of its potential that the verification – which I might add, the verification I believe in this case would mostly have been done via what's called recognition - - -

20 AVM HARLAND: With the German Forces?

LTCOL LAMONT: Correct. So the idea being is that where a contemporary and acceptable authority equivalent to DASA has already done that verification, DASA obviously generally won't repeat that; it will obviously accept the elements. But it's possible that those organisations could have made an error, or the context of our Defence context might differ slightly, and so there might be a testing arrangement that identified a concern or a problem with that. And in those cases, yes, that could be pushed back to DASA, and they potentially could review the design approval associated with that testing.

25 AVM HARLAND: You know I guess, in simple terms, if DASA are approving a design.

30 LTCOL LAMONT: Correct, sir.

35 AVM HARLAND: So they're a regulatory organisation. They approve a design, and then that design then goes forward and goes through some testing and the testers find that there's actually a really substantial hazard and risk associated with that design. If I'm doing that approval and, you know, I'm putting my name on it, I'd probably want to know that, that this design is actually quite risky.

40 LTCOL LAMONT: That is true. It depends on what the hazard is and whether it's a technical hazard where it's not performing as it's designed from - - -

45

AVM HARLAND: Let's talk about the risk. The risk is controlled flying into terrain.

5 LTCOL LAMONT: Correct, yes.

AVM HARLAND: So doesn't get any bigger than that, does it, in Aviation?

10 LTCOL LAMONT: No. No, it doesn't. But the issue there being is that an issue whereby the aircraft design is causing that, or it is a function of the aircraft that is misaligned to the way we train our crews that might result in that?

15 AVM HARLAND: The AATES report indicated that the functionality of the HMSD version 5.10 was the issue.

LTCOL LAMONT: Yes.

20 AVM HARLAND: Yes. Which could induce spatial disorientation resulting in controlled flight into terrain.

LTCOL LAMONT: Yes.

25 AVM HARLAND: So again, if I'm the design organisation, I'd probably want to know that.

LTCOL LAMONT: Yes, I - - -

30 AVM HARLAND: Sorry, if I'm the regulator approving the design.

LTCOL LAMONT: I've got a little bit of familiarity in my previous role, and in that previous role I also have done some looking into the – and it might be worthwhile having a look at, and I can provide a copy if you need because it's available on the internet – is the CASA-type certification process which they go through where they form a Certification Team that actually involves operators and aircrew in the actual Authority Team to approve the design.

40 AVM HARLAND: Yes.

LTCOL LAMONT: I think we have the similar arrangements with DASA – I can't speak authoritatively on that – to have operators involved in the approval when it's required, to make sure that the operational impacts – because obviously a designer might suggest that maybe an

5 instruction to aircrew in the flight manual is clear and unambiguous, but you actually need an operator to determine whether that's true or not. And that would be part of it, to make sure that some of those elements are included. Again, particularly – you mentioned before – when a design change affects the Human-Machine Interface of the aircraft.

10 AVM HARLAND: And the CCB process seems to account for some of those considerations in terms of managing a risk. I'm not sure if I misheard you or not, but did you know about the AATES assessment of "unacceptable" during your time when you were sitting on that Configuration Control Board?

15 LTCOL LAMONT: I don't believe I did. I can't recall that I knew about that at the time.

AVM HARLAND: I'm just wondering if that influenced your preference for an out-of-session CCB?

20 LTCOL LAMONT: No.

AVM HARLAND: So was there a reason why the out-of-session CCB wasn't available? Because that seems to have just – we went from a preference and agreement from the Chair to a delegation.

25 LTCOL LAMONT: So there was a lot of people involved in the Configuration Control Board. There's a range of different subject-matter experts. The ability to get them all available, even for a remote session, was often difficult and would often result in delays. I believe it was the delegation was chosen to avoid any delays or any potential delays that might have been associated with gathering that team again together for an  
30 out-of-session board.

35 AVM HARLAND: But this was for approval of a design which had been assessed as unacceptable risk to flight safety by a Flight Test Organisation in its initial test. There was a follow-up test which then said that it wasn't unacceptable, it was unsatisfactory, I think, if I recall correctly?

LTCOL LAMONT: Yes.

40 AVM HARLAND: These are pretty big decisions. Again, if you think about it, it doesn't get much bigger than this from a CCB.

LTCOL LAMONT: No. I don't recall that "unacceptable" outcome from flight test ever being mentioned at the Configuration Control Board.  
45

AVM HARLAND: Okay, that's all I've got. Thank you.

MAJ CHAPMAN: Thank you, sir.

5 Just finally, sir, if we go to paragraph 21, under the heading, "Other  
Issues", you note some matters that you'd like to bring to the Inquiry's  
attention, and I'll just again summarise those as a final matter. You  
consider that the MRH should have been retired much earlier than it  
eventually was, even as early as midway through the acquisition process.

10 LTCOL LAMONT: Correct.

MAJ CHAPMAN: You consider that the program needed to demonstrate  
failure over a prolonged period before there was the political will to retire  
15 the platform earlier than expected?

LTCOL LAMONT: That's my opinion, but yes.

MAJ CHAPMAN: These are your opinions, yes.

20 LTCOL LAMONT: Yes.

MAJ CHAPMAN: You consider continuing to operate the MRH with  
these problems placed huge stresses on the workforce and increased the  
25 risk of an accident.

LTCOL LAMONT: Yes.

MAJ CHAPMAN: You say that you do not believe Defence is  
30 independent enough to determine if a struggling project or platform  
should continue or should be terminated.

LTCOL LAMONT: Correct.

MAJ CHAPMAN: You'd like to suggest that the IGADF consider  
35 Recommendations, including an Australian National Audit Office review  
of struggling projects, for example.

40 LTCOL LAMONT: Correct.

MAJ CHAPMAN: Thank you, sir. Ms McMurdo, those are my  
questions.

MS McMURDO: Thank you. Applications to cross-examine?  
45

LCDR GRACIE: I'm going to retire early than expected today to - - -

MS McMURDO: Yes. LCDR Healey.

5

**<CROSS-EXAMINATION BY LTCOL HEALEY**

10 LTCOL HEALEY: LTCOL Lamont, my name's LTCOL David Healey, and I appear for BRIG Fenwick. I just want to take you to your statement, to a couple of spots in your statement, if you don't mind? The first paragraph I'll take you to is paragraph 17, and more specifically that's 17.3 at page 9. You refer to the accumulation of unsafe conditions.

15 LTCOL LAMONT: Yes.

LTCOL HEALEY: Can you see that? Yes?

20 LTCOL LAMONT: Yes.

LTCOL HEALEY: Would it be normal to be flying and operating an aircraft with unsafe conditions in place?

25 LTCOL LAMONT: No.

LTCOL HEALEY: So you're actually referring to numerous aggregated issues under management; is that correct?

30 LTCOL LAMONT: Yes. Look, to expand on that a little bit, yes, that is true. The issue there being is that there are multiple ways of treating risk. There is a hierarchy of controls in our own Australian legislation that talks about how to manage those, going all the way from administrative controls all the way through to elimination, normally which would be done by a design change.

35 The element there being is a lot of these unsafe conditions were managed under what effectively were administrative controls, additional maintenance checks, et cetera, in order to mitigate the risk of those unsafe conditions being present. But, by definition, some of those controls are fallible and hence the more you have that accumulate on each other, the more cumulative risk that you're generating.

40 In theory, you are operating at a suitable level of safety, but because the controls you have in place are fallible there's potential that you are not operating at an appropriate level of safety. The idea being there is that –

45

again, this is where our Workplace Health and Safety Regulations, I believe, talk about a hierarchy of controls that need to be followed, and the time it took to work through that hierarchy was excessive.

5 LTCOL HEALEY: So you wouldn't operate an aircraft in unsafe conditions. That's your answer?

LTCOL LAMONT: Correct. That's correct.

10 LTCOL HEALEY: And for all those reasons, correct, in terms of obligations under WHS?

LTCOL LAMONT: And many of those Service Bulletins that were released did require the aircraft not to be operated until the immediate  
15 corrective action was put in place.

LTCOL HEALEY: Thank you for that. I've just got one more question. I'm just finding my place here, just bear with me. I'll just get you to turn to paragraph 18 of your statement, if you don't mind. Are you there?  
20

LTCOL LAMONT: Yes.

LTCOL HEALEY: So you state in answer to that question which was posed to you that:  
25

*In the context of that particular observation, i.e. another example of cutting Coroners –*

“cutting corners”, I think that must be.  
30

MS McMURDO: I think so.

LTCOL HEALEY:

35 *We might want to do that from time to time, but going around the system and meeting more broadly, could you please respond to the following matters –*

and it says – Counsel Assisting has asked you, I assume:  
40

*To what extent, if at all, are you aware of any Risk Management process having been conducted with relation to SR of version 5.10?*

45 Do you see your response there? I think it says:



*I was not aware of any Risk Management processes having been conducted in relation to version 5.10.*

5 LTCOL LAMONT: Correct. At the time, I can't recall being aware.

LTCOL HEALEY: If you go back to paragraph 11 of your statement in response to that question that was posed – and I won't go through the long question that's been posed there – but you do mention that the core purpose of the Configuration Control Board is to ensure all aspects of an engineering change are considered and completed before the change is released into service release. Is that correct?  
10

LTCOL LAMONT: That's correct.  
15

LTCOL HEALEY: So could that be not a form of risk management in your opinion in terms of what you've said there? I can go through the complete answer.

LTCOL LAMONT: Yes. Generally not, no. So the philosophy of a risk management of risk is eliminated or otherwise minimised, the philosophy there would be is that the risk had been considered eliminated so far as reasonably practicable. It's possible that there may be underpinning Risk Management Plans in place where operational aspects of a modification had been considered and either considered to be eliminated or minimised so far as reasonably practical, and they might be part of the operational endorsement for the CCB.  
20  
25

If they were substantial, I'd expect the CCB to be aware of those. There were often – I mean, the Configuration Control Master Plan that was put in place was a way of managing risk. One of the risks that were identified at the time because of the hugely challenging configuration management system we found ourselves with MRH-90 was that - - -  
30

LTCOL HEALEY: Just across the board.  
35

LTCOL LAMONT: Yes. Yes, there were a lot of modifications that had a Human-Machine Interface. Those modifications were not rolled out to all the aircraft simultaneously. So what you would find is that an aircraft being flown in – sorry, two aircraft being flown in the one location, the aircrew getting into that aircraft will see differences in the Human-Machine Interface. It might be something as – we had one at one stage which was the main display screens, the Flight Control Systems, had a new gen and old gen, both hardware and software, that would give very subtle differences to the flight system displayed to the aircrew. What we  
40  
45

found was that by having those mixed across the fleet, it was not appropriate that a pilot in one location would get an aircraft that looked subtly differently, depending on which tail number they were flying on a certain day.

5

So the Configuration Master Plan was used to identify what those elements were to make sure that those modifications were put into one particular location and one particular unit. So all aircraft in that unit were able to see an aircraft that looked and smelt the same. The idea being there it minimised the risk of different configurations, particularly that impacted the way the aircrew operated with the aircraft across different locations.

I think there was about 20 or 30 different items on that Configuration Master Plan that required detailed configuration management. Part of that also required, if I was going to move an aircraft, say, between 5th Aviation Regiment and the 6th Aviation Regiment, it might require that the older components be removed and the newer components be installed as part of that relocation to ensure that the aircraft in that location was as common as possible.

So was there risk management? There was risk controls, I guess, put in place via the CCB. Was it risk management? That's probably more underlying in some of the approvals that went to the CCB.

25

LTCOL HEALEY: Perhaps I could just put it this way: was it part of the Risk Management process in the CCB, your role – part of?

LTCOL LAMONT: I wouldn't see the Risk Management process as being something as part of the CCB itself. It was sort of intrinsic to it, I guess, not explicit.

LTCOL HEALEY: And I've just got one final question. The Counsel Assisting referred to an accelerated process in terms of the implementation of version 5.10, and I think you agreed with that. But that's not entirely correct, is it? I mean, the 5.1 had been considered by the CCB on a number of occasions. Would you agree with that?

LTCOL LAMONT: I believe it had been considered by the CCB on a number of occasions. I'm sorry, can you repeat the first part of the question you asked?

LTCOL HEALEY: Yes, sure. So which part? Would you like me to repeat what Counsel Assisting had said to you about the accelerated process, and you agreeing with that?

45

LTCOL LAMONT: Yes.

5 LTCOL HEALEY: You agreed with that. Correct?

LTCOL LAMONT: So you'll need to repeat the question, sorry.

10 LTCOL HEALEY: Counsel Assisting initially referred to an accelerated process in terms of the implementation of version 5.10, and I believe you agreed with that. Is that correct?

LTCOL LAMONT: That it was an accelerated process?

15 LTCOL HEALEY: Yes.

LTCOL LAMONT: Yes.

20 LTCOL HEALEY: And then I put it to you that I don't think that's entirely correct, and that version 5.10 had been considered by the CCB on a number of occasions. Correct?

LTCOL LAMONT: They're mutually exclusive concepts, I guess. So that, yes, you can have something looked at by the CCB multiple times; it doesn't necessarily mean that it's not an accelerated process.

25 LTCOL HEALEY: But we're talking about a history here in terms of it being tested. You'd agree with that?

LTCOL LAMONT: Sorry, can you repeat the question?

30 LTCOL HEALEY: You'd agree that there's been a history here of the 5.10 undergoing testing and evaluation?

LTCOL LAMONT: Undergoing test and evaluation, correct.

35 LTCOL HEALEY: So you still hold your position that it was an accelerated process, despite the fact that it had been a fairly elongated process in some respects? And I know it's a long question.

40 MS McMURDO: Well, I don't think he's agreed with that proposition.

LTCOL HEALEY: No.

45 MS McMURDO: So you've got two lots there, so just start again, please.

LTCOL HEALEY: I'll probably split the question in half.

5 LTCOL LAMONT: Yes, if you could just maybe rephrase it for me?

LTCOL HEALEY: Yes, I can. You'd agree, wouldn't you, that the TopOwl 5.10 was tested? Correct?

10 LTCOL LAMONT: Correct.

LTCOL HEALEY: And that was for safety. You'd agree with that?

LTCOL LAMONT: Yes.

15 LTCOL HEALEY: What I'm trying to point out to the Inquiry: this wasn't necessarily an accelerated process, there was a number of testings that were done.

LTCOL LAMONT: Yes. So the reason for testing I can't speak to and I'm not familiar with. It could be either for safety or for capability. So there's two reasons for testing: (1) to make sure it is safe; and the other one, to make sure it's fit for purpose.

20 LTCOL HEALEY: Yes, thank you. Those are my questions.

25 MS McMURDO: Thank you. Any other applications to cross-examine? COL Gabbedy?

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

COL GABBEDY: Thank you, ma'am. So there's only one area I wanted to explore.

35 Colonel, I'm COL Nigel Gabbedy. I'm representing MAJGEN Jobson. I just want to take you to paragraph 17(a)(2) of your statement. In that part of your statement you talk about indications that the project was struggling as early as 2011.

40 LTCOL LAMONT: That's correct.

COL GABBEDY: And then you go on to talk about an agenda paper - - -

45 LTCOL LAMONT: Yes.

COL GABBEDY: - - - that your committee prepared, and you make comments about the security classification of that paper. So being mindful of the security classifications, are you able to say what the purpose of that paper was?  
5

LTCOL LAMONT: No.

COL GABBEDY: That's going to make my next question even harder. You've recommended that that be a paper that this Inquiry obtain. Is that a paper that is likely to inform them as to concerns with the project as at that early stage?  
10

LTCOL LAMONT: Yes.  
15

COL GABBEDY: You say that – I'll paraphrase you, so correct me if I'm wrong – that you were a little surprised about the way in which that paper was handled. Is that right?

LTCOL LAMONT: Correct.  
20

COL GABBEDY: Are you able to say to whom that paper was addressed?

LTCOL LAMONT: I think so. Just give me a second to consider any security implications. I think that should be fine. So it was an agendum paper to the Defence Capability and Investment Committee. It was not formally released through the organisation that I was part of at the time, which was Capability Development Group.  
25

I don't really, actually, fully understand why it was not released, but the system at the time – and it was part of a previous review – was that anything involving that level of committee had a thing called "financial contestability", and the Department of Finance was involved in financial contestability of major decisions and papers going through to those type of committees.  
30

We were working alongside the Department of Finance personnel, and we provided them with a copy of our paper. And my understanding was that their submission to the DCIC was largely a copy of our paper that we had provided them.  
35

COL GABBEDY: So only answer this question, if you can.

LTCOL LAMONT: Yes.  
40

COL GABBEDY: Broadly speaking, was this paper looking at a business case for the continuation or cancellation of the MRH-90 project?

5 LTCOL LAMONT: I can't answer that within the bounds, unfortunately.

COL GABBEDY: I understand, all right. Thank you very much. I have no further questions.

10 MS McMURDO: Yes, Ms Musgrove?

**<CROSS-EXAMINATION BY MS MUSGROVE**

15 MS MUSGROVE: Thank you. Sir, my name is Musgrove. I represent the Commonwealth. There is evidence before the Inquiry that the version 5.10 was presented to the CCB for the first time in June 2018. Are you aware of that?

20 LTCOL LAMONT: When it was first presented?

MS MUSGROVE: Correct.

25 LTCOL LAMONT: I'm not sure, sorry.

MS MUSGROVE: The AATES report came about in approximately September 2018. Were you aware of that?

30 LTCOL LAMONT: No.

MS MUSGROVE: Version 5.10 was presented again to the CCB on 7 March 2019. Were you aware of that?

35 LTCOL LAMONT: What was that presentation for?

MS MUSGROVE: I'm just asking if you're aware that it went the second time on 7 March 2019.

40 LTCOL LAMONT: I don't recall.

MS MUSGROVE: You started in your role in 2021; is that correct?

45 LTCOL LAMONT: Which role, sorry?

MS MUSGROVE: The role that saw you sitting on the CCB.

5 LTCOL LAMONT: No, I commenced that role in – just give me a second, I have to go back and refer.

MS MUSGROVE: In your statement, page 2, question 4.5, “2021 to 2025, Defence Aviation Safety Authority”.

10 LTCOL LAMONT: That’s correct. So I was in my role as the Acting Continuing Airworthiness Manager, or the Deputy CAM. That was in my position within Aviation Support, which was 2019 to 2020.

MS MUSGROVE: Could it be that you don’t have a recollection of what was presented to the CCBs back in 2019?

15 LTCOL LAMONT: I don’t have a specific recollection of what was presented, at the moment.

MS MUSGROVE: So would you accept that you not having a specific recollection, it could be that the AATES report was informed to the CCB, but you just can’t say at this point in time?

20 LTCOL LAMONT: It’s possible. It’s unlikely. My role back as early as 2015 was a Chief Engineer of the MRH project, so I’d been involved back then in the CCBs in detail. It’s possible. I don’t recall it ever coming up in any of the CCBs.

25 MS MUSGROVE: Thank you. But we’ll leave it at, “It’s possible”, because you don’t have an absolute recollection.

30 LTCOL LAMONT: Yes, absolutely, sure.

MS MUSGROVE: Thank you.

35 MAJ CHAPMAN: Could I just raise one matter?

LTCOL LAMONT: Sure.

40 MAJ CHAPMAN: If there is evidence that the Commonwealth has to suggest that it was presented, in fairness, it probably should be produced. I just ask the question if it does exist?

MS MUSGROVE: It was an open-ended question. I take on notice my friend’s question.

45

MAJ CHAPMAN: Well, you put it to the witness, so - - -

5 MS McMURDO: Well, perhaps we might need another section 23  
Notice.

MS MUSGROVE: It was an open-ended question.

10 MS McMURDO: Well, it's one the Inquiry will have to chase down,  
obviously.

MS MUSGROVE: You say at paragraph 12 of your statement:

15 *I cannot recall other instances of corners being cut or steps taken  
to go around the system that involved HMSD version 5.10.*

Is that correct?

20 LTCOL LAMONT: That's correct.

MS MUSGROVE: Further, you say at 17(a):

25 *There was a much deeper and complex context underpinning my  
comments in the CCB. As Defence members working in the Army  
Aviation Capability, it was our job to make the MRH work - - -*

and you go on to say:

30 *to maximise the delivery of safe capability to Army.*

LTCOL LAMONT: Correct.

MS MUSGROVE: That "safe capability", was that the ultimate goal?

35 LTCOL LAMONT: Yes.

MS MUSGROVE: Thank you. I have nothing further.

40 MS McMURDO: Thank you. Any other applications to cross-examine?  
Any applications to re-examine?

MAJ CHAPMAN: No. Thank you, Chair.

MS McMURDO: Thank you very much, Lieutenant Colonel. The



5 Inquiry greatly appreciates the assistance you've given us. It's been very helpful. Remember, you know, this is challenging sometimes for people giving evidence and being cross-examined about these issues, so remember that there is assistance available, and if you feel you need it, please take advantage of it.

LTCOL LAMONT: Thank you.

10 MS McMURDO: Thank you. You're excused and free to go. Thank you.

**<WITNESS WITHDREW**

15 MS McMURDO: Yes?

MAJ CHAPMAN: Chair, that concludes the witnesses for today.

20 MS McMURDO: That's very good. We're on schedule. All right then, we'll adjourn. We can start at 10 tomorrow again?

MAJ CHAPMAN: Yes.

25 MS McMURDO: All right, we'll resume at 10 o'clock tomorrow morning. Thank you.

30 **PUBLIC INQUIRY ADJOURNED UNTIL  
WEDNESDAY, 26 FEBRUARY 2025 AT 1000**